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

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2022

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission File Number 001-39061

DIRTT ENVIRONMENTAL SOLUTIONS LTD.
(Exact name of Registrant as specified in its Charter)

Alberta, Canada	**N/A**
(State or other jurisdiction of incorporation or organization)	**(IRS Employer Identification No.)**
7303 30th Street S.E.	
Calgary, Alberta, Canada	**T2C 1N6**
(Address of principal executive offices)	**(Zip code)**

Registrant's telephone number, including area code: (403) 723-5000

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

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common Shares, without par value	DRTT	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 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 ☐

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 o□cers 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 ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant, based on the closing price of the common shares on The Nasdaq Stock Market on June 30, 2022, was $64,781,634.

The registrant had 97,961,655 common shares outstanding as of February 17, 2023.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement relating to the Annual and Special Meeting of Shareholders, scheduled to be held on May 4, 2023, are incorporated by reference into Part III of this Annual Report on Form 10-K.

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EXPLANATORY NOTE

Currency and Exchange Rate Information

Unless otherwise indicated, references in this Annual Report on Form 10-K (the “Annual Report”) to “$” or “dollars” are expressed in U.S. dollars (US$). References in this Annual Report to Canadian dollars are noted as “C$.”

Our consolidated financial statements that are included in this Annual Report are presented in U.S. dollars. Unless otherwise stated, all figures presented in Canadian dollars and translated into U.S. dollars were calculated using the daily average exchange rate as reported by the H.10 statistical release of the Board of Governors of the Federal Reserve System on December 31, 2022 of C$1.3532 = US$1.00.

Market and Industry Data

Certain market and industry data contained in this Annual Report, including Item 1. “Business” and Item 7. “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” are based upon information from government or other third-party publications, reports and websites or based on estimates derived from such publications, reports and websites. Government and other third-party publications, reports and websites do not guarantee the accuracy or completeness of their information. While management believes this data to be reliable, market and industry data are subject to variations and cannot be verified with complete certainty due to limits on the availability and reliability of raw data, the voluntary nature of the data-gathering process, and other limitations and uncertainties inherent in any statistical survey.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained in this Annual Report are "forward-looking statements" within the meaning of "safe harbor" provisions of the United States Private Securities Litigation Reform Act of 1995 and Section 21E of the Securities Exchange Act of 1934 (the "Exchange Act") and "forward-looking information" within the meaning of applicable Canadian securities laws. All statements, other than statements of historical fact included in this Annual Report, regarding without limitation our strategy, future operations, financial position, estimated revenues and losses, projected costs, prospects, plans and objectives of management are forward-looking statements. When used in this Annual Report, the words "anticipate," "believe," "expect," "estimate," "intend," "plan," "project," "outlook," "may," "will," "should," "would," "could," "can," the negatives thereof, variations thereon and other similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain such identifying words. In particular and without limitation, this Annual Report contains forward-looking information pertaining to the effect of our strategic priorities on increasing value creation; the application of our processes and technology and