

SECURITIES AND EXCHANGE COMMISSION

FORM ARS

Annual report to security holders

Filing Date: **2025-04-21** | Period of Report: **2024-12-31**

SEC Accession No. [0001437749-25-012415](#)

([HTML Version](#) on [secdatabase.com](#))

FILER

LIQTECH INTERNATIONAL INC

CIK: [1307579](#) | IRS No.: **201431677** | State of Incorp.: **NV** | Fiscal Year End: **1231**

Type: **ARS** | Act: **34** | File No.: **001-36210** | Film No.: **25851455**

SIC: **3590** Misc industrial & commercial machinery & equipment

Mailing Address

*INDUSTRIPARKEN 22C
BALLERUP G7 DK-2750*

Business Address

*INDUSTRIPARKEN 22C
BALLERUP G7 DK-2750
01145 2390 4545*

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

- ☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2024
- ☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission File Number: 001-36210

LiqTech International, Inc.
(Exact name of registrant as specified in its charter)

<u>Nevada</u> (State or other jurisdiction of incorporation or organization)	<u>20-1431677</u> (I.R.S. Employer Identification No.)
<u>Industriparken 22C, DK 2750 Ballerup, Denmark</u> (Address of principal executive offices)	<u></u> (Zip Code)

Registrant's telephone number, including area code: +4531315941

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Common Stock, \$0.001 par value	LIQT	The Nasdaq Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

[Table of Contents](#)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant’s executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

On June 30, 2024, the aggregate market value of the common stock outstanding and held by non-affiliates (as defined in Rule 405 under the Securities Act of 1933) of the registrant based on the closing price of the registrant’s common stock of \$2.36 per share on June 30, 2024, was \$12,282,163. As of March 28, 2025, there were 9,606,024 shares of common stock, \$0.001 par value per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant’s Definitive Proxy Statement for the registrant’s 2025 Annual Meeting of Shareholders are incorporated by reference in Part III of this report. The Definitive Proxy Statement or an amendment to this Form 10-K will be filed with the Securities and Exchange Commission within 120 days after the registrant’s fiscal year ended December 31, 2024.

LIQTECH INTERNATIONAL, INC. AND SUBSIDIARIES

TABLE OF CONTENTS

	Page
PART I	
Item 1	Business
Item 1A	Risk Factors
Item 1B	Unresolved Staff Comments
Item 1C	Cybersecurity
Item 2	Properties
Item 3	Legal Proceedings
Item 4	Mine Safety Disclosures
PART II	
Item 5	Market for the Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities
Item 6	[Reserved]
Item 7	Management's Discussion and Analysis of Financial Condition and Results of Operations
Item 7A	Quantitative and Qualitative Disclosures About Market Risk
Item 8	Financial Statements and Supplementary Data
Item 9	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure
Item 9A	Controls and Procedures
Item 9B	Other Information
Item 9C	Disclosure Regarding Foreign Jurisdictions that Prevent Inspections
PART III	
Item 10	Directors, Executive Officers and Corporate Governance
Item 11	Executive Compensation
Item 12	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters
Item 13	Certain Relationships and Related Transactions, and Director Independence
Item 14	Principal Accountant Fees and Services
PART IV	
Item 15	Exhibits and Financial Statement Schedules
Item 16	Form 10-K Summary
	Signatures

Cautionary Language Regarding Forward-Looking Statements and Industry Data

This Annual Report on Form 10-K contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995 regarding the plans and objectives of management for future operations and market trends and expectations. Forward-looking statements can be identified by the fact that they do not relate strictly to historical or current facts. In some cases, you can identify forward-looking statements by the following words: “may,” “could,” “would,” “should,” “expect,” “intend,” “plan,” “anticipate,” “believe,” “approximately,” “estimate,” “predict,” “project,” “potential” or the negative of these terms or other comparable terminology, although the absence of these words does not necessarily mean that a statement is not forward-looking.

The forward-looking statements included herein are based on current expectations that involve numerous risks and uncertainties. Our plans and objectives are based, in part, on assumptions involving the continued expansion of our business. Assumptions relating to the foregoing involve judgments with respect to, among other things, future political, legislative, economic, competitive and market conditions and future business decisions, all of which are difficult or impossible to predict accurately and many of which are beyond our control. This is especially underlined by the anticipated impacts from the prevailing macro-economic uncertainty on the Company, including the related effects to our business operations, results of operations, cash flows, and financial position. Although we believe that our assumptions underlying the forward-looking statements are reasonable, any of the assumptions could prove inaccurate and, therefore, there can be no assurance that the forward-looking statements included in this Annual Report will prove to be accurate. In light of the significant uncertainties inherent in the forward-looking statements included herein, the inclusion of such information should not be regarded as a representation by us or any other person that our objectives and plans will be achieved. We undertake no obligation to revise or update publicly any forward-looking statements for any reason.

Forward-looking statements include, but are not limited to, statements concerning:

- The potential adverse effects on our operations and financial performance from armed conflicts or geopolitical tensions;
- The potential adverse impact of global trade restrictions and geopolitical tensions on our business and supply chain;
- The potential negative impact of prolonged energy market volatility and supply disruptions on our business;
- The potential adverse impact of health crises, pandemics, and public health emergencies on our business, financial condition, and operations;
- Our dependence on a few major customers and the ability to maintain future relationships with one or more of these major customers;
- Our ability to operate with financial stability and secure access to external financing and adequate liquidity;
- Our ability to secure and source supplies of raw materials and key components in due time and at competitive prices;
- Our ability to achieve revenue growth and penetrate new markets;
- Our dependence on the expertise and experience of our management team and the retention of key employees;
- Our reliance and access to qualified personnel to expand our business;
- Our ability to adapt to potentially adverse changes in legislative, regulatory and political frameworks;
- Changes in interest rates of tightening of debt capital markets
- Changes in emissions and environmental regulations, and potential further tightening of emission standards;

- The exposure to potentially adverse tax consequences;
- Our ability to compete under changing governmental standards by which our products are evaluated;
- The financial impact from the fluctuation and volatility of foreign currencies;
- The potential monetary costs of defending our intellectual property rights;
- Our ability to successfully protect our intellectual property rights and manufacturing know-how;
- The possibility of a dispute over intellectual property developed in conjunction with third parties with whom we have contractual relationships;
- The possibility that we could become subject to litigation that could be costly, limit, or cancel our intellectual property rights or divert time and efforts away from our business operations;
- The potential negative impact to the sale of our products caused by technological advances of our competitors;
- The potential liability for environmental harm or damages resulting from technical faults or failures of our products;
- The possibility that an investor located within the United States may not be able to, or find it difficult to, enforce any judgments obtained in United States courts because a significant portion of our assets and some of our officers and directors may be located outside of the United States;
- The possibility that we may not be able to develop and maintain an effective system of internal controls over financial reporting, leading to inaccurate reports of our financial results;
- The possibility of breaches in the security of our information technology systems;
- The liability risk of our compliance to environmental laws and regulations;
- The potential negative impact of more stringent environmental laws and regulations as governmental agencies seek to improve minimum standards; and

PART I

Item 1. Business

Overview

LiqTech International, Inc. is a clean technology company that manufactures and markets highly specialized filtration products and systems. For more than two decades, we have developed and manufactured products of re-crystallized silicon carbide. We specialize in three business areas: ceramic membranes for liquid filtration systems, ceramic diesel particulate filters (DPFs) to control soot exhaust particles and black carbon emission from diesel engines, and plastic components for usage across various industries. Using nanotechnology, we develop proprietary products using patented silicon carbide technology. Our products are based on unique silicon carbide membranes that facilitate new applications and improve existing technologies. We market our products from our offices in Denmark and through local representatives and distributors. The products are shipped directly to customers from our production facilities in Denmark.

The terms “LiqTech”, “we”, “our”, “us”, the “Company” or any derivative thereof, as used herein, refer to LiqTech International, Inc., a Nevada corporation, together with its direct and indirect wholly owned subsidiaries, which we collectively refer to herein as our “Subsidiaries”.

At present, we conduct our operations in the Kingdom of Denmark. Our Danish operations are located in the Copenhagen area and Hobro.

Our Products

We manufacture and sell a broad range of systems and products based on the application of our ceramic filters and membranes for the filtration of liquids and gases within a range of uses, such as industrial wastewater, oil & gas, commercial pool, road & non-road machinery, marine, chemicals/petrochemicals and other industrial applications. We also provide engineered plastic parts and products for various internal and external industrial applications in the food & beverage and pharmaceutical industries.

Silicon Carbide Ceramic Membranes for Liquid Filtration

For more than two decades, LiqTech has developed, manufactured, and sold innovative silicon carbide ceramic membranes for liquids purification. Based on our continuous R&D efforts, patented technologies, and advanced production methods, we produce state-of-the-art silicon carbide products for various applications with the current membrane portfolio consisting of:

- **Silicon Carbide (SiC) ceramic membranes**, a unique patented technology designed as a tubular membrane. It utilizes a crossflow structure to handle high concentrations of suspended solids found in produced water from the oil & gas and chemical industries, wastewater from industrial processes, and other applications. It offers consistent removal of oil and suspended solids at high throughput rates regardless of feed conditions. We offer onshore and offshore solutions and have experience within petrochemicals, chemicals and produced water streams. We believe our SiC filters are the best alternative to microfiltration and walnut shell filters due to the operational efficiencies of our SiC filters including operating cost savings, reduced installation cost, and product resilience. Our chemically inert, plug-and-play membranes are extremely hard, chemically resistant, and consist of durable ceramics with high flux (flow). SiC membranes are stronger, harder, longer-lasting, more temperature-resistant, and perform more efficiently than conventional ceramic or polymeric membranes; and
- **Hybrid Technology Membranes (HTM)**, a patented asymmetric membrane that combines the desired properties from silicon carbide (SiC) and zirconia (ZrO_2) ceramics. With a pore size of 60 nanometers (nm), it is suitable for ultrafiltration applications. This state-of-the-art membrane technology facilitates new separation processes and new filtration applications; and
- **Aqua Solution®**, which integrates an enclosed structural design with cutting-edge membrane technology in a solution specifically designed for applications including pre-treatment, wastewater treatment, and swimming pool and spa water filtration. Our Aqua Solution® offers the same water purification as conventional sand filters, which typically require up to 400 times more space and have pore sizes at least three times larger than our Aqua Solution® SiC membrane. The Aqua Solution® also reduces the number of membrane elements, pressure vessels, and both water and energy consumption as well as CO_2 footprint by offering high-flow capabilities at very low pressure with improved filtration characteristics.

Diesel Particulate Filters (DPFs) for Gas Purification

We offer diesel particulate filters for exhaust emission control solutions to the verified retrofit and original equipment manufacturer (OEM) markets through our direct sales force and distributors specializing in sales to end users. We use a proprietary “nano wash coat” to provide a catalytic coating for anything from diesel particulate filters to catalytic converters. Our DPf products are sold worldwide under the LiqTech brand.

We have developed a robust silicon carbide diesel particulate filter that is especially effective for vehicles, generators, marine, and non-road applications that produce a high soot load. If properly maintained, a LiqTech DPf can last as long as the application machinery or engine. Our DPfs are ideal for both on- and off-road vehicles and machinery because of their strength, chemical non-reactive nature, temperature resilience, and thermal conductivity.

Our DPf filters can handle higher soot loads than filters that do not use a silicon carbide membrane, making them ideal for situations in which engines infrequently reach high enough temperatures to burn off the soot. Examples include:

- Garbage trucks and port vehicles;
- Diesel pickup trucks not carrying a full load;
- Intra-city vehicles that do not reach highway speeds;
- Off-road construction vehicles that idle for long periods of time;
- Marine “black carbon” exhaust applications; and
- Back-up generators and general “gen-set” applications.

Liquids Filtration Systems & Solutions

LiqTech develops, manufactures, and sells liquid filtration systems using our patented silicon carbide technology (sometimes also referred to herein as our “Aqua Solution®, SiC, and HTM membranes”). Our current focus is to strengthen our position within certain industrial applications such as difficult industrial water streams and hydrocarbon production-derived contaminated water, which we refer to herein as “produced water”. Furthermore, we remain focused on segments within marine scrubber wastewater, pool, metal & mining, microplastics removal, and other applications.

Our filtration systems have been used in the following applications by our clients:

- **Pool and Spa Water:** We have supplied turnkey water filtration systems for medium to very large public swimming pool installations in Europe and Asia Pacific. Our Aqua Solution® ceramic membranes provide unique advantages for the commercial pool filtration industry in terms of reduced energy consumption, lower CO2 emissions, smaller footprint, reduced water and chemical consumption, and consistent, high-quality water filtration.
- **Produced Water:** Our systems can be used for the filtration of produced water, which is a byproduct of oil & gas production. The amount of produced water varies from 0.1 to 10 times the amount of oil or gas produced. We have today three installations with international oil & gas companies both in the US and Middle East, all of which are operating with stable performance.

Oil & Gas companies require water treatment units with high capacity and efficiency. In 2024, we developed the PureFlow™ container solution, designed to operate cost-effectively at capacities starting from 10,000 barrels per day.

- **Marine Scrubber Wastewater:** Sustainability is getting more and more attention in the shipping industry. Most commercial new vessels are built with dual-fuel engines. This type of engine requires efficient and reliable water treatment systems for exhaust gas recirculation, for which it is necessary for engine combustion efficiency. Based on our many commercially operated water treatment systems, we have developed a special water treatment solution for this new application. We are actively repositioning our WTU to match the emerging new opportunity for exhaust gas recirculation in dual-fuel engines. This new market development supports the energy transition for the marine industry and will be a major trend in the coming years.

Today, more than 80% of commercial ships are manufactured in China. To accelerate our entry into the emerging dual-fuel engine market, we established a joint venture in Nantong, China, in December 2024.

- **Industrial Applications:** We have delivered complete liquid filtration systems for aggressive fluid applications such as heavy metal removal for energy providers and water treatment systems for mining wastewater. Furthermore, our systems have been deployed successfully to reduce OPEX and enhance product quality in chemicals/petrochemicals applications. In 2024, we piloted a new application area for microplastics removal for a chemical/petrochemical company.

Highly Flexible & Innovative Plastic Manufacturing

LiqTech provides highly flexible and innovative plastics manufacturing, focusing on machining, welding, bending, and solvent cementing. With an intense focus on customer demand, LiqTech serves market leaders in the clean technology, pharmaceuticals, foods, healthcare, and graphics industries. Furthermore, LiqTech delivers benefits through vertical integration by manufacturing some key components for the fabrication and assembly of liquid filtration systems for pool and marine scrubber applications.

Our Competitive Strengths

Our products and systems compete with other filtration technologies made from ceramic, aluminum oxide, and polymeric materials. While most of our competitors are large industrial companies, we hold a unique position by combining proprietary membrane technology with extensive system and application expertise. We believe our patented technology as well as our in-depth application knowledge allow us to offer reliable products that provide an advantage over many of our direct and, in many cases, larger competitors. We intend to continue investing in R&D with the aim of developing new technologies and improving our existing products to strengthen our competitive advantages, retain our existing customers, and acquire new customers.

We believe the following strengths underpin our ability to increase revenue and profitability:

- ***Advantages of Silicon Carbide Membranes and Filters:*** Our liquid filtration and diesel exhaust products utilize silicon carbide substrate and membrane technology, which have unique qualities that we believe make our products more effective than those of our competitors. Unlike filtration products made of aluminum oxide, silicon carbide membranes are chemically inert and temperature-resistant. Furthermore, silicon carbide membranes exhibit a high degree of hydrophilicity (the tendency of a surface to become wet or absorb water), which results in uniquely high flux (and correspondingly low energy consumption). Silicon carbide is also very durable, and its hardness is only surpassed by select unique material compositions such as diamonds, making it a highly desirable material for various abrasive fluids in industrial applications. As a result, we believe that such superior physical properties make our products desirable in both liquid filtration products and exhaust emission control products.
- ***Complete In-house Systems Fabrication:*** LiqTech provides full fabrication and integration of our membranes into complete filtration systems made from corrosion-resistant materials and components. We possess in-house engineering capabilities for process design, 3D modeling, automation, and control. Our professional staff of dedicated engineers and craftsmen assume responsibility for the specification, engineering, fabrication, and commissioning process. We believe that supplying our customers with a modular-based solution built upon our silicon carbide membranes is unique in the market, considering our vertical integration with in-house manufacturing of silicon carbide products and engineered plastic components, coupled with the design, engineering, and assembly of the integrated systems.
- ***Broad Application of LiqTech Membranes:*** Our membranes can be applied in a variety of applications, including the filtration of industrial wastewater, separation of metals from liquids in industrial processes, marine scrubber wastewater, chemicals and produced water within oil & gas, oil emulsion separation, bacteria removal, commercial swimming pool water treatment, food and beverage production, chemicals/petrochemicals processing, and other applications.

- **Marketing and Manufacturing in Key Markets and Expanding to Other Markets:** While production is centered in Denmark, we have distribution and sales activities across multiple jurisdictions. We also sell our products through distributors and agents in many other countries and regions such as China, Korea, Spain, UK, France, Greece, Middle East, Singapore, Australia, and the U.S. Moreover, we have established customer relationships in more than 25 countries.
- **Strong and Experienced Management Team:** Our management team has deep experience in the clean technology and filtration industries and drives growth through developing new applications and technologies and cultivating relationships with customers.

Our Strategy

Our strategy is to leverage our core competencies in material science, advanced filtration, systems integration, and application knowledge, creating differentiated products with compelling value propositions to penetrate attractive end markets with regulatory tailwinds. Essential imperatives associated with our strategy include the following:

- **Develop and reinforce new products and applications to provide clean water and reduce pollution.** We currently provide water filtration systems for commercial pool owners, scrubber technology providers, shipowners, and ship operators as well as tailored filtration systems for oil & gas operators, energy companies, and services companies. We are expanding our range of products to better leverage existing customer relationships and develop new relationships within the oil & gas, marine, chemical, and other industries.
- **Better penetration of existing end markets where our value proposition is strong.** We have successfully sold products and installed systems into several end market segments—including automotive/transportation, clean water and pool filtration, marine, industrial wastewater, chemical/petrochemical, energy, and oil & gas applications. We are focused on targeting and developing new customers in these end markets while working with distributors, agents, and partners to access other important geographic markets.
- **Develop new end markets for our core products and applications.** Our existing products and systems are relevant for and valuable to other end markets, and we regularly evaluate opportunities to develop strategic partners to perfect new applications and validate associated value propositions.

Our Industry

Overview

We serve primarily two industries: the liquid filtration market and the silicon carbide ceramic membrane & diesel particulate filter (DPF) market. Our goal is to leverage our products and core technologies to take advantage of favorable market trends.

Liquid Filtration Systems and Aftermarket

Water is essential to life on earth and clean water shortages are affecting billions of people. Today, 2.2 billion people lack safe drinking water, and 3 billion people worldwide lack basic handwashing facilities at home. In addition, more than 700 million people could be displaced due to water scarcity (according to the UN). According to the World Health Organization, approximately 395,000 children die every year due to unsafe water and lack of basic sanitation. In this context, the Company seeks to deploy our unique filtration systems across industries to help unlock a more sustainable future with lower resource consumption and more efficient and responsible operations, with the objective of creating both economic value and environmental benefits.

According to relevant industry research published in 2022, the global ceramic membrane market is expected to grow at a compound annual growth rate (CAGR) of 11.4%, from \$5.4 billion in 2021 to \$14.3 billion in 2030. LiqTech is differentiated by what we believe is our superior SiC membrane technology and our ability to provide a complete water treatment system for select industries and applications.

Our applications within industrial wastewater and more specific applications such as chemical/petrochemical purification represent a core part of our strategic plan. We seek to leverage our innovative and patented SiC ceramic membrane technology by designing and deploying our filtration systems into complex and demanding industrial applications where our clients can benefit from cost savings and value creation. Recent deployments have showcased attractive returns on investment, as our solutions yield improved product characteristics, lower operational costs, and higher output. We are currently focused on evaluating future market potential to more accurately assess the commercial potential within each industrial end-market segment. Based on industry research, the total addressable market within the global industrial water & wastewater treatment market is projected to reach \$7.7 billion by 2030.

In the oil & gas market, we see growing global demand for high-quality re-injection water. In addition, we see tightening water discharge legislation, increasing public awareness of water scarcity, and heightening adoption of reuse as key growth drivers in this end market. In the past two years, we have worked closely with industry partners to validate and accelerate our ultra-filtration technology applications within the global oil & gas industry, in both onshore and offshore environments, evidenced by a commercial installation in the Middle East for produced water and in the Mediterranean Sea for monoethylene glycol (MEG) recovery. In 2024, we have succeeded in two commercial installations in the U.S. onshore market. The projected global market for produced water treatment has large potential for the Company. According to Zion Market Research, the market will grow with a CAGR of 8% and reach a market size of \$16 billion in 2032 from \$8 billion in 2023.

The market for marine water filtration systems is dependent on the development of new regulations for sulfur and ballast water emissions. In 2020, IMO (International Maritime Organization) issued Marpol VI with clear regulation of SOx emissions for marine ships. The regulation can be reached in one of two ways: 1) use of fuel with low SOx content for a cost that is 150-200 \$/MT higher than normal bunker fuel; 2) installation of open-loop, hybrid, or closed-loop scrubbers. Only hybrid and closed-loop systems can be used in "ECA" zones (Emission Control Areas). For hybrid and closed-loop systems, there is a need to install a water treatment system. Up to now, approximately 6,000 vessels have installed a scrubber, of which 1,200 include hybrid or closed-loop systems. Since 2018, LiqTech has sold and installed more than 170 water treatment units (WTU) for marine scrubbers, with an estimated market share of 14%. Sustainability is gaining increasing attention in the shipping industry. Most commercial new vessels are built with dual-fuel engines. This type of engines requires an efficient and reliable water treatment system for exhaust gas recirculation, for which it is necessary for engine combustion efficiency. Based on our many commercially operated water treatment systems, we have developed a unique for this new application. We are actively repositioning our WTU to match the emerging new opportunity for exhaust gas recirculation in dual-fuel engines. This new market development supports the energy transition for the marine industry and will be a major trend in the coming years. According to Clarkson shipping intelligence and other public sources, there are greater than 400 new dual-engine vessels on order for 2024 to 2027.

In addition to our industrial, oil & gas, and marine applications, our Company offers industry-leading commercial pool filtration systems globally through distributors and local partners. Based on more than 20 years of experience in the filtration industry, we have developed a superior and cost-effective industrial pool filter system with a smaller footprint, lower chlorine consumption, and higher quality of water filtration. Conventional technologies use large amounts of chemicals for disinfection, whereas our superior commercial pool system reduces chemical consumption. We believe our offering is uniquely positioned to unlock future growth in the context of the global focus on ESG, since our commercial pool application delivers safe, clean, and clear water to our clients with lower energy consumption and reduced lifecycle costs. According to Frost & Sullivan's report *European Swimming Pool Water Treatment Growth Opportunities* (June 2022), the European commercial pool market is projected to grow at a CAGR of 6.1% from 2024 to 2028, reaching a total addressable market of \$687 million. We remain committed to expand our geographical reach outside of Europe through new partnerships and distribution agreements.

Furthermore, we have recently intensified our focus on aftermarket sales through service & maintenance agreements and the sale of spare parts to our clients and partners. We intend to leverage the installed base of our filtration systems delivered and commissioned over the last decade by engaging with both new and existing clients to develop a closer and more comprehensive partnership structure and ultimately bundle our filtration systems and aftermarket offering. We believe the aftermarket segment benefits from robust growth fundamentals as clients and technology providers are increasingly focused on unlocking value through close collaboration, for which service and maintenance will yield improved customer satisfaction and growth.

Silicon Carbide Ceramic Membrane & Diesel Particulate Filter (DPF) Market

Our legacy business related to the provision of DPF filters is expected to continue growing across Europe and North America as regulators require diesel engines to comply with new and more stringent environmental rules and regulations. In Europe, for example, cities in Germany and the Benelux countries are enforcing increasingly stringent requirements for diesel engines to include DPF filters, with the same trend also taking place in select Asian countries.

Furthermore, our proprietary DPF technology has paved the way for new market opportunities such as black carbon emission reduction in the marine industry, where our solutions allow both ocean-going and inland marine vessels to comply with current and future regulatory thresholds as defined by both IMO and regional regulators.

According to industry research, the global market for new DPF filters manufactured by OEMs is expected to grow at approximately 13% per year. Diesel emissions consist of several toxic gases and particles, including particulate matter (soot), carbon monoxide, and hydrocarbons. Soot has been linked to a variety of human health problems. Reducing diesel emissions will have both health and social benefits along with reduced costs.

In response to health impacts, governments have been implementing legislation to regulate emissions from diesel engines. California implemented the Diesel Risk Reduction Plan, and New York City implemented binding directives for the retrofitting of buses, garbage trucks, and construction machines. In the European Union, Directive EC 715/2007 of June 20, 2007, defines particle count limits for certain cars and light utility vehicles. Also, low emission zones have been implemented locally in various places in Europe, creating a patchwork of regulation.

Historically, our business has predominantly sold our integrated filtration systems with embedded SiC, HTM, and Aqua Solution® membranes to our partners, distributors, and end users. Recently, we have intensified our focus on the direct sale of SiC and HTM membrane products to clients and integrators across jurisdictions to directly access the global market for ceramics membrane solutions in the context of the growing need for clean water and responsible handling of industrial wastewater, while also placing value-enhancing applications across core industrial processes such as chemical/petrochemical, enhanced oil recovery, and other applications.

Research and Development

We have eight (8) full-time employees who are primarily engaged in R&D activities pertaining to the development of technology and intellectual property rights related to silicon carbide product formulas, applications, and manufacturing processes.

Manufacturing

We currently manufacture our ceramic membrane and DPF products in Ballerup, Denmark (Copenhagen area). We assemble our liquid filtration systems and manufacture plastic products at our facilities located in Hobro, Denmark. We plan to consolidate, optimize, and expand our production capacity within the existing facilities with further support from partnerships across the U.S. and Asia.

Raw Materials and Components

The main raw materials used in our manufacturing processes are silicon carbide, steel, pumps, electrical components, plastic, platinum, and palladium. We purchase these commodities from various sources generally based upon availability, lead time, quality, and price.

Sales, Marketing and Business Intelligence

Our products and services are sold both directly and indirectly to end users across multiple jurisdictions and end-markets through direct sales, systems integrators, distributors, agents, and partners.

Our Company initially focused on selling DPF filters to the automotive industry to reduce exhaust gas emissions in diesel engines. In 2014, we acquired Provital Solutions, a Danish filtration system manufacturing company that enabled our Company to broaden our offering of products and systems for ceramic filters, SiC membranes, and modular liquid filtration systems. The liquid filtration systems business has become a highly complementary offering to our SiC membrane and DPF business.

We plan to actively market our existing products to new customers as we penetrate new end markets and optimize our manufacturing capacity. As of December 2024, we employed ten (10) full-time sales, marketing and strategy personnel in addition to partnership and distribution agents. We promote our products through direct sales to potential customers and marketing activities such as participation in tradeshow and exhibitions, with a new focus on digital marketing.

In certain instances, our products are delivered to the end customer through system integrators. These system integrators use our filtration products and membranes in larger filtration systems, which eventually are installed in systems used by the end customers. Due to legislative regulation, system integrators are often required by the end customers to receive approval for their systems, including the components used in such systems, which requires significant time and expense. As a result, we believe that certain system integrators using our products will not replace our filters with competitive products unless there are compelling reasons to do so.

Intellectual Property

We have two issued patents in Denmark, one issued European patent, and one pending European and US patent application that we co-own with a third party. Scope and duration of each of our foreign patents vary in keeping with local laws. On July 7, 2014, we obtained a new Danish patent application related to our silicon carbide membrane technology. In 2023, we have submitted 3 patent applications to further strengthen our intellectual property for SiC membranes.

We also rely on trade secret protection for our confidential and proprietary information. Trade secrets, however, can be difficult to protect. We may not be able to maintain our technology or know-how as trade secrets, and competitors may develop or acquire equally valuable or more valuable technology or know-how related to the manufacture of comparable silicon carbide products. We also seek to protect our confidential and proprietary information, in part, by requiring all employees, consultants, and business partners to execute confidentiality and/or nondisclosure agreements upon the commencement of any employment, consulting arrangement, or engagement with us. These agreements generally require that all confidential and proprietary information developed by the employee, consultant, or business partner, or made known to the employee, consultant, or business partner by us, during the course of the relationship with us and thereafter, be kept confidential and not disclosed to third parties.

We also believe that having distinctive names is an important factor in marketing our products and therefore use trademarks to brand some of our products. As of March 2025, we had three trademark registrations in China and four trademark registrations in Denmark (AQUA SOLUTION, CoMem, CDPX, and FUTURE FILTRATION). We are also in the process of proactively renewing and developing new trademarks in select geographic areas.

Government Regulation

We do not believe that we are subject to any special governmental regulations affecting our products in the countries in which we operate, although we are subject to numerous health and safety laws and regulations. We actively seek to maintain a safe, healthy, and environmentally friendly workplace for all of our employees and other stakeholders.

Environmental Matters

We are subject to a broad range of environmental laws and regulations that govern, among other things, air emissions, wastewater discharges, and the handling, storage, disposal, and release of waste and hazardous substances. It is our policy to comply with all applicable environmental requirements at each of our facilities.

Competition

Our products compete with other filters that are made using polymer, silicon carbide ceramic, and aluminum oxide membranes. Most of our competitors are large industrial companies; however, we believe our patented technology, manufacturing know-how, and trade secrets allow us to produce high-quality products that provide an advantage over most of our competitors, many of which have greater financial, technological, manufacturing and personnel resources. We intend to continue to devote resources to the development of new technologies and the improvement of our products to retain existing customers and acquire new customers.

Employees

At December 31, 2024 we had 105 employees, including 66 in production; 20 in administration; 8 in research and development; 10 in sales, marketing and strategy; and 1 in executive management.

Certain employees in Denmark are represented by workers' councils that have collective bargaining agreements. With the exception of such Danish employees, no other employees are members of a labor union or are represented by workers' councils that have collective bargaining agreements. We believe that we have good relations with our employees.

Corporate Information

We filed our Articles of Incorporation on July 1, 2004, and are incorporated under the laws of the State of Nevada. Our principal executive office is located at Industriparken 22C, 2750 Ballerup, Denmark, and our telephone number is +45 3131 5941. We maintain an Internet website at www.liqtech.com. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to section 13(a) or 15(d) of the Exchange Act are available free of charge through our website as soon as reasonably practicable after we electronically file with or furnish them to the SEC and are available in print to any stockholder who requests a copy. The information contained in, or accessible from, our website is not a part of this Annual Report.

Additionally, the SEC maintains a website that contains reports, proxy statements, information statements, and other information regarding issuers, including us, that file electronically with the SEC at www.sec.gov.

Item 1A. Risk Factors

RISKS RELATED TO OUR BUSINESS AND OPERATIONS

The adverse effect to our business operations from armed conflicts (such as Ukraine/Russia and Hamas/Israel) or similar political, social, regulatory, or economic tension may challenge our operational flexibility and financial performance.

The continuation of the war between Ukraine and Russia as well as the war/armed conflict related to Hamas/Israel and the situation in the Red Sea fuels uncertainty and risk to our business as we rely on the ability to manufacture, ship, service, and operate across multiple jurisdictions. The wars may result in sanctions and increased uncertainties, thus restricting our ability to service our clients and execute orders globally due to supply chain risk, import/export restrictions, and increased demand uncertainty. Additionally, if customers are not successful in generating sufficient revenue or are precluded from securing financing due to the ongoing wars, they may not be able to pay, or may delay payment of, owed amounts to the Company for the provision of products and services. Any inability of current or new potential customers to purchase or pay for our products may adversely affect our sales, earnings, and cash flow.

Sales and earnings could also be affected by our ability to manage the risks and uncertainties associated with changes in local legal requirements or the enforceability of laws and contractual obligations, trade protection measures, changes in tax laws, regional political instability, war, terrorist activities, severe or prolonged adverse weather conditions, natural disasters, and health epidemics or pandemics.

Global trade restrictions and geopolitical tensions could adversely impact our business and supply chain

Our business operates in a global market and is subject to risks arising from increasing trade restrictions, geopolitical tensions, and shifting regulatory frameworks. In recent years, governments have imposed new tariffs, sanctions, and export controls, particularly in relation to advanced technologies, critical raw materials, and industrial goods. Trade conflicts between major economies, such as the United States and China, as well as evolving sanctions on Russia, have created uncertainty in supply chains and increased the complexity of cross-border trade. More recently, the change in administration in the U.S. elevates the potential for trade conflict and tariffs on imports, which could potentially impact our business.

New or expanded trade restrictions, including export controls on key materials or technologies used in our products, could disrupt our supply chain, limit our ability to source critical components, and increase costs. Additionally, changes in import/export regulations or retaliatory trade policies from foreign governments could affect our ability to serve certain markets or delay customer orders.

Our ability to mitigate these risks depends on the stability of global trade relations, our ability to identify alternative suppliers, and potential shifts in regulatory frameworks that could impact our industry. There can be no assurance that future trade restrictions or geopolitical conflicts will not have a material adverse effect on our business, financial condition, and results of operations.

Prolonged period of energy market volatility and supply disruptions could negatively impact our business

The European energy crisis, which escalated in 2022 amid the Russia-Ukraine war, has largely stabilized; however, our business remains exposed to fluctuations in energy prices and potential supply disruptions caused by geopolitical instability, regulatory changes, or natural disasters. While natural gas and electricity prices in Europe have moderated compared to prior peaks, continued uncertainty regarding global energy markets, including potential disruptions from conflicts in the Middle East and instability affecting key shipping routes, could result in renewed price volatility and supply constraints.

Our business is heavily exposed to both gas and electricity prices used to power operating equipment and high-temperature kilns, as well as to heat office and manufacturing facilities. Any significant increase in energy costs or supply shortages, whether due to geopolitical conflicts, new regulatory restrictions, or logistical challenges in securing energy inputs, could negatively impact profitability and reduce our competitive position compared to competitors operating in regions with lower energy costs.

Additionally, evolving energy policies, such as carbon taxes, emissions trading schemes, and government-mandated energy transition initiatives, may increase operating costs and impact the cost structure of our production processes. While management continues to evaluate energy efficiency measures and alternative supply arrangements, there can be no assurance that future energy market volatility or supply disruptions will not have a material adverse effect on our business, financial condition, and results of operations.

Our business has been right-sized to help protect our profitability and cash flow; however, we remain exposed to near-term market fundamentals as we rely on short lead-time products and orders that may be cancelled if customers are facing weakened end-market demand or increased uncertainty.

Health crises, pandemics, and other public health emergencies could adversely affect our business, financial condition, and results of operations.

Our business could be adversely affected by the emergence or resurgence of health crises, pandemics, or other public health emergencies. While the global impact of COVID-19 has diminished, recent years have demonstrated the significant disruptions that pandemics or widespread health emergencies can cause to supply chains, labor markets, and overall economic activity.

Authorities worldwide continue to implement measures to mitigate potential future outbreaks, including vaccination campaigns, travel restrictions, and quarantine protocols, however, new infectious diseases or resurgences of existing ones could lead to disruptions in our supply chain, temporary facility closures, labor shortages, and delays in customer orders. Additionally, prolonged health crises could negatively impact the financial position of our customers or suppliers, increasing the risk of delayed payments, order cancellations, or defaults on contractual obligations.

Our ability to navigate future public health emergencies will depend on the severity and duration of such events, as well as the effectiveness of mitigation strategies implemented by governments, businesses, and healthcare systems. There can be no assurance that future health crises will not have a material adverse effect on our business, financial condition, and results of operations.

Historically, we have been dependent on a few major customers for a significant portion of the Company's revenue. Our revenue could decline if we are unable to maintain or develop relationships with additional customers and our results of operations could be adversely affected if any one of these customers is unable to meet their financial obligations to us.

For the year ended December 31, 2024, our four largest customers accounted for approximately 7%, 7%, 5%, and 5% of our net sales (approximately 24% in total). For the year ended December 31, 2023, our four largest customers accounted for approximately 7%, 5%, 4%, and 4% of our net sales (approximately 20% in total). If we are unable to diversify our customer base, our future results will be heavily dependent on these customers. Our dependence on a limited number of customers means that the loss of a major customer or any reduction in orders by a major customer would materially reduce our net sales and adversely affect our results of operations. We expect that sales to relatively few customers will continue to account for a significant percentage of our net sales for the foreseeable future; however, these customers or our other customers may not use our products at current levels in the future, if at all. We have no firm, long-term volume commitments from any of our major customers, and we generally enter into individual purchase orders with our customers, in certain cases under master agreements that govern the terms and conditions of the relationship. We have experienced delays or cancellations of orders and fluctuations in order levels from period to period and expect that we will continue to experience such delays, cancellations, and fluctuations in the future. Customer purchase orders may be delayed or cancelled, and order volume levels can be changed with limited or no penalties. We may not be able to replace cancelled, delayed, or reduced purchase orders with new orders. If any one of these customers reduces its demand for our products, it will likely have a material adverse effect on our financial results.

Furthermore, a significant portion of our accounts receivable is concentrated with a few major customers who may not be able to meet their financial obligations to us. The failure of any such customer to pay amounts owed to us in a timely fashion or at all could have an adverse effect on our results of operations. The Company is also exposed to credit risk on its accounts receivable, and this risk is heightened during periods when economic conditions worsen. The Company's outstanding receivables are not covered by collateral or credit insurance. The Company's exposure to credit and collection risk on its receivables may also be higher in certain international markets, and its ability to mitigate such risks may be limited. While the Company has procedures to monitor and limit exposure to credit risk on its receivables, there can be no assurance such procedures will effectively limit our credit risk and avoid losses.

If we fail to restore financial stability through improved profitability and access to adequate liquidity, our business options and financial condition would be impacted.

Our business has undergone significant changes in the past few years to help restore financial flexibility to the Company through an enhanced capital structure, improved profitability, reduced investments, and changes to the organization. Our ability to achieve financial break-even is heavily dependent on external macroeconomic and competitive industry dynamics that are outside of our control; therefore, our business may not achieve its financial objectives in a period with increased competition or weakening market fundamentals.

Furthermore, future growth and operations may require public or private equity offerings or debt financings. Additional funds may not be available when we need them on terms that are acceptable to us, or at all. If adequate funds are not available, we may be required to delay or reduce the scope of our plans to grow our revenues, to pass on one or more opportunities, or to scale back our business plans. To the extent that we raise additional funds by issuing equity securities, our stockholders may experience significant dilution. In addition, debt financing, if available, may involve restrictive covenants. We may seek to access the public or private capital markets whenever conditions are favorable, even if we do not have an immediate need for additional capital at that time. Our access to the financial markets and the pricing and terms we receive in the financial markets could be adversely impacted by various factors, including changes in financial markets and interest rates.

The potential interruption or failure to obtain raw materials and components at affordable prices caused by continued global and regional supply chain constraints could negatively affect our ability to supply products to our customers and negatively affect our profit and delay revenue.

We use silicon carbide, steel, plastic, platinum, and palladium in the manufacturing process. As other industries develop products utilizing silicon carbide, we may not be able to obtain adequate supplies of silicon carbide required for the manufacture of our existing and future products that would prevent us from supplying products to our customers and materially affect our business. Furthermore, any increased demand for, the raising of tariff rates on, or an increase of non-tariff trade barriers that apply to silicon carbide, steel, plastic, platinum, or palladium could increase the price we must pay to obtain it and could adversely affect our profitability, which would have an adverse effect on our financial results. Additionally, fluctuation in demand for ceramics or global bottlenecks in shipping may result in supply chain constraints and longer lead times on key components which may result in delayed order shipments or risk of cancellation from clients demanding short lead times.

If we are unable to manage our expected growth, our business may be materially and adversely affected.

We expect to expand our operations by increasing our production capacity and penetrating new markets. The growth of our business could place significant strain on our management, operational, and financial resources. To manage our future growth, we could be required to improve existing or implement new operational or financial systems, procedures, and controls as well as to expand, train, and manage a growing employee base. Our failure to accomplish any of these tasks could materially and adversely affect our business. We also may not recognize the anticipated benefits of completed dispositions or other divestitures we may pursue in the future.

Our success will depend, to a large degree, on the expertise and experience of the members of our management team, the loss of whom could have a material adverse effect on our business.

Our success is, to a large degree, dependent upon the expertise and experience of the management team and its ability to attract and retain qualified personnel who are technically proficient. The loss of the services of one or more of such personnel could have a material adverse effect on our business. Our business may also be adversely affected if we are unable to continue to attract and retain such personnel.

Adverse conditions, regulatory challenges, or lack of funding for emission control programs, may delay or negatively affect our future growth and market potential within the transportation and marine industries.

Global health crises such as the COVID-19 pandemic or significant macroeconomic uncertainty exacerbated by current or future geopolitical conflicts and high inflationary pressure can significantly impact our Company, customers, and suppliers. For example, the global shipping industry has been negatively impacted by the coronavirus outbreak and may be further adversely affected by an extended shutdown of various businesses or delayed implementation of regulatory frameworks and environmental policies. This, in turn, could adversely affect the demand for our marine scrubbers as shipowners delay or even cancel their orders for new closed-loop scrubber systems.

Future growth of our business depends in part on the availability of funding for emissions control programs, which can be affected by economic as well as political reasons that are beyond our control. If such funding is not available, or delayed, it can negatively affect our future growth prospects. In addition to funding, we also expect that our future business growth will be driven, in part, by the enforcement of existing emissions-related environmental regulations and tightening of emissions standards worldwide, where regulations and standards are frequently contested in litigation. For example, our ability to expand our business in the marine industry is dependent on the effective implementation of IMO 2020, which requires the burning of low-sulfur oil for marine vessels or the inclusion of marine scrubber technology. If existing regulations and emissions standards do not continue to become stricter, are loosened, or are not enforced by governmental authorities due to commercial and business pressures, economic conditions, or otherwise, it could have a material adverse effect on our business, operating results, financial condition, and long-term prospects.

We face changes in governmental standards by which our products are evaluated, and if we cannot meet any such changes, some of our products could become obsolete, which could have a material adverse effect on our business.

We believe that, due to the intensifying focus on the environment and clean air and water standards throughout the world, new requirements to adhere to more stringent regulations are possible in the future as governmental agencies seek to promote clean air and water along with new product certifications. In the event that our products fail to meet these evolving standards, some or all of our products may become obsolete, which could have an adverse effect on our business, operating results, financial condition, and long-term prospects.

Our international operations are exposed to potential adverse tax consequence.

Our international operations create a risk of potentially adverse tax consequences. Taxes on income in future internationally based operations are dependent upon acceptance of our operational practices and intercompany transfer pricing by local tax authorities as being on an arm's length basis. Due to inconsistencies among taxing authorities in application of the arm's length standard, transfer pricing challenges by tax authorities could, if successful, materially increase our consolidated income tax expense. We may be subject to tax audits, and an audit could result in the assessment of additional income tax against us. This could have a material adverse effect on our operating results or cash flows in the period or periods for which that determination is made and could result in increases to our overall tax expense in subsequent periods.

Our business could face adverse impacts due to increased interest rates, tightening debt capital markets, and market volatility.

Our business and capital structure are dependent upon our ability to raise financing and optimize our cash management activities through timely access to credit and loan markets at attractive terms. The prevailing uncertainty and increased interest rates represent a significant risk to our business as we are relying upon our ability to refinance our capital structure and maintain access to relevant financing. Furthermore, elevated interest rates may cause increased uncertainty and cash flow constraints, including the inability of the Company to meet existing debt service commitments. Increased market and interest rate uncertainty may also elevate execution risk and ultimately restrict our ability to refinance our debt obligations.

Foreign currency fluctuations could adversely impact financial performance.

Our reporting currency is the United States Dollar (\$). Because of our activities in Denmark, the European Continent, Middle East, U.S., and other countries, we are exposed to fluctuations in foreign currency rates. Most income and expense-related transactions are denominated in currencies other than the reporting currency, and a certain portion of the excess cash balances may be held in other currencies or in bank accounts outside of the United States, causing risks of currency fluctuations when translating balances to the reporting currency at the end of the reporting period. We may manage the risk to such exposure through active cash flow management, and in some cases, by entering into foreign currency futures and option contracts; however, we can make no assurance that such actions will be sufficient to offset a material adverse effect on our operations in the future. As of December 31, 2024, we have not entered into any derivative contracts to hedge our currency exposure.

Our inability to protect our intellectual property rights could negatively affect our business and results of operations.

Our ability to compete effectively depends in part upon developing, maintaining, and/or protecting intellectual property rights relevant to our re-crystallized silicon carbide product forms, applications, and manufacturing processes. We rely principally on a combination of patent protection, trade secrets, confidentiality and non-disclosure agreements, and trusted business relationships to establish, maintain, and protect the intellectual property rights relevant to our business. These measures, however, may not be adequate in every given case to permit us to gain or retain any competitive advantage, particularly in those countries where the laws do not protect our proprietary rights as fully as those in the United States. In particular, because silicon carbide is a well-known material (developed over 100 years ago), and there has been extensive research, development, and publication related to this material and its wide range of applications, obtaining intellectual property rights to key elements of silicon carbide technology can be challenging. Accordingly, at least some of the technology employed in our manufacture of re-crystallized silicon carbide products is not protected by patents.

Where we consider it appropriate, we seek patent protection in the United States and other countries for technologies used in, or relating to, our re-crystallized silicon carbide product forms, applications, and manufacturing processes. The issuance of a patent is not conclusive as to its scope, validity, and enforceability. Thus, any patent or patent application which may issue into a patent held by us could be challenged, invalidated, or held unenforceable in litigation or proceedings before the U.S. Patent and Trademark Office and/or other patent tribunals, or they may be circumvented by others. No consistent policy regarding the breadth of patent claims has emerged to date in the United States, and the landscape could become more uncertain in view of future rule changes by the United States Patent and Trademark Office, the introduction of patent reform legislation, and decisions in patent law cases by United States federal courts. The patent landscape outside of the United States is even less predictable. As a result, the validity and enforceability of patents cannot be predicted with certainty. In addition, we may fail to apply for patents on important technologies or product candidates in a timely fashion, if at all, and our existing and future patents may not be sufficiently broad to prevent others from practicing our technologies or from developing competing products or technologies, especially given the long history of silicon carbide development.

Our patent strategy involves complex legal and factual questions. Our ability to maintain and solidify our proprietary technology may depend in part upon our success in obtaining patent rights and enforcing those rights once granted or licensed. We do not know whether any of our pending patent applications will result in the issuance of any patents. Our issued patents and those that may be issued in the future may be challenged, invalidated, rendered unenforceable, or circumvented, which could limit our ability to prevent competitors from marketing similar or related products or shorten the term of patent protection that we may have for our products, processes, and enabling technologies. In addition, the rights granted under any issued patents may not provide us with competitive advantages against competitors with similar technology. Furthermore, our competitors may independently develop similar technologies, duplicate technology developed by us, or otherwise possess intellectual property rights that could limit our ability to manufacture our products and operate our business.

We also rely on trade secret protection for our confidential and proprietary information. Trade secrets, however, can be difficult to protect. We may not be able to maintain our technology or know-how as trade secrets, and competitors may develop or acquire equally valuable or more valuable technology or know-how related to the manufacture of comparable silicon carbide products. We also seek to protect our confidential and proprietary information, in part, by requiring all employees, consultants, and business partners to execute confidentiality and/or nondisclosure agreements upon the commencement of any employment, consulting arrangement, or engagement with us. These agreements generally require that all confidential and proprietary information developed by the employee, consultant, or business partner, or made known to the employee, consultant, or business partner by us, during the relationship with us, be kept confidential and not disclosed to third parties. These agreements may be breached and may not provide adequate remedies in the event of breach. To the extent that our employees, consultants, or business partners use intellectual property owned by others in their work for and/or with us, disputes could arise as to the rights in related or resulting technologies, know-how, or inventions. Moreover, while we also require customers and vendors to execute agreements containing confidentiality and/or nondisclosure provisions, we may not have obtained such agreements from all of our customers and vendors. In addition, our trade secrets may otherwise become known or be independently discovered by competitors, customers, or vendors. Such customers or vendors may also be subject to laws and regulations that require them to disclose information that we would otherwise seek to keep confidential.

Moreover, others may independently develop and obtain patents covering technologies that are similar or superior to the product forms, applications, or manufacturing processes that we employ. If that happens, we may need to obtain licenses for these technologies and may not be able to obtain licenses on reasonable terms, if at all, which could limit our ability to manufacture our future products and operate our business. In addition, third parties could utilize our intellectual property rights in territories where we do not have intellectual property protection. Such third parties may then try to import products made using our intellectual property rights into the United States or other countries, which could have a material adverse effect on our business.

Our contracts with third parties could negatively affect our intellectual property rights.

To further strengthen our product development efforts, we continue to work closely with customers and other third parties to research and develop advancements in silicon carbide product forms, applications, manufacturing processes, and related products and technologies. In some instances, the research and development activities that we conduct with customers and other third parties may produce intellectual property to which we may not have ownership or exclusive rights and will be unable to protect or monetize. Furthermore, there could be disputes between us and a private third party as to the ownership rights to any inventions that we develop in collaboration with such third party. Any such dispute may cause us to incur substantial costs and could place a significant strain on our financial resources, divert the attention of management from our core business, or harm our reputation.

We could become subject to intellectual property litigation that could be costly, limit or cancel our intellectual property rights, divert time and efforts away from business operations, require us to pay damages, and/or otherwise have an adverse material impact on our business.

The success of our business is highly dependent on protecting our intellectual property rights. Unauthorized parties may attempt to copy or otherwise obtain and use our products and/or enabling technologies. Policing the unauthorized use of our intellectual property rights is difficult and expensive, as is enforcing these rights against unauthorized use by others. Identifying unauthorized use of our intellectual property rights is difficult because we may be unable to monitor the processes and/or materials being employed by other parties. The steps we have taken may not prevent unauthorized use of our intellectual property rights, particularly in foreign countries where enforcement of intellectual property rights may be more difficult than in the United States.

Our continued commercial success will also depend in part upon not infringing the patents or violating the intellectual property rights of third parties. We are aware of patents and patent applications generally relating to aspects of our technologies filed by, and issued to, third parties. Nevertheless, we cannot determine with certainty whether such patents or patent applications of other parties may materially affect our ability to conduct our business. There may be existing patents of which we are unaware that we may inadvertently infringe, resulting in claims against us or our customers. In the event that the manufacture, use, and/or sale of our products or processes is challenged, or if our product forms or processes conflict with the patent rights of others, third parties could bring legal actions against us or our customers in the United States, Europe, or other countries, claiming damages and seeking to enjoin the manufacturing and/or marketing of our products. Additionally, it is not possible to predict with certainty what patent claims may issue from any relevant third-party pending patent applications. Third parties may be able to obtain patents with claims relating to our product forms, applications, and/or manufacturing processes, which they could attempt to assert against us or our customers.

In any case, litigation may be necessary to enforce, protect, or defend our intellectual property rights or to determine the validity and scope of the intellectual property rights of others. Any litigation could be unsuccessful, cause us to incur substantial costs, divert resources and the efforts of our personnel away from daily operations, harm our reputation, and/or result in the impairment of our intellectual property rights. In some cases, litigation may be threatened or brought by a patent-holding company or other adverse patent owner who has no relevant product revenues and against which our patents may provide little or no deterrence. If we are found to infringe any patents, we could be required to (1) pay substantial monetary damages, including lost profits, reasonable royalties, and/or treble damages if an infringement is found to be willful and/or (2) totally discontinue or substantially modify any products or processes that are found to be in violation of another party's intellectual property rights. If our competitors are able to use our technology without payment to us, our ability to compete effectively could be harmed.

We face competition and technological advances by competitors, which could adversely affect the sales of our products.

The growth of our Company depends in part on maintaining and growing the sales of our current products in existing and new markets, but also in developing new products and technologies. There is significant competition among companies that provide solutions for pollutant emissions from diesel engines and liquids purification. Several companies market products that compete directly with our products. Other companies offer products that potential customers may consider to be acceptable or superior alternatives to our products and services, including products that are verified by the Environmental Protection Agency or other environmental authorities. We face direct competition from companies with greater financial, technological, manufacturing, and personnel resources. Newly developed products could be more effective and cost-efficient than our current or future products.

Any liability for environmental harm or damages resulting from technical faults or failures of our products could be substantial and could materially adversely affect our business and results of operations.

Customers rely upon our products to meet emissions control standards imposed upon them by regulatory bodies. Failure of our products to meet such standards could expose us to claims from customers. Our products are also integrated into goods used by consumers, and therefore a malfunction or the inadequate design of our products could result in product liability claims. Any liability for environmental harm or damages resulting from technical faults or failures could be substantial and could materially and adversely affect our business and results of operations. In addition, a well-publicized actual or perceived problem could adversely affect the market's perception of our products, which would materially impact our financial condition and operating results.

We could become liable for damages resulting from our manufacturing activities, which could have a material adverse effect on our business or cause us to cease operations.

The nature of our manufacturing operations exposes us to potential claims and liability for environmental damage, personal injury, loss of life, and damage to, or destruction of, property. Our manufacturing operations are subject to numerous laws and regulations that govern environmental protection and human health and safety. These laws and regulations have changed frequently in the past, and it is reasonable to expect additional and more stringent changes in the future. Our manufacturing operations may not comply with future laws and regulations, and we may be required to make significant unanticipated capital and operating expenditures to bring our operations within compliance with such evolving regulations. If we fail to comply with applicable environmental laws and regulations, manufacturing guidelines, and workplace safety requirements, governmental authorities may seek to impose fines and penalties on us or to revoke or deny the issuance or renewal of operating permits, and private parties may seek damages from us. Under such circumstances, we could be required to curtail or cease operations, conduct site remediation or other corrective action, or pay substantial damage claims for which we may not have sufficient or any insurance coverage for claims.

Our actual or perceived failure to adequately protect personal data could adversely affect our business, financial condition, and results of operations.

A wide variety of provincial, state, national, foreign, and international laws and regulations apply to the collection, use, retention, protection, disclosure, transfer, and other processing of personal data. These privacy and data protection-related laws and regulations are evolving, with new or modified laws and regulations proposed and implemented frequently and existing laws and regulations subject to new or different interpretations. Further, our legal and regulatory obligations in foreign jurisdictions are subject to unexpected changes, including the potential for regulatory or other governmental entities to enact new or additional laws or regulations, to issue rulings that invalidate prior laws or regulations, or to increase penalties significantly. Compliance with these laws and regulations can be costly and can delay or impede the development and offering of new products and services.

For example, the General Data Protection Regulation, which became effective in May 2018, imposes more stringent data protection requirements and provides for significantly greater penalties for noncompliance than the European Union laws that previously applied. Additionally, California enacted legislation, the California Consumer Privacy Act, which became effective on January 1, 2020. We may also be subject to additional obligations relating to personal data by contract that industry standards apply to our practices. Our actual or perceived failure to comply with applicable laws and regulations or other obligations to which we may be subject relating to personal data, or to protect personal data from unauthorized access, use, or other processing, could result in enforcement actions and regulatory investigations against us, claims for damages by customers and other affected individuals, fines, damage to our reputation, and loss of goodwill, any of which could have a material adverse effect on our operations, financial performance, and business. Further, evolving and changing definitions of personal data and personal information, including the classification of IP addresses, machine identification information, location data, and other information, may limit or inhibit our ability to operate or expand our business, including limiting business relationships and partnerships that may involve the sharing or uses of data and may require significant costs, resources, and efforts to comply.

Some of our officers and directors are located outside of the United States; therefore, it may be difficult for an investor to enforce within the United States any judgments obtained against us or such officers and directors.

The majority of our officers and some of our directors are nationals and/or residents of countries other than the United States, and all or a substantial portion of such persons' assets may be located outside of the United States. As a result, it may be difficult for an investor to affect service of process or enforce within the United States any judgments obtained against us or such officers or directors, including judgments predicated upon the civil liability provisions of the securities laws of the United States or any state thereof. In addition, there is uncertainty as to whether the courts of other jurisdictions would recognize or enforce judgments of United States courts obtained against us or our directors and officers predicated upon the civil liability provisions of the securities laws of the United States or any state thereof or be competent to hear original actions brought in other jurisdictions against us or such officers and directors predicated upon the securities laws of the United States or any state thereof.

We have signed partnership, distribution, and joint venture agreements and may engage in additional collaborations, joint ventures, or strategic alliances in the future, and we may not realize the benefits of such arrangements.

From time to time, we may enter into partnership, exclusivity, distribution, or joint venture agreements. Establishment of these agreements involves significant risks and uncertainties, including (i) our inability to cooperate with our local partner, (ii) our local partner having economic, business, or legal interests or goals that are inconsistent with ours, and (iii) the potential that our local partner may be unable to meet its economic or other obligations, which may require us to fulfill those obligations alone. In any joint venture in which we engage, we will rely on our local partner for the implementation of much of any such joint venture operation, and the success of any such operation is thus not entirely within our control. Any failure or perceived failure of a joint venture may have a material impact on our operations and financial condition.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results, and current and potential stockholders may lose confidence in our financial reporting.

Section 404 of the Sarbanes-Oxley Act of 2002 requires our management to assess the effectiveness of our internal control over financial reporting and to disclose in our filing if such controls were unable to provide assurance that a material error would be prevented or detected in a timely manner. We have an ongoing program to review the design of our internal controls framework in keeping with changes in business needs, implement necessary changes to our controls design, and test the system and process controls necessary to comply with these requirements. If our internal controls over financial reporting is determined to be ineffective, resulting in material weaknesses and/or significant deficiencies, investor perceptions regarding the reliability of our financial statements may be adversely affected, which could cause a decline in the market price of our stock and otherwise negatively affect our liquidity and financial condition.

In Item 9A, we disclose that, with respect to the standards of Sarbanes-Oxley Section 404 and the internal controls standard to which we are subjected, we reported material weaknesses in our internal controls over financial reporting. For additional information on this item, please see Item 9A, Controls and Procedures.

Although we believe our historical efforts have strengthened our internal control over financial reporting (and we concluded that our financial statements were reliable, notwithstanding the material weakness we reported), we cannot be certain that our revised internal control practices will ensure that we will have or maintain adequate internal control over financial reporting in future periods. Any failure to have or maintain such internal controls could adversely impact our ability to report our financial results accurately and on a timely basis. If our financial statements are not accurate, investors may not have a complete understanding of our operations.

We may have risks associated with security of our information technology systems.

We make significant efforts to maintain the security and integrity of our information technology systems and data. Despite significant efforts to create security barriers to such systems, it is virtually impossible for us to entirely mitigate this risk. There is a risk of industrial espionage, cyber-attacks, misuse or theft of information or assets, or damage to assets by people who may gain unauthorized access to our facilities, systems, or information. Such cybersecurity breaches, misuse, or other disruptions could lead to the disclosure of confidential information; improper usage and distribution of our intellectual property; theft, manipulation, and destruction of private and proprietary data; and production downtimes. Although we actively employ measures to prevent unauthorized access to our information systems, preventing unauthorized use is inherently difficult. These events could adversely affect our financial results, and any legal action in connection with any such cybersecurity breach could be costly and time-consuming, may divert management's attention and adversely affect the market's perception of us and our products. In addition, we must frequently expand our internal information system to meet increasing demand in storage, computing, and communication, which may result in increased costs. Our internal information system is expensive to expand and must be highly secure due to the sensitive nature of our customers' information that we transmit. Building and managing the support necessary for our growth places significant demands on our management and resources. These demands may divert such resources from the continued growth of our business and implementation of our business strategy.

RISKS RELATED TO OUR COMMON STOCK

Future equity financings or convertible debt issuances would dilute your ownership and could adversely affect your common stock ownership rights in comparison with those of other security holders.

Our Board of Directors has the power to issue additional shares of common or preferred stock without stockholder approval. In general, stockholders do not have preemptive rights to any common stock issued by us in the future; therefore, stockholders may experience additional dilution of their equity investment if we issue additional shares of common stock in the future, including shares issuable under equity incentive plans, or if we issue securities that are convertible into shares of our common stock.

If additional funds are raised through the issuance of equity or convertible debt securities, the percentage of ownership of our existing stockholders will be reduced, and such newly issued securities may have rights, preferences, or privileges senior to those of existing stockholders. If we issue additional common stock or securities convertible into common stock, such issuance will reduce the proportionate ownership and voting power of each other stockholder. In addition, such stock issuances might result in a reduction of the market value of our common stock, which could make our stock unattractive to existing stockholders.

We will not receive a significant amount, or potentially any, additional funds upon the exercise of our pre-funded warrants; however, any exercise would increase the number of shares eligible for future resale in the public market and result in substantial dilution to our stockholders.

As of December 31, 2024, we have issued pre-funded warrants to purchase a total of 5,299,879 shares of our common stock, consisting of 3,930,008 pre-funded warrants issued prior to 2024 and an additional 1,369,871 pre-funded warrants issued in 2024. Of these, none have been exercised. Each of the pre-2024 pre-funded warrants is exercisable for \$0.008 per share of common stock underlying such pre-funded warrant, while the pre-funded warrants issued in 2024 are exercisable for \$0.001 per share of common stock underlying such pre-funded warrant. These warrants may be exercised through a cashless exercise mechanism, meaning that the holder may not pay a cash purchase price upon exercise, but instead would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the pre-funded warrant.

Accordingly, we will not receive a significant amount, or potentially any, additional funds upon the exercise of the pre-funded warrants. To the extent such pre-funded warrants are exercised, additional shares of common stock will be issued for nominal or no additional consideration, which will result in substantial dilution to the then-existing holders of our common stock and will increase the number of shares eligible for resale in the public market. Sales of substantial numbers of such shares in the public market could adversely affect the market price of our common stock, causing our stock price to decline.

Provisions in our articles of incorporation and bylaws could discourage a change in control or an acquisition of us by a third party, even if the acquisition would be favorable to you, thereby adversely affecting existing stockholders.

Our articles of incorporation and bylaws contain provisions that may have the effect of making it more difficult or delaying attempts by others to obtain control of our Company, even when these attempts may be in the best interests of stockholders. For example, our articles of incorporation authorize our Board of Directors, without stockholder approval, to issue one or more series of preferred stock, which could have voting and conversion rights that adversely affect or dilute the voting power of the holders of common stock. These provisions and others that could be adopted in the future could deter unsolicited takeovers or delay or prevent changes in our control or management, including transactions in which stockholders might otherwise receive a premium for their shares over then-current market prices. These provisions may also limit the ability of stockholders to approve transactions that they may deem to be in their best interests.

There is limited trading volume of our common stock, which could make it difficult for you to liquidate an investment in our common stock in a timely manner.

Since April 16, 2019, our common stock has been traded on Nasdaq Capital Market under the ticker LIQT. Because there is limited volume in our common stock, investors may not be able to liquidate their investments when they desire to do so.

In addition, if we fail to meet the criteria set forth in SEC and Nasdaq Capital Market rules and regulations, various requirements would be imposed by law on broker-dealers who sell our securities to persons other than established customers and accredited investors. Consequently, such regulations may deter broker-dealers from recommending or selling our common stock, which may further affect its liquidity.

The market price of our common stock has been and may continue to be volatile.

The market price of our common stock has been volatile and fluctuates widely in response to various factors that are beyond our control. The price of our common stock is not necessarily indicative of our operating performance or long-term business prospects. In addition, the securities markets have from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. These market fluctuations may also materially and adversely affect the market price of our common stock. Factors such as the following could cause the market price of our common stock to fluctuate substantially:

- the underlying price of the commodities that affect our key markets of industrial water filtration, marine, and oil & gas;
- announcements of capital budget changes by major customers;
- the introduction of new products by our competitors;
- announcements of technology advances by us or our competitors;
- current events affecting the political and economic environment in the United States, Europe, or Asia;
- conditions or industry trends, including demand for our products, services, and technological advances;
- changes to financial estimates by us or by any securities analysts who might cover our stock;
- additions or departures of our key personnel;
- government regulation of our industry;
- seasonal, economic, or financial conditions;
- our quarterly operating and financial results;
- litigation or public concern about the safety of our products; or
- the effect of macroeconomic uncertainty, global supply chain disruptions, or public health crises.

The realization of any of these risks and other factors beyond our control could cause the market price of our common stock to decline significantly. In particular, the market price of our common stock may be influenced by changes in governmental regulations regarding diesel particle emissions and marine wastewater because demand for our products and services is closely related to those regulations. The stock market in general experiences, from time to time, extreme price and volume fluctuations. Periodic and/or continuous market fluctuations could result in extreme volatility in the price of our common stock, which could cause a decline in the value of our common stock. Price volatility may be worse if the trading volume of our common stock is low.

If securities analysts do not publish research or reports about our business or if they downgrade us or our sector, the price of our common stock could decline.

The trading market for our common stock will depend in part on research and reports that industry or financial analysts publish about us or our business. Furthermore, if one or more of the analysts who cover us downgrades us, the industry in which we operate, or the stock of any of our competitors, the price of our common stock may decline. If one or more of these analysts ceases coverage altogether, we could lose visibility, which could also lead to a decline in the price of our common stock.

Future sales of our common stock, or the perception that future sales may occur, may cause the market price of our common stock to decline.

If any significant number of our outstanding shares are sold, such sales could have a depressive effect on the market price of our stock. We are unable to predict the effect, if any, that the sale of shares, or the availability of shares for future sale, will have on the market price of the shares prevailing from time to time. Sales of substantial amounts of shares in the public market, or the perception that such sales could occur, could depress prevailing market prices for the shares. Such sales may also make it more difficult for us to sell equity securities or equity-related securities in the future at a time and price that we deem appropriate.

The Company is considered a “smaller reporting company” and is exempt from certain disclosure requirements, which could make our common stock less attractive to potential investors.

As a “smaller reporting company” (as defined in Rule 12b-2 of the Securities Exchange Act of 1934 (the “Exchange Act”)), we are not required and may not include a Compensation Discussion and Analysis section in our proxy statements, provide only three years of business information, provide fewer years of selected financial data and have other “scaled” disclosure requirements that are less comprehensive than issuers that are not “smaller reporting companies,” which could make our stock less attractive to potential investors and could make it more difficult for stockholders to sell their shares.

We have no current plan to pay dividends on our common stock, and investors may lose the entire amount of their investment.

We have no current plans to pay dividends on our common stock; therefore, investors will not receive any funds absent a sale of their shares. We cannot assure investors of a positive return on their investment when they sell their shares, nor can we assure investors will not lose the entire amount of their investment.

PUBLIC COMPANY RISK FACTORS

We will continue to incur significant costs from operating as a public company, and our management may be required to devote substantial time to compliance initiatives that ultimately could have a material adverse effect on our financial condition and results of operations.

As a public company, we expect to continue to incur significant legal, accounting, and other expenses. In addition, the Sarbanes-Oxley Act, along with rules subsequently implemented by the SEC, have imposed various requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls as well as mandating certain corporate governance practices. Our management and other personnel will continue to devote a substantial amount of time and financial resources to these compliance initiatives.

If we fail to staff our accounting and finance function adequately or maintain internal control systems sufficient to meet the demands that are placed upon us as a public company, we may be unable to report our financial results accurately or in a timely manner and our business and stock price may suffer. The costs of being a public company, as well as the diversion of management's time and attention, may have a material adverse effect on our future business, financial condition, and results of operations.

Changes in U.S. Generally Accepted Accounting Principles ("GAAP") could adversely affect our financial results and may require significant changes to our internal accounting systems and processes.

We prepare our consolidated financial statements in conformity with GAAP. These principles are subject to interpretation by the Financial Accounting Standards Board ("FASB"), the SEC, and various bodies formed to interpret and create appropriate accounting principles and guidance. The FASB periodically issues new accounting standards on a variety of topics. For information regarding new accounting standards, please refer to Note 1, "Description of Business and Significant Accounting Policies – Recent Accounting Pronouncements," of the Notes to Consolidated Financial Statements in Part II, Item 8, "Financial Statements and Supplementary Data," of this Annual Report on Form 10-K. These and other such standards generally result in different accounting principles, which may significantly impact our reported results or could result in variability of our financial results.

In preparing our financial statements, we make certain assumptions, judgments and estimates that affect amounts reported in our consolidated financial statements, which, if not accurate, may significantly impact our financial results.

We make assumptions, judgments, and estimates for a number of items, including the fair value of financial instruments, goodwill, long-lived assets, and other intangible assets; the realizability of deferred tax assets; the recognition of revenue; the fair value of stock awards; and others. We also make assumptions, judgments, and estimates in determining the accruals for employee-related liabilities, including commissions and variable compensation, and in determining the allowance or provisions for uncertain tax positions, doubtful accounts, excess or obsolete inventory, and legal contingencies. These assumptions, judgments, and estimates are drawn from historical experience and various other factors that we believe are reasonable under the circumstances as of the date of the consolidated financial statements. Actual results could differ materially from our estimates, and such differences could significantly impact our financial results.

Item 1B. Unresolved Staff Comments

None.

Item 1C. Cybersecurity

We maintain a cyber risk management program designed to identify, assess, manage, mitigate, and respond to cybersecurity threats. This program is integrated within the Company's enterprise risk management system and addresses both the corporate information technology environment and customer-facing products.

The underlying controls and processes of our cyber risk management program are consistent with recognized practices and standards for cybersecurity and information technology, including the National Institute of Standards and Technology ("NIST") Cybersecurity Framework and the International Organization Standardization 27001 Information Security Management System Requirements.

Cyber partners are also a key part of our cybersecurity infrastructure. We utilize third-party software to provide continuous monitoring of our infrastructure and to coordinate the investigation and remediation of alerts. A program for staging incident response drills is intended to prepare support teams in the event of a significant incident.

The Chief Financial Officer, who is responsible for assessing and managing our cyber-risk management program, informs senior management regarding the prevention, detection, mitigation, and remediation of cybersecurity incidents and supervises such efforts. The Chief Financial Officer has experience selecting, deploying, and operating cybersecurity technologies, initiatives, and processes, and relies on threat intelligence as well as other information obtained from governmental, public, or private sources, including external consultants.

The Audit Committee of the Board of Directors is responsible for overseeing cybersecurity risk exposures and the steps taken by management to monitor and mitigate cybersecurity risks. Management briefs the Audit Committee on the effectiveness of our cyber risk management program. In addition, cybersecurity risks are reviewed by the Board of Directors, at least annually.

We face risks from cybersecurity threats that could have a material adverse effect on our business, financial condition, results of operations, cash flows, or reputation. We have experienced, and will continue to experience, cyber incidents in the normal course of our business, however, prior cybersecurity incidents have not had a material adverse effect on our business, financial condition, results of operations, or cash flows. See “Risk Factors – Risks Relating to Our Business – We may have risks associated with security of our information technology systems”.

Item 2. Properties

Our corporate headquarters are located at Industriparken 22C, 2750 Ballerup, Denmark. We lease approximately 67,000 square feet at our Ballerup location, of which approximately 10,000 square feet is used for office space and 57,000 square feet is used for production. The lease will expire on August 31, 2028. We also conduct operations at Benshøj Industrivej 24, 9500 Hobro, Denmark, where we lease approximately 45,750 square feet, of which approximately 10,750 square feet is used for office space and 35,000 square feet is used for production. The lease will expire on November 30, 2034. In addition, in 2024, we entered into a new lease agreement for additional production and office space at Benshøj Industrivej 1, 9500 Hobro, Denmark. This facility consists of approximately 18,800 square feet, including 13,500 square feet of production space and 5,300 square feet of office space. The lease will expire on April 30, 2034.

Item 3. Legal Proceedings

From time to time, we may be involved in litigation relating to claims arising out of our operations in the normal course of business. Please reference Note 8 - Agreements, Commitments and Contingencies for details on such litigation.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common stock is quoted on the Nasdaq Capital Market under the symbol LIQT.

As of December 31, 2024, there were approximately 42 stockholders of record of our common stock as reported by our transfer agent, one of which is Cede & Co., a nominee for Depository Trust Company (“DTC”). All of the shares of common stock held by brokerage firms, banks, and other financial institutions as nominees for beneficial owners are deposited into participant accounts at DTC and are therefore considered to be held of record by Cede & Co. as one stockholder.

We have not paid any cash dividends on our common stock and have no intention of paying any dividends on the shares of our common stock in the future. Subject to Nevada law, our Board of Directors will determine the payment of future dividends on our common stock, if any, and the amount of any dividends subject to:

- any contractual restrictions limiting our ability to pay dividends that may be applicable at such time;
- our earnings and cash flow;
- our capital requirements;
- our financial condition; and
- other factors that our Board of Directors deems relevant.

Since the beginning of our fiscal year ended December 31, 2024, we have not sold any equity securities that were not registered under the Securities Act of 1933 and that were not previously reported in a quarterly report on Form 10-Q or in a current report on Form 8-K.

Since the beginning of our fiscal year ended December 31, 2024, we have not repurchased any of our equity securities.

Item 6. [Reserved]

Item 7. **Management's Discussion and Analysis of Financial Condition and Results of Operations**

Overview

We are a Nevada corporation, formerly named Blue Moose Media, Inc. In October 2011, we changed our name to LiqTech International, Inc. For more than two decades, we have developed and provided state-of-the-art technologies for gas and liquid purification using silicon carbide ceramic filters, particularly highly specialized filters for the control of soot exhaust particles from diesel engines and for liquid filtration. Using nanotechnology, LiqTech develops products using proprietary silicon carbide technology. LiqTech's products are based on unique silicon carbide membranes that facilitate new applications and improve existing technologies. In particular, the Company has developed a new standard of water filtration technology to meet the ever-increasing demand for higher water quality. By incorporating LiqTech's SiC liquid membrane technology with its long-standing systems design experience and capabilities, the Company offers solutions to the most difficult water pollution problems.

2024 Developments

On January 10, 2024, Simon Stadil tendered his resignation as Chief Financial Officer of the Company, effective as of April 10, 2024.

On February 14, 2024, the Company entered into a distribution agreement with Razorback Direct for produced water treatment solutions in the U.S.

On March 19, 2024, the Board of Directors of the Company appointed Phillip Massie Price as Interim Chief Financial Officer of the Company, effective April 1, 2024.

On May 7, 2024, the Company entered into a distribution agreement with Dan Marine Group for marine water treatment solutions for the Chinese market.

On May 14, 2024, the Company entered into a distribution agreement with Franman for marine water treatment solutions for the Greek Market.

On July 25, 2024, the Company entered into a distribution agreement with Danbee Marine Co. for marine water treatment solutions for the South Korean market.

On September 27, 2024, the Company entered into a securities purchase agreement with certain investors, pursuant to which the Company agreed to issue and sell an aggregate of 3,630,129 shares of Common Stock, 1,369,871 pre-funded warrants to purchase shares of Common Stock, and warrants to purchase up to an aggregate of 5,000,000 shares of Common Stock for gross proceeds of approximately \$10 million. The combined purchase price of one share of Common Stock and one accompanying warrant to purchase one share of Common Stock is \$2.00. The combined purchase price of one pre-funded warrant and one accompanying warrant to purchase one share of Common Stock under the Purchase Agreement is \$1.999.

The Company agreed to issue the Common Stock, warrants, and pre-funded warrants in two tranches: (i) a first tranche comprised of 29,227 shares of Common Stock, 555,302 pre-funded warrants, and warrants to purchase an aggregate of 584,529 shares of Common Stock, which closed on September 27, 2024; and (ii) a second tranche comprised of 3,600,902 shares of Common Stock, 814,569 pre-funded warrants, and warrants to purchase an aggregate of 4,415,471 shares of Common Stock, which closed on November 12, 2024.

On November 7, 2024, the Company announced the establishment of a joint venture in China for the marine water treatment market.

Results of Operations

Results of Operations for the Year Ended December 31, 2024 Compared to the Year Ended December 31, 2023

The following table sets forth our revenues, expenses, and net income for the years ended December 31, 2024, and 2023 in U.S. dollars, except for percentages.

	Year Ended December 31,					
	2024	As a % of Sales	2023	As a % of Sales	Period to Period Change	
					Variance	Percent
Revenue	\$ 14,604,618	100.0%	\$ 18,001,652	100.0%	\$ (3,397,034)	(18.9)%
Cost of goods sold	14,353,713	98.3	15,226,176	84.6	(872,463)	(5.7)
Gross Profit	250,905	1.7	2,775,476	15.4	(2,524,571)	(91.0)
Operating Expenses						
Selling expenses	2,725,239	18.7	4,298,905	23.9	(1,573,666)	(36.6)
General and administrative expenses	5,661,455	38.8	4,856,779	27.0	804,676	16.6
Research and development expenses	1,352,060	9.3	1,418,842	7.9	(66,782)	(4.7)
Total Operating Expenses	9,738,754	66.7	10,574,526	58.7	(835,772)	(7.9)
Loss from Operation	(9,487,849)	(65.0)	(7,799,050)	(43.3)	(1,688,799)	21.7
Other Income (Expense)						
Interest and other income	178,834	1.2	366,365	2.0	(187,531)	(51.2)
Interest expense	(167,556)	(1.1)	(151,670)	(0.8)	(15,886)	10.5
Amortization of debt discount	(615,552)	(4.2)	(400,903)	(2.2)	(214,649)	53.5
Gain (loss) on foreign currency transactions	164,310	1.1	(359,960)	(2.0)	524,270	(145.6)
Gain (loss) on disposal of property and equipment	(456,282)	(3.1)	7,254	0.0	(463,536)	(6,390.1)
Loss on assets held for sale	-	-	(439,388)	(2.4)	439,388	(100.0)
Total Other Expense	(896,246)	(6.1)	(978,302)	(5.4)	82,056	(8.4)
Loss Before Income Taxes	(10,384,095)	(71.1)	(8,777,352)	(48.8)	(1,606,743)	18.3
Income Tax Benefit	(38,837)	(0.3)	(206,207)	(1.1)	167,370	(81.2)
Net Loss	\$ (10,345,258)	(70.8)%	\$ (8,571,145)	(47.6)%	\$ (1,774,113)	20.7%

Revenues

Revenue for the year ended December 31, 2024, was \$14,604,618 compared to \$18,001,652 for the same period in 2023, representing a decrease of \$3,397,034, or 18.9%. The decline was mainly due to reduced deliveries of liquid filtration systems, plastics products, ceramic membranes, and aftermarket sales, partly offset by increased sales of DPFs.

The decrease in deliveries of liquid filtration systems was mainly driven by reduced deliveries of pool filtration systems and marine scrubber systems. The decline in aftermarket sales was primarily due to remediation work carried out in the same period of 2023, which did not recur in 2024. The reduction in sales of plastic products was largely due to a significant one-time sale recorded in 2023 that did not recur in the current period. The increase in sales of DPFs was primarily driven by the effective execution of strategies designed to capitalize on the increased demand for DPFs.

Gross Profit

Gross profit for the year ended December 31, 2024, was \$250,905 (or a gross profit margin of 1.7%), compared to \$2,775,476 (or a gross profit margin of 15.4%) for the same period in 2023, representing a decrease of \$2,524,571, or approximately 91.0%. This decline in gross profit can be attributed to the decrease in revenue, resulting in lower overall activity levels and underutilization of our manufacturing capacity, as well as an unfavorable sales mix, which resulted in a lower proportion of high-margin products such as liquid filtration systems and ceramic membranes. Specifically, the deliveries of containerized oil and gas pilot systems to the Middle East and the U.S. contributed to lower-than-usual margins, reflecting a strategic decision aimed at demonstrating and validating the value proposition associated with our technology and seeding the market for future growth. This approach has proven successful, securing an order for a full-scale system scheduled for delivery in 2025. Additionally, a thorough inventory review led to necessary adjustments for obsolescence and slow-moving items. The decline in gross profit was partly offset by decreased depreciation as well as continued initiatives aimed at optimizing manufacturing processes, which have improved profitability within DPF and ceramic membrane production. Included in the gross profit was depreciation of \$1,830,553 and \$2,598,095 for the years ended December 31, 2024, and 2023, respectively.

Operating Expenses

Total operating expenses for the year ended December 31, 2024, were \$9,738,754, representing a decrease of \$835,772, or 7.9%, compared to \$10,574,526 for the same period in 2023.

Selling expenses for the year ended December 31, 2024, were \$2,725,239, compared to \$4,298,905 for the same period in 2023, representing a decrease of \$1,573,666, or 36.6%. This decline was primarily driven by a reduction in executive officers, along with reductions in bonus payouts, travel costs, marketing expenses, and expenditures related to external sales consultancy services. The decrease was partially offset by increased bad debt expenses.

General and administrative expenses for the year ended December 31, 2024, were \$5,661,455 compared to \$4,856,779 for the same period in 2023, representing an increase of \$804,676, or 16.6%. The increase was primarily due to newly created positions in supply chain and project management, as well as higher legal expenses, insurance costs, and recruitment costs associated with the resignations of our CFO and VP of Sales. Additionally, one-time expenses were incurred for the relocation of our plastics production facility. The increase was also partially attributable to the release of bonus provisions in the comparable period of 2023. Included in general and administrative expenses was non-cash compensation of \$664,434 and \$627,904 for the years ended December 31, 2024, and 2023, respectively.

The following is a summary of our non-cash compensation:

	2024	2023
Compensation for vesting of restricted stock awards issued to the Board of Directors	\$ 202,125	\$ 203,708
Compensation for vesting of restricted stock awards issued to management	462,309	424,196
Total Non-Cash Compensation	\$ 664,434	\$ 627,904

Research and development expense for the year ended December 31, 2024, was \$1,352,060 compared to \$1,418,842 for the same period in 2023, representing a decrease of \$66,782, or 4.7%. The decrease was primarily due to a more focused R&D strategy with fewer ongoing projects and a reduced average number of employees engaged in external research and development activities, as the Company streamlined and centralized its R&D function. This was partially offset by one-time exit costs associated with a loss-making external development project.

Other income (expense)

Total Other expense for the year ended December 31, 2024, was \$896,246 compared to \$978,302 for the comparable period in 2023, representing decreased expense of \$82,056, or 8.4%. The decrease was primarily attributable to a gain on currency transactions resulting from the EUR/DKK decline against the USD during the period and a loss on assets held for sale in the comparable period in 2023. This decrease in other expenses was partially offset by a non-cash loss related to the disposal of property and equipment, decreased interest income, and higher debt discount amortization costs due to the extension of the maturity date for the senior promissory notes, with additional warrants issued as consideration for the extension.

Income taxes provision

The income tax benefit for the year ended December 31, 2024, was \$38,837 compared to a benefit of \$206,207 for the comparable period in 2023, representing a decrease of \$167,370, or 81.2%, mainly driven by a decrease in tax credits associated with research and development activities in Denmark.

Net Loss

As a result of the cumulative effect of the factors described above, we had a net loss for the year ended December 31, 2024, of \$10,345,258 compared to \$8,571,145 for the comparable period in 2023, representing an increase in net loss of \$1,774,113, or 20.7%.

Cash Flows**Year Ended December 31, 2024, Compared to Year Ended December 31, 2023**

Cash used by operating activities is net loss adjusted for certain non-cash items and changes in assets and liabilities. Cash used by operating activities for the year ended December 31, 2024, was \$7,534,072 compared to cash used by operating activities of \$4,183,918 for the year ended December 31, 2023, representing an increase of \$3,350,154. The cash used by operating activities for the year ended December 31, 2024, consists mainly of the net loss for the year of \$(10,345,258) adjusted by depreciation and other non-cash items of \$4,432,671. Further, changes in assets and liabilities included a decrease in accounts payable of \$1,050,406, a decrease in accrued expenses of \$908,607, and an increase in inventories of \$587,806, partly offset by a decrease in contract assets of \$1,102,791 and a decrease in accounts receivable of \$620,116.

Net cash used in investing activities was \$424,036 for the year ended December 31, 2024, as compared to \$2,886,036 for the year ended December 31, 2023, representing a decrease of \$2,462,000. The investing activities include general purchases of production equipment to continue optimizing production throughput and the internal production of rental assets, partly offset by proceeds from the disposition of production equipment in our Ballerup facility.

Cash provided by financing activities was \$8,493,300 for the year ended December 31, 2024, as compared to \$580,645 for the year ended December 31, 2023, representing an increase of \$7,912,655. The increase was mainly driven by the equity raise, generating net proceeds of \$9,922,063 from the issuance of common stock and prefunded warrants, partly offset by the repayment of lease agreements in connection with the sales of production equipment in Ballerup as mentioned above.

	2024	2023
Net Cash Used in Operating Activities	\$ (7,534,072)	\$ (4,183,918)
Net Cash Used in Investing Activities	(424,036)	(2,886,036)
Net Cash Provided by Financing Activities	8,493,300	580,645
Net Change in Cash and Cash Equivalents	446,547	(6,175,190)
Cash and Cash Equivalents at End of Period	<u>\$ 10,868,728</u>	<u>\$ 10,422,181</u>

Off-Balance Sheet Arrangements

As of December 31, 2024, we had no off-balance sheet arrangements. We are not aware of any material transactions that are not disclosed in our consolidated financial statements.

Critical Accounting Policies

The methods, estimates, and judgments that we use in applying our accounting policies have a significant impact on the results that we report in our consolidated financial statements, which have been prepared in accordance with U.S. GAAP. Some of our accounting policies require us to make difficult and subjective judgments, often as a result of the need to make estimates regarding matters that are inherently uncertain. Our most critical accounting estimates include:

- The assessment of revenue recognition, which impacts revenue and cost of sales;
- The assessment of allowance for product warranties, which impacts cost of sales;
- The assessment of collectability of accounts receivable, which impacts operating expenses when and if we record bad debt or adjust the allowance for doubtful accounts;
- The assessment of recoverability of long-lived assets, which impacts gross margin or operating expenses when and if we record asset impairments or accelerate their depreciation;
- The recognition and measurement of current and deferred income taxes (including the measurement of uncertain tax positions), which impact our provision for taxes;
- The valuation of inventory, which impacts cost of sales; and
- The recognition and measurement of loss contingencies, which impact cost of sales or operating expenses when we recognize a loss contingency, revise the estimate for a loss contingency, or record an asset impairment.

We discuss these policies further below as well as the estimates and judgments involved.

Accounts Receivable and Allowance for Current Expected Credit Losses

Accounts receivable consist of trade receivables arising from credit sales to customers in the normal course of business. These receivables are recorded at the time of sale, net of an allowance for current expected credit losses. In accordance with Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Topic 326, “*Financial Instruments – Credit Losses*,” the Company estimates expected credit losses based on historical bad debt experience, the aging of accounts receivable, the current creditworthiness of customers, prevailing economic conditions, and reasonable and supportable forward-looking information. Accounts receivable balances are written off when they are determined to be uncollectible.

The roll-forward of the allowance for current expected credit losses for the year ended December 31, 2024, and December 31, 2023 were as follows:

	December 31, 2024	December 31, 2023
Allowance for current expected credit losses at the beginning of the period	\$ 134,912	\$ 59,559
Bad debt expense	578,423	82,066
Receivables written off during the periods	(49,577)	(10,298)
Effect of exchange rate changes	(26,202)	3,585
Allowance for current expected credit losses at the end of the period	<u>\$ 637,556</u>	<u>\$ 134,912</u>

Inventories

Inventories directly purchased are carried at the lower of cost or net realizable value, as determined on the first-in, first-out (“FIFO”) method. For inventories produced, standard costs that approximate actual cost on the FIFO method are used to value inventories. Standard costs are reviewed at least annually by management or more often if circumstances indicate a change in cost has occurred. Work in process and finished goods include material, labor, and production overhead costs.

The Company adjusts the value of its inventories to the extent management determines that the cost cannot be recovered due to obsolescence or other factors. Inventory valuation adjustments for excess and obsolete inventories are calculated based on current inventories levels, movement, expected useful lives, and estimated future demand for our products.

Goodwill and Intangible assets

The purchase price of an acquired company is allocated between intangible assets and the net tangible assets of the acquired business, with the residual purchase price recorded as goodwill. The determination of the value of the intangible assets acquired involves certain judgments and estimates. These judgments can include, but are not limited to, the cash flows that an asset is expected to generate in the future and the appropriate weighted average cost of capital.

Acquired intangible assets with determinable useful lives are amortized on a straight-line or accelerated basis over the estimated periods benefited, ranging from one to ten years. Customer relationships and other non-contractual intangible assets with determinable lives are amortized over periods of five years.

The Company evaluates the recoverability of long-lived assets by comparing the carrying amount of an asset to estimated future net undiscounted cash flows generated by the asset. If such assets are considered to be impaired, the impairment recognized is measured as the amount by which the carrying value of the assets exceeds the fair value of the assets. The evaluation of recoverability involves estimates of future operating cash flows based upon certain forecasted assumptions, including, but not limited to, revenue growth rates, gross profit margins, and operating expenses over the expected remaining useful life of the related asset. A shortfall in these estimated operating cash flows could result in an impairment charge in the future.

Goodwill is not amortized but is evaluated annually for impairment at the reporting unit level or when indicators of a potential impairment are present. The Company estimates the fair value of the reporting unit using the discounted cash flow and market approaches. Forecasts of future cash flows are based on the Company's best estimate of future net sales and operating expenses, using primarily expected category expansion, pricing, market segment fundamentals, and general economic conditions. During the years ended December 31, 2024, and 2023, no impairment charge for goodwill was recorded.

Long-Lived Assets

The Company assesses the impairment of long-lived assets when events or changes in circumstances indicate that the carrying value of the assets or the asset grouping may not be recoverable. Factors that the Company considers in deciding when to perform an impairment review include significant under-performance of a business or product line in relation to expectations, significant negative industry or economic trends, and significant changes or planned changes in its use of the assets. The Company measures the recoverability of assets that will continue to be used in its operations by comparing the carrying value of the asset grouping to its estimate of the related total future undiscounted net cash flows. If an asset grouping's carrying value is not recoverable through the related undiscounted cash flows, the asset grouping is considered to be impaired. The impairment is measured by comparing the difference between the asset grouping's carrying value and its fair value.

Impairments of long-lived assets are determined for groups of assets related to the lowest level of identifiable independent cash flows. Due to the Company's asset usage model and the interchangeable nature of its ceramic filter manufacturing capacity, the Company must make subjective judgments in determining the independent cash flows that can be related to specific asset groupings. In addition, as the Company makes manufacturing process changes and other factory planning decisions, it must make subjective judgments regarding the remaining useful lives of assets, primarily process-specific filter manufacturing tools and building improvements. If the Company determines that the useful lives of assets are shorter than it had originally estimated, the Company accelerates the rate of depreciation over the assets' new, shorter useful lives.

Management has analyzed the impact of the current economic climate on its financial statements as of December 31, 2024, and has determined that the changes to its significant judgements and estimates did not have a material impact with respect to goodwill, intangible assets, or long-lived assets. During the years ended December 31, 2024, and 2023, no impairment charge of long-lived assets has been recorded.

Revenue Recognition

The Company records revenue in accordance with FASB ASC Topic 606, "*Revenue from Contracts with Customers*." Revenue is recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To achieve this core principle, the Company applies the following five-step approach: (1) identify the contract with the customer; (2) identify the performance obligations in the contract; (3) determine the transaction price; (4) allocate the transaction price to performance obligations in the contract; and (5) recognize revenue when or as a performance obligation is satisfied.

The Company sells products throughout the world. Sales by geographical region for the years ended December 31, 2024, and 2023 were as follows:

	% Distribution		For the Year Ended December 31	
	2024	2023	2024	2023
Americas	18%	12%	\$ 2,693,002	\$ 2,125,460
Asia-Pacific	5%	14%	645,044	2,506,215
Europe	71%	65%	10,440,040	11,820,674
Middle East & Africa	6%	9%	826,532	1,549,303
Totals	100%	100%	\$ 14,604,618	\$ 18,001,652

The Company's sales by product line for the years ended December 31, 2024, and 2023 were as follows:

	% Distribution		For the Year Ended December 31	
	2024	2023	2024	2023
Water	38%	42%	\$ 5,538,741	\$ 7,705,080
Ceramics	39%	35%	5,634,973	6,232,628
Plastics	23%	21%	3,381,408	3,736,529
Corporate	0%	2%	49,496	327,415
Totals	100%	100%	\$ 14,604,618	\$ 18,001,652

For Water (systems and aftermarket), Ceramics (diesel particulate filters and membranes), and Plastics (components), revenue is recognized when performance obligations specified within the terms of a contract with the customer are satisfied, which occurs when control of the product transfers to the customer or when services are rendered by the Company. The majority of the Company's sales contracts contain performance obligations satisfied at a point in time when title along with risks and rewards of ownership have transferred to the customer. This generally occurs when the product is shipped or accepted by the customer. Revenue for service contracts is recognized as the services are provided. Revenue is measured as the amount of consideration expected to be received in exchange for transferring the goods or providing services. The satisfaction of performance obligations under the terms of a revenue contract generally gives rise to the right to receive payment from the customer. The Company's standard payment terms vary by the type and location of the customer and the products or services offered. Generally, the time between when revenue is recognized and when payment is due is not significant. Pre-payments received prior to satisfaction of performance obligations are recorded as a contract liability. Considering the relatively short time between revenue recognition and receipt of payment, financing components do not exist between the Company and its customers.

For contracts with customers that include multiple performance obligations, judgment is required to determine whether performance obligations specified in these contracts are distinct and should be accounted for as separate revenue transactions for recognition purposes. For such arrangements, revenue is allocated to each performance obligation based on its relative standalone selling price. Standalone selling prices are generally determined based on the prices charged to customers or using expected cost-plus margin.

System sales are recognized when the Company transfers control to the customer based upon sales and delivery conditions specified in the sales contract. This typically occurs upon shipment of the system from the production facility but can also occur upon other agreed delivery terms. In connection with the completion of the system, it is normal procedure to issue a FAT (Factory Acceptance Test) asserting that the customer has accepted the performance of the system as it is being shipped from our production facility in Hobro. As part of the performance obligation, the customer is normally offered commissioning services (final assembly and configuration at a place designated by the customer), and this commissioning is therefore considered a second performance obligation and is valued at cost, with the addition of a standard gross profit. This second performance obligation is recognized as revenue at the time of the commissioning services being rendered together with the cost incurred. Part of the invoicing to the customer is also attributed to the commissioning, and at transfer of the control of the system (i.e., the first performance obligation), this portion is recognized as contract liabilities.

Aftermarket sales represent parts, extended warranties, and maintenance services. For the sale of aftermarket parts, the Company transfers control and recognizes revenue when parts are shipped to the customer. When customers are given the right to return eligible parts and accessories, the Company estimates the expected returns based on an analysis of historical experience. The Company adjusts estimated revenues at the earlier of when the most likely amount of consideration expected to be received changes or when the consideration becomes fixed. The Company recognizes revenue for extended warranty and maintenance agreements based on the standalone selling price over the life of the contract.

The Company has received long-term contracts for grants from government entities for the development and use of silicon carbide membranes in various water filtration and treatment applications and historically in the installation of various water filtrations systems. We measure transfer of control of the performance obligation on long-term contracts utilizing the cost-to-cost measure of progress, with cost of revenue including direct costs such as labor and materials. Under the cost-to-cost approach, the use of estimated costs to complete each performance obligation is a significant variable in the process of determining recognized revenue and a significant factor in the accounting for such performance obligations. The timing of when we bill our customers is generally dependent upon advance billings terms, milestone billings based on completion of certain phases of the work or when services are provided, or when products are shipped. Projects with performance obligations recognized over time that have costs and estimated earnings recognized to date in excess of cumulative billings are reported on our balance sheet as Contract assets. Projects with performance obligations recognized over time that have cumulative billings in excess of costs and estimated earnings recognized to date are reported on our balance sheet as contract liabilities.

Contracts Assets and Liabilities

Contract assets are the Company's rights to consideration in exchange for goods or services and are recognized when a performance obligation has been satisfied but has not yet been billed. When the Company issues invoices to the customer, and the billing is higher than the capitalized Contract assets, the net amount is transferred to Contract liabilities. Contract assets/liabilities are transferred to revenue and cost of revenues when the right to consideration is unconditional and billed per the terms of the contractual agreement.

Contract assets also include unbilled receivables, which usually comprise the last invoice remaining after the delivery of the water treatment unit, where revenue is recognized at the transfer of control based upon signed acceptance of the unit by the customer. Most commonly, this invoice is sent to the customer at commissioning of the product or no later than 12 months after delivery. Further included in Contract Assets are short-term receivables such as VAT and other receivables.

The roll-forward of contract assets and contract liabilities for the years ended December 31, 2024, and 2023 were as follows:

	December 31, 2024	December 31, 2023
Cost incurred	\$ 2,512,901	\$ 3,225,728
Unbilled project deliveries	51,442	582,557
VAT	93,961	329,980
Other receivables	20,972	92,619
Prepayments	(1,121,897)	(1,688,427)
Deferred Revenue	-	(33,360)
	<u>\$ 1,557,379</u>	<u>\$ 2,509,097</u>
Distributed as follows:		
Contract assets	\$ 1,666,698	\$ 2,891,744
Contract liabilities	(109,319)	(382,647)
	<u>\$ 1,557,379</u>	<u>\$ 2,509,097</u>

Income Taxes

Income taxes are accounted for under the asset and liability method in accordance with ASC 740, “*Income Taxes*.” Under the asset and liability method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the year in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period that includes the enactment date. The Company assesses the likelihood that its deferred tax assets will be recovered from future taxable income and establishes a valuation allowance if, based on the weight of available evidence, it believes it is more likely than not that all or a portion of the deferred tax assets will not be realized.

The Company recognizes the tax benefit of an uncertain tax position only if it is more likely than not the position will be sustainable upon examination by the taxing authority, including resolution of any related appeals or litigation processes. This evaluation is based on all available evidence and assumes that the tax authorities have full knowledge of all relevant information concerning the tax position. The tax benefit recognized is measured as the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The Company recognizes interest accrued and penalties related to unrecognized tax benefits in income tax expense.

Stock-Based Compensation

Stock-based awards granted to qualified employees, non-employee directors, and consultants are measured at fair value and recognized as an expense in accordance with ASC Topic 718, “*Share-Based Payments*.” For service-based awards, stock-based compensation is recognized on a straight-line basis over the requisite service period, which is generally the vesting period. The fair value of our stock options is estimated using a Black-Scholes option valuation model. Restricted stock awards are valued based on the closing stock price on the date of grant. The Company has elected to recognize forfeitures as they occur.

Warrant Liabilities

The Company accounts for warrants as either equity-classified or liability-classified instruments based on an assessment of the specific terms of the warrants in accordance with ASC 480, “*Distinguishing Liabilities from Equity*,” and ASC 815-40, “*Contracts in Entity’s Own Equity*.” This assessment, which requires the use of professional judgment, considers whether the warrants are freestanding financial instruments pursuant to ASC 480, meet the definition of a liability pursuant to ASC 480, and meet all of the requirements for equity classification under ASC 815-40, including whether the warrants are indexed to the Company’s own shares and whether the events where holders of the warrants could potentially require net cash settlement are within the Company’s control, among other conditions for equity classification. Warrant liabilities are recognized at fair value, with changes in fair value recognized in the consolidated statement of operations each period.

Loss Contingencies

We are subject to various legal and administrative proceedings along with asserted and potential claims, accruals related to product warranties, and potential asset impairments (loss contingencies) that arise in the ordinary course of business. An estimated loss from such contingencies is recognized as a charge to income if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Disclosure of a loss contingency is required if there is at least a reasonable possibility that a loss has been incurred. The outcomes of legal and administrative proceedings and claims, and the estimation of product warranties and asset impairments, are subject to significant uncertainty. Significant judgment is required in both the determination of probability and the determination as to whether a loss is reasonably estimable. To estimate the losses associated with repairing and replacing parts in connection with product warranties, we make judgments with respect to customer claim rates. At least quarterly, we review the status of each significant matter, and we may revise our estimates. These revisions could have a material impact on our results of operations and financial position.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk.

We are not required to provide quantitative and qualitative disclosures about market risk because we are a smaller reporting company.

Item 8. Financial Statements and Supplementary Data.

Index to Consolidated Financial Statements

	Page
Report of Independent Registered Public Accounting Firm (PCAOB ID NO: 3627)	33
Consolidated Balance Sheets at December 31, 2024 and 2023	35
Consolidated Statements of Operations for the years ended December 31, 2024 and 2023	37
Consolidated Statement of Comprehensive Loss for the years ended December 31, 2024 and 2023	38
Consolidated Statement of Stockholders' Equity for the years ended December 31, 2024 and 2023	39
Consolidated Statement of Cash Flows for the years ended December 31, 2024 and 2023	41
Notes to the Consolidated Financial Statements	43

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of LiqTech International, Inc.:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of LiqTech International, Inc. (“the Company”) as of December 31, 2024, and 2023, the related consolidated statements of operations, comprehensive loss, stockholders’ equity, and cash flows for each of the years in the two-year period ended December 31, 2024 and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2024, and 2023, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2024, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) related to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgements. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Inventory Costing

Critical Audit Matter Description

As described in Notes 1 and 2 to the consolidated financial statements, the Company uses a standard costing method to value inventory produced. Management reviews and assesses the standard costing estimates annually or more frequently in the event circumstances indicate a change in cost structure or material variance from actual has occurred. In addition to raw materials, labor and energy usage charges, the Company applies production overhead allocations to each item.

We identified the auditing of inventory costing as a critical audit matter because of the significant estimates and assumptions management used in the determination of the standard costing allocation and related overhead allocations. Performing audit procedures to evaluate the reasonableness of these estimates and assumptions required a high degree of auditor judgment and an increased extent of effort.

How the Critical Audit Matter was Addressed in the Audit

Our audit procedures consisted of the following:

- Obtaining an understanding and testing management's process for developing the standard costing model and overhead allocations.
- Assessing the accuracy, completeness, and reasonableness of the costs included in the standard costing model, including overhead allocations to ensure all costs capitalized were appropriate, complete and proper.
- Evaluating the appropriateness and reasonableness of the assumptions used by management to allocate costs to specific inventory products, including assessing the reasonableness of production times, labor requirement and energy usage utilized.
- Performing cost testing on raw material inputs purchased by tracing the recorded costs to supporting third party invoices.

Revenue Recognition – Contracts with Multiple Performance Obligations

Critical Audit Matter Description

As described in Note 1 to the consolidated financial statements, the Company has some contracts with customers that contain multiple performance obligations. For these contracts, management accounts for individual performance obligations separately if they are distinct. As described by management, management exercises judgment and uses estimates in order to (1) determine whether performance obligations are distinct and should be accounted for separately; (2) determine the standalone selling price of each performance obligation; (3) allocate the transaction price among the various performance obligations on a relative standalone selling price basis; and (4) determine whether revenue for each performance obligation should be recognized at a point in time or over time. Revenue recognized in 2024 related to contracts with multiple performance obligations was approximately \$3.6 million.

We identified the auditing of revenue from contracts with multiple performance obligations as a critical audit matter because there was significant judgments by management in identifying, evaluating and accounting for performance obligations in contracts with multiple performance obligations, which led to significant auditor judgment and effort in performing procedures to evaluate whether contracts with multiple performance obligations were appropriately identified, evaluated and accounted for by management.

How the Critical Audit Matter was Addressed in the Audit

Our audit procedures consisted of the following:

- Obtaining an understanding and testing management's process for identifying, evaluating, and accounting for contracts with multiple performance obligations.
- Examining revenue arrangements on a test basis, including assessing the key terms and conditions of the arrangements and testing the identification, evaluation, and accounting of the performance obligation for conformity with relevant authoritative guidance.
- Performing procedures to test the completeness and accuracy of the data used to determine estimated stand-alone selling price.
- Evaluating the reasonableness of the approaches used to determine estimated stand-alone selling price.

/s/ Sadler, Gibb & Associates, LLC

We have served as the Company's auditor since 2018.

Draper, UT
March 28, 2025

LIQTECH INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

	December 31, 2024	December 31, 2023
Assets		
Current Assets:		
Cash and restricted cash	\$ 10,868,728	\$ 10,422,181
Accounts receivable, net	2,396,056	3,171,047
Inventories, net	5,541,192	5,267,816
Contract assets	1,666,698	2,891,744
Prepaid expenses and other current assets	168,443	337,391
Total Current Assets	<u>20,641,117</u>	<u>22,090,179</u>
Non-Current Assets:		
Property and equipment, net	6,618,822	9,007,166
Operating lease right-of-use assets	4,450,822	4,055,837
Deposits and other assets	456,658	470,349
Intangible assets, net	39,367	114,593
Goodwill	220,693	233,723
Total Non-Current Assets	<u>11,786,362</u>	<u>13,881,668</u>
Total Assets	<u><u>\$ 32,427,479</u></u>	<u><u>\$ 35,971,847</u></u>

The accompanying notes are an integral part of these consolidated financial statements.

LIQTECH INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

	December 31, 2024	December 31, 2023
Liabilities and Stockholders' Equity		
Current Liabilities:		
Accounts payable	\$ 1,300,966	\$ 2,444,653
Accrued expenses	2,491,479	3,550,542
Current portion of finance lease liabilities	458,347	590,550
Current portion of operating lease liabilities	544,197	531,355
Contract liabilities	109,319	382,647
Total Current Liabilities	4,904,308	7,499,747
Non-Current Liabilities:		
Deferred tax liability	57,960	101,059
Finance lease liabilities, net of current portion	1,600,931	2,879,932
Operating lease liabilities, net of current portion	3,906,625	3,527,082
Notes payable, net	5,303,563	4,688,011
Total Non-Current Liabilities	10,869,079	11,196,084
Total Liabilities	15,773,387	18,695,831
Stockholders' Equity:		
Preferred stock; par value \$0.001, 2,500,000 shares authorized, 0 shares issued and outstanding at December 31, 2024 and December 31, 2023, respectively	-	-
Common stock; par value \$0.001, 50,000,000 shares authorized and 9,475,443 and 5,727,310 shares issued and outstanding at December 31, 2024 and December 31, 2023, respectively	9,475	5,727
Additional paid-in capital	109,274,166	98,796,357
Accumulated deficit	(86,267,438)	(75,922,180)
Accumulated other comprehensive loss	(6,362,111)	(5,603,888)
Total Stockholders' Equity	16,654,092	17,276,016
Total Liabilities and Stockholders' Equity	\$ 32,427,479	\$ 35,971,847

The accompanying notes are an integral part of these consolidated financial statements.

LIQTECH INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

	For the Year Ended December 31,	
	2024	2023
Revenue	\$ 14,604,618	\$ 18,001,652
Cost of goods sold	14,353,713	15,226,176
Gross Profit	250,905	2,775,476
Operating Expenses:		
Selling expenses	2,725,239	4,298,905
General and administrative expenses	5,661,455	4,856,779
Research and development expenses	1,352,060	1,418,842
Total Operating Expenses	9,738,754	10,574,526
Loss from Operations	(9,487,849)	(7,799,050)
Other Income (Expense):		
Interest and other income	178,834	366,365
Interest expense	(167,556)	(151,670)
Amortization of debt discount	(615,552)	(400,903)
Gain (loss) on foreign currency transactions	164,310	(359,960)
Gain (loss) on disposal of property and equipment	(456,282)	7,254
Loss on assets held for sale	-	(439,388)
Total Other Expense	(896,246)	(978,302)
Loss Before Income Taxes	(10,384,095)	(8,777,352)
Income tax benefit	(38,837)	(206,207)
Net Loss	\$ (10,345,258)	\$ (8,571,145)
Loss Per Common Share – Basic and Diluted	\$ (1.64)	\$ (1.51)
Weighted-Average Common Shares Outstanding – Basic and Diluted	6,310,379	5,688,281

The accompanying notes are an integral part of these consolidated financial statements.

LIQTECH INTERNATIONAL, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

	For the Year Ended December 31,	
	2024	2023
Net Loss	\$ (10,345,258)	\$ (8,571,145)
Loss on foreign currency translation adjustments	(758,223)	716,679
Other Comprehensive Loss	<u>\$ (11,103,481)</u>	<u>\$ (7,854,466)</u>

The accompanying notes are an integral part of these consolidated financial statements.

LIQTECH INTERNATIONAL, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY
For the Years Ended December 31, 2024, and 2023

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Compre- hensive Loss	TOTAL
	Shares	Amount				
Balance, December 31, 2023	<u>5,727,310</u>	<u>\$ 5,727</u>	<u>\$ 98,796,357</u>	<u>\$ (75,922,180)</u>	<u>\$ (5,603,888)</u>	<u>\$ 17,276,016</u>
Common stock issued in settlement of RSUs	148,002	148	(148)	-	-	-
Tax withholdings paid related to stock-based compensation	(29,998)	(30)	(104,910)	-	-	(104,940)
Issuance of common shares, warrants and prefunded warrants in connection with a private offering	3,630,129	3,630	9,918,433	-	-	9,922,063
Stock-based compensation	-	-	664,434	-	-	664,434
Currency translation, net	-	-	-	-	(758,223)	(758,223)
Net Loss for the year ended December 31, 2024	<u>-</u>	<u>-</u>	<u>-</u>	<u>(10,345,258)</u>	<u>-</u>	<u>(10,345,258)</u>
Balance, December 31, 2024	<u>9,475,443</u>	<u>\$ 9,475</u>	<u>\$ 109,274,166</u>	<u>\$ (86,267,438)</u>	<u>\$ (6,362,111)</u>	<u>\$ 16,654,092</u>

The accompanying notes are an integral part of these consolidated financial statements.

LIQTECH INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY
For the Years Ended December 31, 2024, and 2023

	Common Stock		Additional	Accumulated	Accumulated	
	Shares	Amount	Paid-in	Deficit	Other	TOTAL
			Capital		Compre-	
					hensive	
					Loss	
Balance, December 31, 2022	5,498,260	\$ 5,498	\$ 96,975,476	\$ (67,351,035)	\$ (6,320,567)	\$ 23,309,372
Common stock issued in settlement of RSUs	212,254	212	(212)	-	-	-
Fractional shares from individual shareholder round-up following reverse split	16,796	17	(17)	-	-	-
Warrants issued in connection with Senior Promissory Notes	-	-	1,193,206	-	-	1,193,206
Stock-based compensation	-	-	627,904	-	-	627,904
Foreign currency translation adjustments	-	-	-	-	716,679	716,679
Net loss for the year ended December 31, 2023	-	-	-	(8,571,145)	-	(8,571,145)
Balance, December 31, 2023	<u>5,727,310</u>	<u>\$ 5,727</u>	<u>\$ 98,796,357</u>	<u>\$ (75,922,180)</u>	<u>\$ (5,603,888)</u>	<u>\$ 17,276,016</u>

The accompanying notes are an integral part of these consolidated financial statements.

LIQTECH INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Year Ended December 31,	
	2024	2023
Cash Flows from Operating Activities:		
Net loss	\$ (10,345,258)	\$ (8,571,145)
Adjustments to reconcile net loss to net cash used in operations:		
Depreciation and amortization	2,160,837	2,575,286
Amortization of debt discount	615,552	400,903
Stock-based compensation	664,434	627,904
Amortization of right-of-use assets	574,403	565,493
Deferred taxes	(38,837)	(57,539)
Loss on disposal of assets held for sale	-	439,388
(Gain) loss on disposal of property and equipment	456,282	(7,254)
Changes in assets and liabilities:		
Accounts receivable	620,116	(765,956)
Inventories	(587,806)	(1,045,838)
Contract assets	1,102,791	(825,974)
Prepaid expenses and other current assets	40,598	1,403,707
Accounts payable	(1,050,406)	990,538
Accrued expenses	(908,607)	639,309
Operating lease liabilities	(576,948)	(562,948)
Contract liabilities	(261,223)	(282,614)
Assets held for sale	-	292,822
Net Cash used in Operating Activities	(7,534,072)	(4,183,918)
Cash Flows from Investing Activities:		
Purchase of property and equipment	(1,367,729)	(2,893,290)
Proceeds from the disposal of property and equipment	943,693	7,254
Net Cash used in Investing Activities	(424,036)	(2,886,036)
Cash Flows from Financing Activities:		
Repayments of finance lease liabilities	(1,428,763)	(435,343)
Proceeds from sale and leaseback agreement	-	1,015,988
Proceeds from issuance of common stock and prefunded warrants	9,922,063	-
Net Cash provided by Financing Activities	8,493,300	580,645
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(88,645)	314,119
Net Change in Cash, Cash Equivalents, and Restricted Cash	446,547	(6,175,190)
Cash, Cash Equivalents, and Restricted Cash at Beginning of Period	10,422,181	16,597,371
Cash, Cash Equivalents, and Restricted Cash at End of Period	\$ 10,868,728	\$ 10,422,181

The accompanying notes are an integral part of these consolidated financial statements.

LIQTECH INTERNATIONAL, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Year Ended December 31,	
	2024	2023
Supplemental Disclosures of Cash Flow Information:		
Cash paid for interest	\$ 160,926	\$ 178,872
Cash paid for income taxes	-	-
Non-Cash Financing Activities		
Financed purchases of property and equipment	\$ 166,443	\$ 1,196,206

The accompanying notes are an integral part of these consolidated financial statements.

LIQTECH INTERNATIONAL, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 – ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Business Organization

The consolidated financial statements include the accounts of LiqTech International, Inc. and its subsidiaries (the “Company”). The terms “Company”, “us”, “we” and “our” as used in this report refer to the Company and its subsidiaries, which are set forth below. The Company engages in the development, design, production, marketing, and sale of automated filtering systems, ceramic silicon carbide liquid applications, and diesel particulate air filters in the Americas, Asia-Pacific, Europe, and Middle East & Africa. Set forth below is a description of the Company and each of its subsidiaries:

LiqTech International, Inc., a Nevada corporation organized in July 2004, formerly known as Blue Moose Media, Inc.

LiqTech USA Inc., a Delaware corporation and a 100% owned subsidiary of the Company formed in May 2011.

LiqTech Holding A/S (formerly known as LiqTech International A/S), a Danish corporation, incorporated on January 15, 2000 (“LiqTech Holding”), a 100% owned subsidiary of LiqTech USA Inc., handling all joint group activities such as management, marketing, finance, IT, and others.

LiqTech NA, Inc. (“LiqTech NA”), incorporated in Delaware on July 1, 2005, a 100% owned subsidiary of LiqTech USA Inc., engaged in the production, marketing, and sale of ceramic diesel particulate and liquid filters in the United States and Canada. LiqTech NA closed operations in January 2021, and all activity in this company has ceased.

LiqTech Water A/S (formerly known as LiqTech Systems A/S), a Danish corporation (“LiqTech Water”), incorporated on September 1, 2009, engaged in the manufacture of fully automated filtering systems for use within marine applications, municipal pool and spa applications, and other industrial applications within Denmark and international markets.

LiqTech Plastics A/S (formerly known as BS Plastic A/S), a Danish corporation (“LiqTech Plastics”), acquired on September 1, 2019, engaged in the manufacture of specialized machined and welded plastic parts within Denmark and international markets.

LiqTech Ceramics A/S, a Danish corporation (“LiqTech Ceramics”), incorporated on December 20, 2019, engaged in the development, design, application, marketing, and sales of membranes, ceramic diesel particulate and liquid filters, and catalytic converters in Europe, Asia, and South America.

LiqTech Water Projects A/S, a Danish corporation (“LiqTech Water Projects”), incorporated on July 28, 2020, that is a dormant company without activity.

LiqTech Emission Control A/S, a Danish corporation (“LiqTech Emission Control”), incorporated on March 1, 2021, that is a dormant company without activity.

Nantong JiTRI LiqTech Green Energy Technology Co., Ltd., a Chinese corporation (“LiqTech JiTRI”), incorporated on December 6, 2024, as a joint venture in which the Company holds a 90% ownership stake. The company is focused on developing and commercializing systems for marine water treatment market in China.

Basis of Presentation

The consolidated financial statements of the Company have been prepared in accordance with generally accepted accounting principles in the United States of America (“GAAP”) as codified in the Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”).

Principles of Consolidation

The consolidated financial statements include the accounts of the Company, its wholly owned subsidiaries, and its majority-owned subsidiary. All material intercompany transactions and accounts have been eliminated in the consolidation.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant estimates and judgments include revenue recognition, allowance for estimated credit losses, reserves for excess and obsolete inventories, impairment evaluations of long-lived assets and goodwill, fair value measurements of warrants and stock-based compensation, and assessments of contingent liabilities.

Foreign Currency

The functional currency of LiqTech International, Inc. and LiqTech USA, Inc. is the U.S. Dollar. The functional currency of LiqTech Holding, LiqTech Water, LiqTech Plastics, LiqTech Ceramics, LiqTech Water Projects, and LiqTech Emission Control is the Danish Krone (“DKK”); and the functional currency of LiqTech JiTRI is the Renminbi (“RMB”). The Company’s reporting currency is the U.S. Dollar for the purpose of these consolidated financial statements. The balance sheet accounts of the foreign subsidiaries are translated into U.S. Dollars at the period-end exchange rates, equity is translated at historical cost, and all revenue and expenses are translated into U.S. Dollars at the average exchange rates prevailing during the twelve months ended December 31, 2024, and 2023. Translation gains and losses are deferred and accumulated as a component of other comprehensive income (loss) in stockholders’ equity. Transaction gains and losses that arose from exchange rate fluctuations from transactions denominated in a currency other than the functional currency are included in the statement of operations as incurred.

Cash, Cash Equivalents, and Restricted Cash

The Company considers all highly liquid debt instruments purchased with a maturity of three months or less to be cash equivalents. As of December 31, 2024, and 2023, the Company held \$0 and \$941,361, respectively, of restricted cash. The restricted cash is held as security by a local financial institution for ensuring a leasing facility and for payment guarantees issued for the benefit of customers in connection with prepayments of sales orders and for warranties after the delivery of sales orders.

Accounts held in each U.S. institution are insured by the Federal Deposit Insurance Company (“FDIC”) up to \$250,000. At December 31, 2024, and December 31, 2023, the Company had \$4,414,510 and \$0 in excess of the FDIC insured limit, respectively.

Accounts Receivable and Current Expected Credit Losses

Accounts receivable consist of trade receivables arising from credit sales to customers in the normal course of business. These receivables are recorded at the time of sale, net of an allowance for current expected credit losses. In accordance with FASB ASC Topic 326, “*Financial Instruments – Credit Losses*,” the Company estimates expected credit losses based on historical bad debt experience, the aging of accounts receivable, the current creditworthiness of customers, prevailing economic conditions, and reasonable and supportable forward-looking information. Accounts receivable balances are written off when they are determined to be uncollectible.

The roll-forward of the allowance for current expected credit losses as of December 31, 2024, and 2023 were as follows:

	December 31, 2024	December 31, 2023
Allowance for current expected credit losses at the beginning of the period	\$ 134,912	\$ 59,559
Bad debt expense	578,423	82,066
Receivables written off during the periods	(49,577)	(10,298)
Effect of exchange rate changes	(26,202)	3,585
Allowance for current expected credit losses at the end of the period	<u>\$ 637,556</u>	<u>\$ 134,912</u>

Inventories

Inventories directly purchased is carried at the lower of cost or net realizable value, as determined on the first-in, first-out (“FIFO”) method. For inventories produced, standard costs that approximate actual cost on the FIFO method are used to value inventories. Standard costs are reviewed at least annually by management or more often if circumstances indicate a change in cost has occurred. Work in process and finished goods include material, labor, and production overhead costs.

The Company adjusts the value of its inventories to the extent management determines that the cost cannot be recovered due to obsolescence or other factors. Inventory valuation adjustments for excess and obsolete inventories are calculated based on current inventories levels, movement, expected useful lives, and estimated future demand for our products.

Leases

The Company has elected to not recognize lease assets and liabilities with an initial term of 12 months or less and to not separate lease and non-lease components. The Company’s accounting for finance leases remains substantially unchanged. Operating lease right-of-use (“ROU”) assets and liabilities are recognized at the commencement date based on the present value of lease payments over the lease term. As most of the Company’s leases do not provide an implicit rate, an incremental borrowing rate based on the information available at the commencement date is used in determining the present value. The Company uses the implicit rate when determinable. The operating lease ROU asset also included prepaid lease payments, reduced by accrued lease payments. The Company’s lease terms may include options to extend or terminate the lease, recognized when it is reasonably certain that those options will be exercised. Operating lease cost for lease payments will be recognized on a straight-line basis over the lease term.

Property and Equipment

Property and equipment are stated at cost. Expenditures for major renewals and betterments that extend the useful lives of property and equipment are capitalized upon being placed in service. Expenditures for maintenance and repairs are charged to expense as incurred. Depreciation is computed for financial statement purposes on a straight-line basis over the estimated useful lives of the assets, which range from three to ten years.

Long-Lived Assets

The Company assesses the impairment of long-lived assets when events or changes in circumstances indicate that the carrying value of the assets or the asset grouping may not be recoverable. Factors that the Company considers in deciding when to perform an impairment review include significant under-performance of a business or product line in relation to expectations, significant negative industry or economic trends, and significant changes or planned changes in its use of the assets. The Company measures the recoverability of assets that will continue to be used in its operations by comparing the carrying value of the asset grouping to its estimate of the related total future undiscounted net cash flows. If an asset grouping’s carrying value is not recoverable through the related undiscounted cash flows, the asset grouping is considered to be impaired. The impairment is measured by comparing the difference between the asset grouping’s carrying value and its fair value.

Impairments of long-lived assets are determined for groups of assets related to the lowest level of identifiable independent cash flows. Due to the Company’s asset usage model and the interchangeable nature of its ceramic filter manufacturing capacity, the Company must make subjective judgments in determining the independent cash flows that can be related to specific asset groupings. In addition, as the Company makes manufacturing process changes and other factory planning decisions, it must make subjective judgments regarding the remaining useful lives of assets, primarily process-specific filter manufacturing tools and building improvements. If the Company determines that the useful lives of assets are shorter than it had originally estimated, the Company accelerates the rate of depreciation over the assets’ new, shorter useful lives.

Management has analyzed the impact of the current economic climate on its financial statements as of December 31, 2024, and has determined that the changes to its significant judgements and estimates did not have a material impact with respect to goodwill, intangible assets, or long-lived assets. During the years ended December 31, 2024, and 2023, no impairment charges for long-lived assets were recorded.

Goodwill and Intangible Assets

The purchase price of an acquired company is allocated between intangible assets and the net tangible assets of the acquired business, with the residual purchase price recorded as goodwill. The determination of the value of the intangible assets acquired involves certain judgments and estimates. These judgments can include, but are not limited to, the cash flows that an asset is expected to generate in the future and the appropriate weighted average cost of capital.

Acquired intangible assets with determinable useful lives are amortized on a straight-line or accelerated basis over the estimated periods benefited, ranging from one to ten years. Customer relationships and other non-contractual intangible assets with determinable lives are amortized over periods of five years.

The Company evaluates the recoverability of long-lived assets by comparing the carrying amount of an asset to estimated future net undiscounted cash flows generated by the asset. If such assets are considered to be impaired, the impairment recognized is measured as the amount by which the carrying value of the assets exceeds the fair value of the assets. The evaluation of recoverability involves estimates of future operating cash flows based upon certain forecasted assumptions, including, but not limited to, revenue growth rates, gross profit margins, and operating expenses over the expected remaining useful life of the related asset. A shortfall in these estimated operating cash flows could result in an impairment charge in the future.

Goodwill is not amortized but is evaluated annually for impairment at the reporting unit level as of December 31 or when indicators of a potential impairment are present. The Company estimates the fair value of the reporting unit using the discounted cash flow and market approaches. Forecasts of future cash flows are based on the Company's best estimate of future net sales and operating expenses, using primarily expected category expansion, pricing, market segment fundamentals, and general economic conditions. During the years ended December 31, 2024, and 2023, no impairment charge for goodwill was recorded.

Revenue Recognition

The Company records revenue in accordance with FASB ASC Topic 606, "Revenue from Contracts with Customers." Revenue is recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To achieve this core principle, the Company applies the following five-step approach: (1) identify the contract with the customer; (2) identify the performance obligations in the contract; (3) determine the transaction price; (4) allocate the transaction price to performance obligations in the contract; and (5) recognize revenue when or as a performance obligation is satisfied.

The Company sells products throughout the world. Sales by geographical region for the year ended December 31, 2024, and 2023 were as follows:

	% Distribution		For the Year Ended December 31	
	2024	2023	2024	2023
Americas	18%	12%	\$ 2,693,002	\$ 2,125,460
Asia-Pacific	5%	14%	645,044	2,506,215
Europe	71%	65%	10,440,040	11,820,674
Middle East & Africa	6%	9%	826,532	1,549,303
Totals	100%	100%	<u>\$ 14,604,618</u>	<u>\$ 18,001,652</u>

The Company's sales by product line for the years ended December 31, 2024, and 2023 were as follows:

	% Distribution		For the Year Ended December 31	
	2024	2023	2024	2023
Water	38%	42%	\$ 5,538,741	\$ 7,705,080
Ceramics	39%	35%	5,634,973	6,232,628
Plastics	23%	21%	3,381,408	3,736,529
Corporate	0%	2%	49,496	327,415
Totals	100%	100%	<u>\$ 14,604,618</u>	<u>\$ 18,001,652</u>

For Water (systems and aftermarket), Ceramics (diesel particulate filters and membranes), and Plastics (components), revenue is recognized when performance obligations specified within the terms of a contract with the customer are satisfied, which occurs when control of the product transfers to the customer or when services are rendered by the Company. The majority of the Company's sales contracts contain performance obligations satisfied at a point in time when title along with risks and rewards of ownership have transferred to the customer. This generally occurs when the product is shipped or accepted by the customer. Revenue for service contracts is recognized as the services are provided. Revenue is measured as the amount of consideration expected to be received in exchange for transferring the goods or providing services. The satisfaction of performance obligations under the terms of a revenue contract generally gives rise to the right to receive payment from the customer. The Company's standard payment terms vary by the type and location of the customer and the products or services offered. Generally, the time between when revenue is recognized and when payment is due is not significant. Pre-payments received prior to satisfaction of performance obligations are recorded as a Contract liability. Considering the relatively short time between revenue recognition and receipt of payment, significant financing components do not exist between the Company and its customers.

For contracts with customers that include multiple performance obligations, judgment is required to determine whether performance obligations specified in these contracts are distinct and should be accounted for as separate revenue transactions for recognition purposes. For such arrangements, revenue is allocated to each performance obligation based on its relative standalone selling price. Standalone selling prices are generally determined based on the prices charged to customers or using an expected cost-plus margin.

System sales are recognized when the Company transfers control to the customer based upon sales and delivery conditions specified in the sales contract. This typically occurs upon shipment of the system from the production facility but can also occur upon other agreed delivery terms. In connection with the completion of the system, it is normal procedure to issue a Factory Acceptance Test ("FAT") asserting that the customer has accepted the performance of the system as it is being shipped from our production facility in Hobro. As part of the performance obligation, the customer is normally offered commissioning services (final assembly and configuration at a place designated by the customer), and this commissioning is therefore considered a second performance obligation and is valued at cost, with the addition of a standard gross margin. This second performance obligation is recognized as revenue at the time of the commissioning services being rendered together with the cost incurred. Part of the invoicing to the customer is also attributed to the commissioning, and at transfer of the control of the system (i.e., the first performance obligation), this portion is recognized as Contract liabilities.

Aftermarket sales represent parts, extended warranties, and maintenance services. For the sale of aftermarket parts, the Company transfers control and recognizes revenue when parts are shipped to the customer. When customers are given the right to return eligible parts and accessories, the Company estimates the expected returns based on an analysis of historical experience. The Company adjusts estimated revenues at the earlier of when the most likely amount of consideration expected to be received changes or when the consideration becomes fixed. The Company recognizes revenue for extended warranty and maintenance agreements based on the standalone selling price over the life of the contract.

The Company has received long-term contracts for grants from government entities for the development and use of silicon carbide membranes in various water filtration and treatment applications and historically in the installation of various water filtration systems. We measure the transfer of control of the performance obligation on long-term contracts utilizing the cost-to-cost measure of progress, with cost of revenue including direct costs such as labor and materials. Under the cost-to-cost approach, the use of estimated costs to complete each performance obligation is a significant variable in the process of determining recognized revenue and a significant factor in the accounting for such performance obligations. The timing of when we bill our customers is generally dependent upon advance billings terms, milestone billings based on completion of certain phases of the work, or when services are provided or products are shipped. Projects with performance obligations recognized over time that have costs and estimated earnings recognized to date in excess of cumulative billings are reported on our balance sheet as Contract assets. Projects with performance obligations recognized over time that have cumulative billings in excess of costs and estimated earnings recognized to date are reported on our balance sheet as contract liabilities.

Contracts Assets and Contract Liabilities

Contract assets are the Company's rights to consideration in exchange for goods or services and are recognized when a performance obligation has been satisfied but has not yet been billed. When the Company issues invoices to the customer, and the billing is higher than the capitalized Contract assets, the net amount is transferred to Contract liabilities. Contract assets/liabilities are transferred to revenue and cost of goods sold when the right to consideration is unconditional and billed per the terms of the contractual agreement.

Contract assets also include unbilled receivables, which usually comprise the last invoice remaining after the delivery of the water treatment unit, where revenue is recognized at the transfer of control based upon signed acceptance of the unit by the customer. Most commonly, this invoice is sent to the customer at commissioning of the product or no later than 12 months after delivery. Further included in Contract Assets are short-term receivables such as VAT and other receivables.

The roll-forward of contract assets and liabilities for the year ended December 31, 2024, and 2023 were as follows:

	December 31, 2024	December 31, 2023
Cost incurred	\$ 2,512,901	\$ 3,225,728
Unbilled project deliveries	51,442	582,557
VAT	93,961	329,980
Other receivables	20,972	92,619
Prepayments	(1,121,897)	(1,688,427)
Deferred Revenue	-	(33,360)
	<u>\$ 1,557,379</u>	<u>\$ 2,509,097</u>
Distributed as follows:		
Contract assets	\$ 1,666,698	\$ 2,891,744
Contract liabilities	(109,319)	(382,647)
	<u>\$ 1,557,379</u>	<u>\$ 2,509,097</u>

Cost of Sales

The Company includes product costs (i.e., material, direct labor and overhead costs), shipping and handling expense, production-related depreciation expense, and product license agreement expense in cost of sales.

Advertising Costs

Costs incurred in connection with advertising of the Company's products are expensed as incurred. Advertising costs are included in selling expenses, and total advertising costs amounted to \$56,037 and \$70,580 for the years ended December 31, 2024, and 2023, respectively.

Research and Development Cost

The Company expenses research and development costs for the development of new products as incurred. Included in operating expense for the years ended December 31, 2024, and 2023 were \$1,352,060 and \$1,418,842, respectively, of research and development costs.

Income Taxes

Income taxes are accounted for under the asset and liability method in accordance with ASC 740, “*Income Taxes*.” Under the asset and liability method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the year in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period that includes the enactment date. The Company assesses the likelihood that its deferred tax assets will be recovered from future taxable income and establish a valuation allowance if, based on the weight of available evidence, it believes it is more likely than not that all or a portion of the deferred tax assets will not be realized.

The Company recognizes the tax benefit of an uncertain tax position only if it is more likely than not the position will be sustainable upon examination by the taxing authority, including resolution of any related appeals or litigation processes. This evaluation is based on all available evidence and assumes that the tax authorities have full knowledge of all relevant information concerning the tax position. The tax benefit recognized is measured as the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The Company recognizes interest accrued and penalties related to unrecognized tax benefits in income tax expense.

Loss Contingencies

The Company is subject to various legal and administrative proceedings along with asserted and potential claims, accruals related to product warranties, and potential asset impairments (loss contingencies) that arise in the ordinary course of business. An estimated loss from such contingencies is recognized as a charge to income if it is probable that a liability has been incurred, and the amount of the loss can be reasonably estimated. Disclosure of a loss contingency is required if there is at least a reasonable possibility that a loss has been incurred. The outcomes of legal and administrative proceedings and claims, and the estimation of product warranties and asset impairments, are subject to significant uncertainty. Significant judgment is required in both the determination of probability and the determination as to whether a loss is reasonably estimable. To estimate the losses associated with repairing and replacing parts in connection with product warranties, the Company makes judgments with respect to customer claim rates. At least quarterly, the Company reviews the status of each significant matter, and it may revise its estimates. These revisions could have a material impact on the Company’s results of operations and financial position.

Loss Per Share

The Company calculates loss per share in accordance with FASB ASC 260, “*Earnings Per Share*”. Basic earnings per common share (EPS) are based on the weighted average number of common shares outstanding during each period. Diluted earnings per common share are based on shares outstanding (computed as under basic EPS) and potentially dilutive common shares. Potential common shares included in the diluted earnings per share calculation include in-the-money stock options and warrants that have been granted but have not been exercised.

Stock Based Compensation

Stock-based awards granted to qualified employees, non-employee directors, and consultants are measured at fair value at the grant date and recognized as an expense in accordance with ASC Topic 718, “*Share-Based Payments*.” For service-based awards, stock-based compensation is recognized on a straight-line basis over the requisite service period, which is generally the vesting period. The fair value of our stock options is estimated using a Black-Scholes option valuation model. Restricted stock awards are valued based on the closing stock price on the date of grant. The Company has elected to recognize forfeitures as they occur.

Warrant Liabilities

The Company accounts for warrants as either equity-classified or liability-classified instruments based on an assessment of the specific terms of the warrants in accordance with ASC 480, “*Distinguishing Liabilities from Equity*,” and ASC 815-40, “*Contracts in Entity’s Own Equity*.” This assessment, which requires the use of professional judgment, considers whether the warrants are freestanding financial instruments pursuant to ASC 480, meet the definition of a liability pursuant to ASC 480, and meet all of the requirements for equity classification under ASC 815-40, including whether the warrants are indexed to the Company’s own shares and whether the events where holders of the warrants could potentially require net cash settlement are within the Company’s control, among other conditions for equity classification. Warrant liabilities are recognized at fair value, with changes in fair value recognized in the consolidated statement of operations each period.

Fair Value of Financial Instruments

The Company accounts for fair value measurements for financial assets and liabilities in accordance with FASB ASC Topic 820 “*Fair Value Measurement*”. The authoritative guidance, which, among other things, defines fair value, establishes a consistent framework for measuring fair value and expands disclosure for each major asset and liability category measured at fair value on either a recurring or nonrecurring basis. Fair value is defined as the exit price, representing the amount that would either be received to sell an asset or be paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, the guidance establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

- Level 1. Observable inputs such as quoted prices in active markets for identical assets or liabilities;
- Level 2. Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and
- Level 3. Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

Unless otherwise disclosed, the fair value of the Company’s financial instruments including cash and cash equivalents, restricted cash, accounts receivable, other receivables, prepaid expenses, accounts payable, and accrued expenses approximate their recorded values due to their short-term maturities.

Recently Adopted Accounting Pronouncements

In November 2023, the FASB issued ASU 2023-07, *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures*, which requires a public entity to disclose significant segment expenses and other segment items on an annual and interim basis and to provide in interim periods all disclosures about reportable segment’s profit or loss and assets that are currently required annually. ASU 2023-07 is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. These amendments are to be applied retrospectively. The Company adopted ASU 2023-07 retrospectively on December 31, 2024. See Note 12 for further details.

Recently Issued Accounting Pronouncements

In December 2023, the FASB issued ASU 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures*, which enhances the transparency and decision usefulness of income tax disclosures by requiring; (1) consistent categories and greater disaggregation of information in the rate reconciliation and (2) income taxes paid disaggregated by jurisdiction. It also includes certain other amendments to improve the effectiveness of income tax disclosures. ASU 2023-09 is effective for fiscal years beginning after December 15, 2025, with early adoption permitted. These amendments are to be applied prospectively, with retrospective application permitted. The Company is currently evaluating the impact this standard will have on its consolidated financial statements.

In November 2024, the FASB issued ASU 2024-03, *Income Statement—Reporting Comprehensive Income—Expense Disaggregation Disclosures (Subtopic 220-40)*, which requires additional disclosures around specific expense categories in the notes to the financial statements. The additional annual disclosures are effective for our year ending December 31, 2027, and the additional interim disclosures are effective in 2028. These disclosures will be applied prospectively. The Company is currently evaluating the impact this standard will have on its consolidated financial statements.

In August 2023, the FASB issued ASU 2023-05, *Business Combinations—Joint Venture Formations (Subtopic 805-60): Recognition and Initial Measurement*, which requires a newly-formed joint venture to apply a new basis of accounting to its contributed net assets, resulting in the joint venture initially measuring its contributed net assets at fair value on the formation date. ASU 2023-05 is effective for all joint venture formations with a formation date on or after January 1, 2025, with early adoption permitted. These amendments are to be applied prospectively, with retrospective application permitted for joint ventures formed before the effective date. The Company is currently evaluating the impact this standard will have on its consolidated financial statements.

The Company currently believes there are no other issued and not yet effective accounting standards that are materially relevant to its financial statements.

NOTE 2 - INVENTORIES

Inventories consisted of the following on December 31, 2024, and 2023:

	December 31, 2024	December 31, 2023
Furnace parts and supplies	\$ -	\$ 55,177
Raw materials	2,734,781	3,301,526
Work in process	2,435,280	1,271,458
Finished goods and filtration systems	1,580,255	1,507,113
Reserve for obsolescence	(1,209,124)	(867,458)
Total inventories, net	<u>\$ 5,541,192</u>	<u>\$ 5,267,816</u>

Inventory valuation adjustments for excess and obsolete inventories are calculated based on current inventory levels, movements, expected useful lives, and estimated future demand for the products.

NOTE 3 - PROPERTY AND EQUIPMENT

Property and equipment consisted of the following on December 31, 2024, and 2023:

	Useful life (Years)	December 31, 2024	December 31, 2023
Production equipment	3 - 10	\$ 9,553,545	\$ 9,433,581
Production equipment - finance lease	3 - 10	3,675,935	5,182,375
Lab equipment	3 - 10	123,611	130,909
Computer equipment	3 - 5	1,103,623	1,141,790
Computer equipment - finance lease	3 - 5	80,518	-
Vehicles	3 - 5	21,067	26,897
Furniture and fixture	5	1,378,252	1,474,032
Furniture and fixture - finance lease	5	326,411	260,911
Leasehold improvements	5 - 10	3,007,321	3,184,871
		<u>19,270,283</u>	<u>20,835,366</u>
Less accumulated depreciation		(11,494,435)	(10,950,622)
Less accumulated depreciation - finance lease		(1,157,026)	(877,578)
Net Property and Equipment		<u>\$ 6,618,822</u>	<u>\$ 9,007,166</u>

Depreciation expense amounted to \$2,089,478 and \$2,472,031 for the year ended December 31, 2024, and 2023, respectively. Of the \$2,089,478 for the year ended December 31, 2024, \$1,830,553 is allocated to cost of goods sold and \$258,925 is allocated to operating expenses.

NOTE 4 - LEASES

The Company leases certain vehicles, real property, production equipment, and office equipment under lease agreements. The Company evaluates each lease to determine its appropriate classification as an operating lease or finance lease for financial reporting purposes. The majority of our operating leases are non-cancelable operating leases for production and office space in Hobro (two facilities) and Copenhagen, Denmark. The lease agreements expire on April 30, 2034, November 30, 2034, and August 31, 2028, respectively (for the two facilities in Hobro and the office space in Copenhagen, in that order).

During the year ended December 31, 2024, cash paid for amounts included for the measurement of operating lease liabilities was \$853,566, and the Company recorded operating lease expenses of \$851,110 in operating expenses.

During the year ended December 31, 2024, cash paid for amounts included for the measurement of finance lease liabilities was \$1,378,297, and the Company recorded finance lease expenses of \$154,598 in other expenses.

Supplemental balance sheet information related to leases as of December 31, 2024, and 2023 were as follows:

	December 31, 2024	December 31, 2023
Operating leases:		
Operating lease right-of-use assets	\$ 4,450,822	\$ 4,055,837
Operating lease liabilities – current	\$ 544,197	\$ 531,355
Operating lease liabilities – long-term	3,906,625	3,527,082
Total operating lease liabilities	\$ 4,450,822	\$ 4,058,437
Finance leases:		
Property and equipment, at cost	\$ 4,082,864	\$ 5,443,287
Accumulated depreciation	(1,157,025)	(877,578)
Property and equipment, net	\$ 2,925,839	\$ 4,565,709
Finance lease liabilities – current	\$ 458,347	\$ 590,550
Finance lease liabilities – long-term	1,600,931	2,879,932
Total finance lease liabilities	\$ 2,059,278	\$ 3,470,482
Weighted average remaining lease term:		
Operating leases	8.1	8.3
Finance leases	3.1	4.3
Weighted average discount rate:		
Operating leases	6.8%	6.7%
Finance leases	5.5%	6.0%

Maturities of lease liabilities at December 31, 2024 were as follows:

	Operating Leases	Finance Leases
2025	\$ 828,986	\$ 562,072
2026	818,823	544,452
2027	818,823	506,462
2028	700,078	613,474
2029	462,587	76,893
Thereafter	2,128,429	57,288
Total payment under lease agreements	5,757,726	2,360,641
Less imputed interest	(1,306,904)	(301,363)
Total lease liabilities	\$ 4,450,822	\$ 2,059,278

NOTE 5 - INTANGIBLE ASSETS

On December 31, 2024, and 2023, other intangible assets, net of accumulated amortization, consisted of customer relationships acquired in connection with the purchase of BS Plastic A/S and the cost of patent applications for the Company's products.

Intangible assets consisted of the following at December 31, 2024, and 2023:

	2024	2023
Customer relationships	\$ 461,997	\$ 489,273
Patent cost	173,624	183,874
	635,621	673,147
Less accumulated amortization	(596,254)	(558,554)
Intangible assets, net	<u>\$ 39,367</u>	<u>\$ 114,593</u>

Amortization expense amounted to \$71,359 and \$105,522 for the years ended December 31, 2024, and 2023, respectively.

Expected future amortization expense for the next five years consists of the following as of December 31, 2024:

Year ending December 31,	Amortization Expenses
2025	7,238
2026	7,238
2027	7,238
2028	7,238
2029	7,238
Thereafter	3,177
	<u>\$ 39,367</u>

NOTE 6 - ACCOUNTS PAYABLE AND ACCRUED EXPENSES

Accounts payable and accrued expenses consisted of the following at December 31, 2024, and 2023:

	December 31, 2024	December 31, 2023
Accounts payable	\$ 1,300,966	\$ 2,444,653
Accrued payroll liabilities	746,938	1,223,712
Product warranty accrual	621,031	629,100
Other accrued expenses	1,123,510	1,697,730
Total accounts payable and accrued expenses	<u>\$ 3,792,445</u>	<u>\$ 5,995,195</u>

NOTE 7 - LONG-TERM DEBT

Senior Promissory Notes

On June 22, 2022, the Company issued and sold Senior Promissory Notes in an aggregate principal amount of \$6.0 million (the “Notes”) and issued warrants to purchase 531,250 shares of Common Stock to affiliates of Bleichroeder L.P., 21 April Fund, L.P., and 21 April Fund, Ltd. (together, the “Purchasers”), pursuant to a note and warrant purchase agreement entered into with the Purchasers (the “Note and Warrant Purchase Agreement”). The warrants issued in this transaction have an exercise price of \$5.20 per share, a term of five years and are exercisable for cash at any time.

The Notes originally had a term of 24 months and did not bear interest during this period. If the Notes are not repaid on or before the second anniversary of issuance, however, the Notes will thereafter bear interest of 10% per annum, which would increase by 1% each month the Notes remain unpaid, up to a maximum of 16% per annum, payable monthly.

Additionally, as part of the transaction, the Company issued 28,846 warrants to the placement agent. The warrants issued in this transaction have an exercise price of \$5.20 per share, a term of five years, and are exercisable for cash at any time.

As a result, the Company recorded an initial debt discount of \$695,749 based on the relative fair value of the warrants and Notes issued. The Company determined the fair value of the warrants by using the Black-Scholes Option Pricing Model, with the following assumptions: expected term of 2.5 years, stock price of \$3.44, exercise price of \$5.20, volatility of 80.8%, risk-free rate of 3.13%, and no forfeiture rate. The debt discount will be accreted according to the effective interest method over the contractual term of the Notes. The warrants qualified for equity classification and were reported within Additional Paid-In Capital.

On October 13, 2023, the Company and the Purchasers entered into an amendment to the Note and Warrant Purchase Agreement (the “Amendment”) and Allonge No. 1 to each of the Notes (collectively, the “Allonges”) effective as of September 30, 2023, pursuant to which the Company and the Purchasers extended the maturity date of the Notes from June 20, 2024, to January 1, 2026 (the “Extension”). As consideration for the Extension, simultaneously with the entry into the Amendment and Allonges, the Company issued to the Purchasers additional warrants to purchase an aggregate of 531,250 shares of Common Stock at an exercise price of \$5.20 per share, subject to adjustment as provided therein (the “2023 Warrants”). The 2023 Warrants are exercisable at any time prior to the five-year anniversary of the initial exercise date of September 30, 2023. The Amendment qualifies as a modification and entitles the Purchasers to registration rights with respect to the shares of Common Stock issuable upon exercise of the 2023 Warrants pursuant to the existing Registration Rights Agreement, dated June 22, 2022, by and between the Company and the Purchasers.

As a result of the Amendment, the Company recorded an initial debt discount of \$1,193,206, based on fair value of the warrants issued. The Company determined the fair value of the warrants by using the Black-Scholes Option Pricing Model, with the following assumptions: expected term of 5.0 years, stock price of \$3.89, exercise price of \$5.20, volatility of 73.66%, risk-free rate of 4.60%, and no forfeiture rate. The debt discount will be accreted according to the effective interest method over the contractual term of the Notes. The warrants qualified for equity classification and were reported within Additional Paid-In Capital.

The components of notes payable are as follows:

	December 31, 2024	December 31, 2023
Senior promissory notes	\$ 6,000,000	\$ 6,000,000
Less: unamortized debt discount	(696,437)	(1,311,989)
Total senior promissory notes payable, net	\$ 5,303,563	\$ 4,688,011
Current portion of senior promissory notes payable	-	-
Senior promissory notes payable, less current portion	5,303,563	4,688,011
Total senior promissory notes payable, net	\$ 5,303,563	\$ 4,688,011

For the years ended December 31, 2024, and 2023, the Company recognized amortization of debt discount of \$615,552 and \$400,903, respectively.

NOTE 8 - AGREEMENTS, COMMITMENTS AND CONTINGENCIES

Contingencies - From time to time, we may be involved in litigation relating to claims arising out of our operations in the normal course of business.

Product Warranties - The Company provides a standard warranty on its systems, generally for a period of one to three years after customer acceptance. The Company estimates the costs that may be incurred under its standard warranty programs and records a liability for such costs at the time product revenue is recognized.

In addition, the Company sells an extended warranty for certain systems, which generally provides a warranty for up to four years from the date of commissioning. The specific terms and conditions of the warranties vary depending upon the product sold and the country in which the Company does business. Revenue received for the sale of extended warranty contracts is deferred and recognized in the same manner as the costs incurred to perform under the warranty contracts.

The Company periodically assesses the adequacy of its recorded warranty liabilities and adjusts the amounts, as necessary. Factors that affect the warranty liability include the number of units sold, historical and anticipated rates of warranty claims, and the cost per claim.

Changes in the Company's current and long-term warranty obligations included in accrued expenses on the balance sheet for the fiscal years ended December 31, 2024, and 2023 were as follows:

	December 31, 2024	December 31, 2023
Balance at January 1	\$ 629,100	\$ 898,072
Warranty costs charged to cost of goods sold	100,726	115,401
Utilization charges against reserve	(72,736)	(408,234)
Foreign currency effect	(36,059)	23,861
Balance at the end of the period	\$ 621,031	\$ 629,100

NOTE 9 - INCOME TAXES

As of December 31, 2024, the Company had net operating loss carry-forwards of approximately \$30,953,048 for U.S. federal tax purposes, expiring through 2041, and approximately \$28,209,222 for Danish tax purposes, which do not expire.

As of December 31, 2024, and December 31, 2023, the Company established a valuation allowance of \$7,611,000 and \$7,100,000 for the tax components of LiqTech International Inc. and Liqtech NA, respectively; \$7,795,000 and \$6,303,000 for the tax components of LiqTech Holding, LiqTech Ceramics, LiqTech Water, LiqTech Plastics, LiqTech Emission Control, and LiqTech Water Projects, respectively; and \$0 and \$479,000 for LiqTech China, respectively, as management could not determine that it was more likely than not that sufficient income could be generated by these components to realize the resulting net operating loss carry-forwards and other deferred tax assets of these components. The change in the valuation allowance for the year ended December 31, 2024, was an increase of \$511,000 for the US component, an increase of \$1,492,000 for the Danish component, and a decrease of \$479,000 for the Chinese component. The change in the valuation allowance for the year ended December 31, 2023, was an increase of \$590,000, \$1,077,000, and \$9,000 for the US, Danish, and Chinese components, respectively.

The temporary differences, tax credits, and carry-forwards gave rise to the following deferred tax assets and liabilities at December 31, 2024, and 2023:

	2024	2023
Excess of tax over financial accounting	\$ 1,588,748	\$ 1,454,389
Reserve for excess and obsolete inventories	266,007	190,841
Discount amortization	853,619	724,353
Net operating loss carryover	12,963,223	11,580,458
Excess of book over tax depreciation	(323,115)	(359,917)
Excess of book over tax work in progress	-	190,196
Valuation allowance	(15,406,442)	(13,881,379)
	<u>\$ (57,960)</u>	<u>\$ (101,059)</u>
Distributed as:		
Long-term deferred tax asset	-	-
Long-term deferred tax liability	(57,960)	(101,059)
	<u>\$ (57,960)</u>	<u>\$ (101,059)</u>

A reconciliation of income tax expense at the federal statutory rate to income tax expense at the Company's effective rate is as follows for the years ended December 31, 2024, and 2023:

	2024	2023
Computed tax at expected statutory rate	\$ (2,177,319)	\$ (1,843,244)
State and local income taxes, net of federal benefit	-	(1,177)
Non-US income taxed at different rates	(80,280)	(44,279)
Non-deductible expenses	1,259	5,399
Change in valuation allowance	1,996,655	1,755,013
Other	220,848	(77,919)
Income tax benefit	<u>\$ (38,837)</u>	<u>\$ (206,207)</u>

The components of income tax benefit from continuing operations for the years ended December 31, 2024, and 2023 consisted of the following:

	2024	2023
Current income taxes:		
Danish	\$ -	\$ (148,668)
Federal	-	-
State	-	-
Current tax (benefit)	<u>\$ -</u>	<u>\$ -</u>
Deferred income taxes:		
Book in excess of tax depreciation	(156,342)	(386,673)
Work in progress	-	(442,964)
Net operating loss carryover	(2,387,047)	(402,448)
Valuation allowance	2,477,718	1,128,197
Discount amortization	129,266	84,190
Reserve for obsolete inventories	(102,432)	(37,841)
Deferred tax benefit	<u>\$ (38,837)</u>	<u>\$ (57,539)</u>
Total tax benefit	<u>\$ (38,837)</u>	<u>\$ (206,207)</u>

Deferred income tax benefit results primarily from the reversal of temporary timing differences between tax and financial statement income.

The Company files Danish, Chinese, U.S. federal, and Minnesota state income tax returns. LiqTech Holding, LiqTech Ceramics, LiqTech Water, LiqTech Plastics, LiqTech Emission Control, and LiqTech Water Projects are generally no longer subject to tax examinations for years prior to 2017 for their Danish tax returns. LiqTech NA is generally no longer subject to tax examinations for years prior to 2017 for U.S. federal and state tax returns.

NOTE 10 - LOSS PER SHARE

Basic and diluted net loss per common share is determined by dividing net loss by the weighted average common shares outstanding during the year. For the years where there is a net loss, stock options, warrants, and restricted stock units (“RSUs”) have been excluded from the calculation of diluted net loss per common share because their effect would be anti-dilutive. Consequently, the weighted-average common shares used to calculate both basic and diluted net loss per common share would be the same.

For the year ended December 31, 2024, the Company had outstanding balances of 357,903 RSUs, 5,299,879 prefunded warrants, and 6,091,346 warrants, all exercisable for shares of Common Stock.

For the year ended December 31, 2023, the Company had outstanding balances of 314,461 RSUs, 3,930,008 prefunded warrants, and 1,091,346 warrants, all exercisable for shares of Common Stock.

NOTE 11 - STOCKHOLDERS' EQUITY

Common Stock - The Company has 50,000,000 authorized shares of common stock, \$0.001 par value. As of December 31, 2024, and 2023, there were 9,475,443 and 5,727,310 common shares issued and outstanding, respectively.

Voting - Holders of common stock are entitled to one vote for each share held of record on each matter submitted to a vote of stockholders, including the election of directors, and do not have any right to cumulate votes in the election of directors.

Dividends - Subject to the rights and preferences of the holders of any series of preferred stock, if any, which may at the time be outstanding, holders of common stock are entitled to receive ratably such dividends as our Board of Directors from time to time may declare out of funds legally available.

Liquidation Rights - In the event of any liquidation, dissolution, or winding-up of affairs, after payment of all of our debts and liabilities and subject to the rights and preferences of the holders of any outstanding shares of any series of our preferred stock, the holders of common stock will be entitled to share ratably in the distribution of any of our remaining assets.

Other Matters - Holders of common stock have no conversion, preemptive, or other subscription rights, and there are no redemption rights or sinking fund provisions with respect to our common stock. All of the issued and outstanding shares of common stock on the date of this Annual Report are validly issued, fully paid, and non-assessable.

Preferred Stock - Our Board of Directors has the authority to issue preferred stock in one or more classes or series and to fix the designations, powers, preferences, and rights, the qualifications, limitations or restrictions thereof, including dividend rights, dividend rates, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences, and the number of shares constituting any class or series, without further vote or action by the stockholders. The issuance of preferred stock may have the effect of delaying, deferring, or preventing a change in control without further action by the stockholders and may adversely affect the voting and other rights of the holders of common stock.

The Company has 2,500,000 authorized shares of preferred stock, \$0.001 par value. As of December 31, 2024, and 2023, there were no preferred shares issued and outstanding.

Stock Issuances

Since January 1, 2024, the Company has made the following issuances of Common Stock:

On January 3, 2024, the Company issued 24,500 shares of Common Stock to settle RSUs. The RSUs were valued at \$73,500 for services provided by the Board of Directors in 2023. The Company recognized the stock-based compensation of the award over the requisite service period during the year ended December 31, 2023.

On January 3, 2024, the Company issued 85,528 shares of Common Stock to settle RSUs. The RSUs were valued at \$289,672 for services provided by management in 2023. The Company recognized the stock-based compensation of the award over the requisite service period during the year ended December 31, 2023. In connection with the issuance, 29,998 shares of Common Stock, with a total value of \$104,940, were retired to settle tax withholdings associated with stock-based compensation.

On June 24, 2024, the Company issued 11,932 shares of Common Stock to settle RSUs. The RSUs were valued at \$36,750 for services provided by the Board of Directors from 2023 to 2024. The Company recognized the stock-based compensation of the award over the requisite service period from 2023 to 2024.

On September 12, 2024, the Company issued 26,042 shares of Common Stock to settle RSUs. The RSUs were valued at \$116,667 for services provided by management in the last 12 months. The Company recognized the stock-based compensation of the award over the requisite service period during the period ended September 30, 2024.

On September 27, 2024, the Company entered into a securities purchase agreement with certain investors, pursuant to which the Company agreed to issue and sell an aggregate of 3,630,129 shares of Common Stock, 1,369,871 pre-funded warrants to purchase shares of Common Stock, and warrants to purchase up to an aggregate of 5,000,000 shares of Common Stock, for gross proceeds of up to \$10 million. The combined purchase price of one share of Common Stock and one accompanying warrant to purchase one share of Common Stock is \$2.00. The combined purchase price of one pre-funded warrant and one accompanying warrant to purchase one share of Common Stock under the Purchase Agreement is \$1.999.

The Company agreed to issue the Common Stock, warrants, and pre-funded warrants in two tranches: (i) a first tranche comprised of 29,227 shares of Common Stock, 555,302 pre-funded warrants, and warrants to purchase an aggregate of 584,529 shares of Common Stock (collectively, the "First Tranche Securities"); and (ii) a second tranche comprised of 3,600,902 shares of Common Stock, 814,569 pre-funded warrants, and warrants to purchase an aggregate of 4,415,471 shares of Common Stock (collectively, the "Second Tranche Securities").

On September 27, 2024, in connection with the closing of the first tranche, the Company sold and issued the First Tranche Securities for gross proceeds of approximately \$1.2 million.

On November 12, 2024, in connection with the closing of the second tranche, the Company sold and issued the Second Tranche Securities for gross proceeds of approximately \$8.8 million.

Warrants

On May 17, 2022, the Company entered a warrant purchase agreement with existing stockholders to purchase 3,803,133 shares of Common Stock at an offering price of \$3.992 per prefunded warrant, which represents the offering price of \$4.00 per share of the Company's Common Stock less the \$0.008 per share exercise price for each pre-funded warrant. The warrants represented gross proceeds of approximately \$15,182,075 as part of the Company's public offering of Common Stock and pre-funded warrants totaling \$23,000,000 before underwriting discounts, commissions, and offering expenses payable by the Company.

On June 22, 2022, the Company completed a private placement of Senior Notes in an aggregate principal amount of \$6,000,000 and warrants to purchase 531,250 shares of Common Stock of the Company to affiliates of Bleichroeder L.P., 21 April Fund, L.P., and 21 April Fund, Ltd. (together, the "Purchasers"), pursuant to a note and warrant purchase agreement (the "Note and Warrant Purchase Agreement"). Additionally, as part of the transaction, the Company issued 28,846 warrants to the placement agent. All warrants issued in this transaction have an exercise price of \$5.20 per share, a term of five years, and are exercisable for cash at any time.

On October 13, 2023, the Company entered into an amendment to the Note and Warrant Purchase Agreement effective as of September 30, 2023, pursuant to which the Company and the Purchasers extended the maturity date of the Notes from June 20, 2024, to January 1, 2026 (the "Extension"). As consideration for the Extension, the Company issued to the Purchasers additional warrants to purchase an aggregate of 531,250 shares of Common Stock at an exercise price of \$5.20 per share. The warrants are exercisable at any time prior to the five-year anniversary of the initial exercise date of September 30, 2023.

On September 27, 2024 (as described under Stock Issuances), the Company closed on a securities purchase agreement with certain purchasers, pursuant to which the Company agreed to issue and sell to such purchasers warrants for the purchase of 584,529 shares of Common Stock at an exercise price of \$2.00 per common share and prefunded warrants for the purchase of 555,302 shares of Common Stock at an exercise price of \$0.001 per common share.

On November 12, 2024 (as described under Stock Issuances), the Company closed on a securities purchase agreement with certain purchasers, pursuant to which the Company agreed to issue and sell to such purchasers warrants for the purchase of 4,415,471 shares of Common Stock at an exercise price of \$2.00 per common share and prefunded warrants for the purchase of 814,569 shares of Common Stock at an exercise price of \$0.001 per common share.

The following is a summary of the periodic changes in warrants outstanding for the years ended December 31, 2024, and 2023:

	2024	2023
Outstanding, December 31	5,021,354	4,490,104
Warrants issued in connection with public offering and private placement	6,369,871	531,250
Exercises and conversions	-	-
Outstanding, December 31	11,391,225	5,021,354

Stock-based Compensation

In 2013, the Company's Board of Directors adopted a Share Incentive Plan (the "Incentive Plan"). Under the terms and conditions of the Incentive Plan, the Board of Directors is empowered to grant RSUs to officers, directors, and consultants of the Company. At December 31, 2024, 26,040 RSUs were granted and outstanding under the Incentive Plan. Directors of the Company receive share compensation consisting of annual grants of \$36,750 (\$73,500 for the Chairman of the Board) in RSUs per annum with one-year vesting.

In 2022, the Company's Board of Directors adopted an Equity Incentive Plan (the "2022 Incentive Plan"). Under the terms and conditions of the 2022 Incentive Plan, the Board of Directors is empowered to grant RSUs to officers and directors of the Company. At December 31, 2024, 331,863 RSUs were granted and outstanding under the 2022 Incentive Plan.

The Company recognizes compensation costs for RSU grants to Directors and management based on the stock price on the date of the grant.

The Company recognized stock-based compensation expense related to RSU grants of \$664,434 and \$627,904 for the years ended December 31, 2024, and 2023, respectively. On December 31, 2024, the Company had \$616,234 of unrecognized compensation cost related to non-vested stock grants.

A summary of the status of the RSUs as of December 31, 2024, and changes during the period are presented below:

		December 31, 2024	
	Number of units	Weighted Average Grant-Date Fair value	Aggregated Intrinsic Value
Outstanding, December 31, 2023	314,461	\$ 3.46	\$ -
Granted	311,154	3.20	-
Vested and settled with share issuance	(148,002)	(3.49)	-
Forfeited	(119,710)	(3.38)	-
Outstanding, December 31, 2024	357,903	\$ 3.25	\$ -

NOTE 12 – SEGMENT REPORTING

The Company operates in three segments: Water, Ceramics, and Plastics.

The Company's reportable segment information for the years ended December 31, 2024, and 2023 were as follows:

	For the Year Ended December 31,	
	2024	2023
Revenues		
Water	\$ 5,538,741	\$ 7,705,080
Ceramics	5,634,973	6,232,628
Plastics	3,381,408	3,736,529
Corporate	49,496	327,415
Total revenues	\$ 14,604,618	\$ 18,001,652

	For the Year Ended December 31,	
	2024	2023
Net loss		
Water	\$ (2,149,224)	\$ (736,148)
Ceramics	(3,322,800)	(2,640,895)
Plastics	(1,304,295)	(660,896)
Corporate	(3,568,939)	(4,533,206)
Total net loss	(10,345,258)	(8,571,145)

	As of	
	December 31, 2024	December 31, 2023
Total assets		
Water	\$ 8,235,726	\$ 9,432,991
Ceramics	10,679,025	14,550,872
Plastics	1,670,644	759,745
Corporate	11,842,084	11,228,239
Total assets	\$ 32,427,479	\$ 35,971,847

NOTE 13 - SIGNIFICANT CUSTOMERS / CONCENTRATION

The Company did not have any customers accounting for 10% or more of net sales in the reported periods. As a result, there is no significant customer concentration that would materially impact the Company's financial position or results of operations.

The following table presents customers accounting for 10% or more of the Company's accounts receivable:

	December 31, 2024	December 31, 2023
Customer A	20%	22%
Customer B	*%	13%

* Zero or less than 10%

As of December 31, 2024, approximately 86% of the Company's assets were located in Denmark, 14% were located in the U.S., and 0% were located in China. As of December 31, 2023, approximately 98% of the Company's assets were located in Denmark, 0% were located in the U.S., and 2% were located in China.

NOTE 14 - SUBSEQUENT EVENTS

On January 1, 2025, the Company issued 30,704 common shares to settle RSUs. The RSUs were valued at \$81,886 for services provided by the senior leadership team and key employees in 2024. The Company is recognizing the stock-based compensation of the award over the requisite service period.

On January 3, 2025, the Company issued 52,350 common shares to settle RSUs. The RSUs were valued at \$183,750 for services provided by the Board of Directors in 2024. The Company is recognizing the stock-based compensation of the award over the requisite service period.

On January 3, 2025, the Company issued 47,527 common shares to settle RSUs. The RSUs were valued at \$151,649 for services provided by management in 2024. The Company is recognizing the stock-based compensation of the award over the requisite service period.

On January 31, 2025, the Company announced the appointment of David Kowalczyk as its new Chief Financial Officer and Chief Operating Officer ("CFOO"), effective March 1, 2025. In connection with this appointment, Phillip Massie Price, the Company's Interim Chief Financial Officer, and the Company mutually agreed that Mr. Price will step down as Interim CFO effective March 1, 2025. Mr. Price will continue to serve as the Company's principal financial officer until April 30, 2025, after which he will depart from the Company. Mr. Kowalczyk is an experienced finance executive with over 20 years of professional experience across multiple industries and ownership structures. He holds a Bachelor of Science in Economics and Business Administration, a Master of Science in Accounting and Auditing, and a Master of Science in Finance and Investments from Copenhagen Business School. He also has extensive experience in technology and R&D-driven companies.

On March 26, 2025, the Company entered into a Second Amendment to the Note and Warrant Purchase Agreement originally dated June 22, 2022, with the holders of the Company's senior promissory notes. In connection with the Second Amendment, the parties executed Allonge No. 2 to each of the existing amended notes, resulting in an extension of the maturity date from January 1, 2026 to May 1, 2027.

Additionally, beginning on January 1, 2026, the notes will bear interest at a rate of 10% per annum, payable semi-annually. In the event of a default or if the notes are not repaid on or before the new maturity date, the interest rate increases to 13% per annum, with a monthly 1% step-up up to a cap of 16% per annum, payable monthly. Accrued interest (excluding default interest) may be paid in cash or in shares of common stock, at the Company's election, subject to certain limitations.

As part of the transaction, the Company and the noteholders also agreed to amend and restate the related warrants, reducing the exercise price from \$5.20 to \$2.00 per share and extending the expiration date to December 31, 2029.

The Company evaluated the Second Amendment under ASC 855 and concluded that it represents a non-recognized subsequent event. While it does not impact the financial statements as of December 31, 2024, it is disclosed herein due to its significance.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the design and effectiveness of our internal controls over financial reporting and disclosure controls and procedures (pursuant to Rule 13a-15(b) and (c) under the Exchange Act) as of the end of the period covered by this Annual Report. A weakness is a control deficiency, or combination of control deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a misstatement of the registrant's financial statements will not be prevented or detected on a timely basis.

There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives.

Based upon that evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures as of December 31, 2024, were not effective due to material weaknesses in internal controls over financial reporting, described below.

Notwithstanding this finding, we concluded that the consolidated financial statements included in this Report present fairly, in all material respects, our financial position, results of operations, and cash flows for the periods presented in conformity with accounting principles generally accepted in the United States. During the year ended December 31, 2024, the Company was not subject to the requirements of Section 404(b) of the Sarbanes-Oxley Act. As such, our independent registered public accounting firm was not required to, and thus did not, audit our internal control structure.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting.

Internal control over financial reporting is a process designed by, or under the supervision of, the Company's principal executive officer and principal financial officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles.

Internal control over financial reporting is defined in rules 13a-15(f) and 15d-15(f) under the Exchange Act as a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles, and includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the audited consolidated financial statements.

Under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, the Company's management conducted an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2024, based on the criteria set forth in the Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations (COSO) of the Treadway Commissions (2013).

Based upon that evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures as of December 31, 2024, were not effective due to material weaknesses in internal controls over financial reporting.

Material weaknesses as of December 31, 2024

A material weakness is a deficiency, or combination thereof, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis.

The material weaknesses we identified related to the following:

- 1) Ineffective information technology general controls (ITGC's) in the areas of user access and program change-management over certain IT systems that support the Company's financial reporting processes. Additionally, management has identified a material weakness in its internal control over financial reporting related to ITGCs in the areas of control report reviews for service organization;
- 2) The lack of formal documentation of the design, and related execution of, certain transaction level controls related to disbursements, procurement, and inventory management and valuation; and
- 3) Ineffective design and operation of process level controls over the existence and accuracy of revenue transactions.

Management's Remediation Initiatives

In response to the identified material weaknesses, our management, with oversight from the Company's Audit Committee, has been and will continue to dedicate necessary resources to enhance the Company's internal control over financial reporting and remediate the identified material weaknesses. As an example of such remediation, the Company in 2024 hired additional employees into the finance department, and we plan to continue to work on remediating the material weaknesses during 2025 by improving competencies and processes. Further, the Company implemented a new ERP system along with other IT programs to help reinforce its controls and processes, and these investments are an important step in the remediation of the material weaknesses. During 2022, the Company introduced an updated Delegation of Authority, with the overall purpose to provide clarity for all employees on the extent to which they can commit the Company and at the same time provide the Company with assurance that decisions about agreements are made by the appropriate functions and employees. Lastly, the Company has started the process of redesigning and ensuring documentation of all processes and procedures related to the financial reporting process to ensure the effective design and operation of process-level controls.

While management believes that the steps that we have taken and plan to take will improve the overall system of internal control over financial reporting and will remediate identified material weaknesses, the material weaknesses cannot be considered remediated until the applicable relevant controls operate for a sufficient period of time.

Following identification of the material weakness and prior to filing this Annual Report on Form 10-K, we completed substantive procedures for the year ended December 31, 2024. Based on these procedures, management believes that our consolidated financial statements included in this Form 10-K have been prepared in accordance with U.S. GAAP. Our CEO and CFO have certified that, based on their knowledge, the financial statements and other financial information included in this Form 10-K, fairly present in all material respects the financial condition, results of operations, and cash flows of the Company as of, and for, the periods presented in this Form 10-K.

Changes in Internal Control

During the most recently completed fiscal quarter, there have been no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on the Effectiveness of Internal Controls

An internal control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, a control may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate.

While management believes that the steps that we have taken and plan to take will improve the overall system of internal control over financial reporting and will remediate identified material weaknesses, the material weaknesses cannot be considered remediated until the applicable relevant controls operate for a sufficient period of time.

Item 9B. Other Information

Item 1.01. Entry into a Material Definitive Agreement.

As previously disclosed in the Current Report on Form 8-K of LiqTech International, Inc. (the “Company”) filed with the Securities and Exchange Commission (the “SEC”) on June 27, 2022, on June 22, 2022, the Company issued and sold senior promissory notes in an aggregate principal amount of \$6.0 million (the “Original Notes”) and issued warrants to purchase an aggregate of 531,250 shares of common stock, \$0.001 par value, of the Company (“Common Stock”) at an exercise price of \$5.20 per share (the “Original Warrants”) to 21 April Fund, L.P. and 21 April Fund, Ltd., affiliates of Bleichroeder L.P. (collectively, the “Purchasers”), pursuant to a note and warrant purchase agreement entered into with the Purchasers (the “Note and Warrant Purchase Agreement”). As previously disclosed in the Current Report on Form 8-K of the Company filed with the SEC on October 19, 2023, on October 13, 2023, the Company and the Purchasers entered into an amendment to the Note and Warrant Purchase Agreement (the “First Amendment”) and Allonge No. 1 to each of the Original Notes (the Original Notes, as so amended by the Allonge No. 1, the “First Amended Notes”) effective as of September 30, 2023, to, among other things, extend the maturity date for the Original Notes to January 1, 2026.

On March 26, 2025, the Company and the Purchasers entered into a second amendment to the Note and Warrant Purchase Agreement (the “Second Amendment”) and Allonge No. 2 to each of the First Amended Notes (collectively, the “Allonges” and the First Amended Notes, as so amended by the Allonges, the “Second Amended Notes”), pursuant to which the Company and the Purchasers amended the First Amended Notes to extend the maturity date from January 1, 2026 to May 1, 2027 (the “Maturity Date”), and provide that, beginning on January 1, 2026, the Second Amended Notes will bear interest at a rate of 10% per annum payable semi-annually or, if at any time that the Second Amended Notes are outstanding, the Second Amended Notes are not repaid on or before the Maturity Date or an Event of Default (as defined in the Second Amended Notes) occurs, a rate of 13% per annum, which will increase by 1% each month that the Second Amended Notes remain unpaid, up to a maximum of 16% per annum, payable monthly (the “Default Interest”). Pursuant to the Second Amendment, the Company may pay the accrued interest on the Second Amended Notes, other than the Default Interest, in cash or in shares of Common Stock at its election, subject certain limitations set forth in the Second Amended Notes.

In addition, pursuant to the Second Amendment, the Company and the Purchasers agreed to amend and restate the Original Warrants (the “Amended and Restated Warrants”) to extend the expiration date to December 31, 2029 and to reset the exercise price to \$2.00 per share.

The foregoing descriptions of the Second Amendment, the Allonges and the Amended and Restated Warrants are qualified in their entirety by reference to the full text of the Second Amendment, the form of Allonge No. 2 and the form of Amended and Restated Warrant, copies of which are attached hereto as Exhibit 10.19, Exhibit 10.20 and Exhibit 4.9, respectively, and which are incorporated herein by reference.

Item 3.02 Unregistered Sales of Equity Securities.

The information provided in Item 1.01 above with respect to the issuance of the Amended and Restated Warrants and the Second Amended Notes to the Purchasers is incorporated into this Item 3.02 by reference.

The Amended and Restated Warrants and the Second Amended Notes were issued to the Purchasers in reliance on the private offering exemption from registration provided by Section 4(a)(2) of the Securities Act of 1933, as amended (the “Securities Act”), and Regulation D promulgated thereunder. The Company has relied and will rely on this exemption based in part on representations and warranties made by each of the Purchasers in the Second Amendment as to their qualification as “accredited investors,” as defined pursuant to Rule 501(a) of Regulation D promulgated under the Securities Act.

The Amended and Restated Warrants and the Second Amended Notes, and any shares of Common Stock issuable upon exercise or repayment thereof, as applicable, have not been registered under the Securities Act or applicable state securities laws and may not be offered or sold in the United States absent registration under the Securities Act or an exemption from such registration requirements.

Item 408(a) – Insider Trading Arrangements and Policies

During the quarter ended December 31, 2024, no director or Section 16 officer adopted, modified, or terminated any “Rule 10b5-1 trading arrangement” or “non-Rule 10b5-1 trading arrangement” (in each case, as defined in Item 408(a) of Regulation S-K).

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by Item 10 is incorporated herein by reference to our Definitive Proxy Statement relating to our 2025 Annual Meeting of Stockholders. Alternatively, it will be included in an amendment to this Form 10-K, filed under cover of Form 10-K/A, no later than 120 days after the end of the fiscal year covered by this report.

Item 11. Executive Compensation

The information required by this Item 11 will be included in the Definitive Proxy Statement referenced above in Item 10 and is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this Item 12 will be included in the Definitive Proxy Statement referenced above in Item 10 and is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this Item 13 will be included in the Definitive Proxy Statement referenced above in Item 10 and is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

The information required by this Item 14 will be included in the Definitive Proxy Statement referenced above in Item 10 and is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) Financial Statements and Schedules

The financial statements are set forth under Item 8 of this Annual Report. The following financial statement schedule for the years ended December 31, 2024, and December 31, 2023, is included in this Annual Report on Form 10-K:

a. Valuation and Qualifying Accounts for the years ended December 31, 2024, and December 31, 2023.

	2024		2023	
Bad debt expense		578,423		82,066
Reserve for obsolete inventory		404,306		177,953

	Balance Beginning of Year	Charges to Costs and Expenses	Deductions (1)	Balance End of
Year Ended December 31, 2024				
Allowance for inventory obsolescence	\$ 867,458	\$ 404,306	\$ (62,640)	\$ 1,209,124
Allowance for current expected credit losses	134,912	528,846	(26,202)	637,556
Totals	\$ 1,002,370	\$ 933,152	\$ (88,842)	\$ 1,846,680
Year Ended December 31, 2023				
Allowance for inventory obsolescence	\$ 663,227	\$ 177,953	\$ 26,278	\$ 867,458
Allowance for current expected credit losses	59,559	82,066	(6,713)	134,912
Totals	\$ 722,786	\$ 260,019	\$ 19,565	\$ 1,002,370

	2024		2023	
Allowance for current expected credit losses at the beginning of the period	\$	134,912	\$	59,559
Bad debt expense		578,423		82,066
Receivables written off during the periods		(49,577)		(10,298)
Effect of exchange rate changes		(26,202)		3,585
Allowance for current expected credit losses at the end of the period	\$	637,556	\$	134,912

(1) Includes write-offs and the impact of foreign currency exchange rates.

Schedules other than that listed above are omitted because the conditions requiring their filing do not exist or because the required information is provided in the Consolidated Financial Statements, including the Notes thereto. Financial statement schedules have been omitted since they are either not required, not applicable, or the information is otherwise included.

(b) Exhibits

Exhibit No.	Description	Location
3.1	Articles of Incorporation, as amended as of November 13, 2023	Incorporated by reference to Exhibit 3.1 to the Company's Annual Report on Form 10-K as filed with the SEC on March 22, 2024
3.2	Amended and Restated Bylaws	Incorporated by reference to Exhibit 3.4 to the Company's Quarterly Report on Form 10-Q as filed with the SEC on May 15, 2012
4.1	Form of Pre-Funded Warrant	Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K as filed with the SEC on June 2, 2020
4.2	Form of Amendment to Pre-Funded Warrant	Incorporated by reference to Exhibit 4.1 to the Company's Quarterly Report on Form 10-Q as filed with the SEC on November 9, 2020
4.3	Description of our Common Stock	Incorporated by reference to Exhibit 4.3 to the Company's Annual Report on Form 10-K as filed with the SEC on March 30, 2020
4.4	Form of Pre-Funded Warrant	Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K as filed with the SEC on August 20, 2021
4.5	Form of Pre-Funded Warrant	Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K as filed with the SEC on May 17, 2022
4.6	Form of Warrant	Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K as filed with the SEC on October 19, 2023
4.7	Form of Pre-Funded Warrant	Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K as filed with the SEC on September 27, 2024
4.8	Form of Warrant	Incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K as filed with the SEC on September 27, 2024
4.9	Form of Amended and Restated Warrant	Included in Exhibit 10.19
10.1	Lease Agreement for Industriparken 22C, 2750 Ballerup, Denmark	Incorporated by reference to Exhibit 10.6 to the Company's Current Report on Form 8-K/A as filed with the SEC on November 15, 2011 (translated in English)
10.2	Form of Registration Rights Agreement, by and among the Company and the investors named therein	Incorporated by reference to Exhibit 10.2 to the Company's Form 8-K as filed with the SEC on June 2, 2020
10.3	Lease Contract for Benshoej Industrivej 24, 9500 Hobro	Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K as filed with the SEC on December 5, 2019

Table of Contents

10.4*	<u>LiqTech International, Inc. 2013 Share Incentive Plan</u>	Incorporated by reference to Exhibit 99.1 to the Company's Form S-8 as filed with the SEC on January 27, 2014
10.5	<u>Note and Warrant Purchase Agreement, by and among the Company and the Purchasers</u>	Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on June 27, 2022
10.6	<u>Form of Note</u>	Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K as filed with the SEC on June 27, 2022
10.7	<u>Registration Rights Agreement, by and among the Company and the Purchasers</u>	Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K as filed with the SEC on June 27, 2022
10.8	<u>First Amendment to Note and Warrant Purchase Agreement</u>	Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on October 19, 2023
10.9	<u>Form of Allonge No. 1</u>	Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on October 19, 2023
10.10*	<u>Executive Service Agreement, dated July 26, 2022, by and between LiqTech Holdings A/S and Fei Chen</u>	Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on August 1, 2022
10.11*	<u>LiqTech International, Inc. 2022 Equity Incentive Plan</u>	Incorporated by reference to Annex A to the Company's Proxy Statement pursuant to Section 14(a) of the Exchange Act filed with the SEC on October 3, 2022
10.12	<u>Exclusivity Agreement for Collaboration, Marketing and Deployment of Products and Associated Services, dated November 11, 2022, by and between the Company and NESR</u>	Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on November 17, 2022
10.13*	<u>Employment Contract, dated January 28, 2022, by and between LiqTech Holdings A/S and Phillip Massie Price</u>	Incorporated by reference to Exhibit 10.16 to the Company's Annual Report on Form 10-K as filed with the SEC on March 22, 2024
10.14*	<u>Addendum to Employment Contract, dated March 20, 2024, by and between LiqTech Holdings A/S and Phillip Massie Price</u>	Incorporated by reference to Exhibit 10.17 to the Company's Annual Report on Form 10-K as filed with the SEC on March 22, 2024
10.15 †	<u>Securities Purchase Agreement, by and among the Company and the investors named therein</u>	Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on September 27, 2024
10.16	<u>Registration Rights Agreement, by and among the Company and the investors named therein</u>	Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K as filed with the SEC on September 27, 2024
10.17*	<u>Service Agreement between Liqtech Holding A/S and David Kowalczyk, dated January 27, 2025.</u>	Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the SEC on January 31, 2025
10.18*	<u>Separation Agreement between Liqtech Holding A/S and Phillip Massie Price, dated March 20, 2025</u>	Filed herewith
10.19	<u>Second Amendment to Note and Warrant Purchase Agreement</u>	Filed herewith
10.20	<u>Form of Allonge No. 2</u>	Included in Exhibit 10.19
19.1	<u>Code of Conduct and Ethics</u>	Filed herewith
21.1	<u>List of Subsidiaries</u>	Filed herewith
23.1	<u>Consent of Sadler, Gibb</u>	Filed herewith
31.1	<u>Certifications of the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>	Filed herewith
31.2	<u>Certifications of the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>	Filed herewith
32.1	<u>Certification Pursuant To 18 U.S.C. Section 1350, As Adopted Pursuant To Section 906 of the Sarbanes-Oxley Act Of 2002</u>	Furnished herewith
32.2	<u>Certification Pursuant To 18 U.S.C. Section 1350, As Adopted Pursuant To Section 906 of the Sarbanes-Oxley Act Of 2002</u>	Furnished herewith
97.1	<u>Clawback Policy</u>	Incorporated by reference to Exhibit 97.1 to the Company's Annual Report on Form 10-K as filed with the SEC on March 22, 2024

Table of Contents

101. INS	Inline XBRL Instance Document (the Instance Document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document)	Provided herewith
101. CAL	Inline XBRL Taxonomy Extension Calculation Link base Document	Provided herewith
101. DEF	Inline XBRL Taxonomy Extension Definition Link base Document	Provided herewith
101. LAB	Inline XBRL Taxonomy Label Link base Document	Provided herewith
101. PRE	Inline XBRL Extension Presentation Link base Document	Provided herewith
101. SCH	Inline XBRL Taxonomy Extension Scheme Document	Provided herewith
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).	Provided herewith

* Denotes a management contract or compensatory plan or arrangement.

† Schedules and similar attachments to this Exhibit have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The Company agrees to furnish supplementally a copy of such omitted materials to the SEC upon request.

Item 16. Form 10-K Summary

Not Applicable.

SIGNATURES

In accordance with Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

LIQTECH INTERNATIONAL, INC.

Date: March 28, 2025

By: /s/ Fei Chen

Fei Chen

Chief Executive Officer and Principal Executive Officer

In accordance with the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on the dates indicated.

Signatures	Title	Date
<u>/s/ Alexander Buehler</u> Alexander Buehler	Chairman of the Board of Directors	March 28, 2025
<u>/s/ Fei Chen</u> Fei Chen	President, Chief Executive Officer, Principal Executive Officer and Director	March 28, 2025
<u>/s/ Phillip Massie Price</u> Phillip Massie Price	Interim Chief Financial Officer, Principal Financial and Accounting Officer	March 28, 2025
<u>/s/ Peyton Boswell</u> Peyton Boswell	Director	March 28, 2025
<u>/s/ Richard Meeusen</u> Richard Meeusen	Director	March 28, 2025
<u>/s/ Martin Kunz</u> Martin Kunz	Director	March 28, 2025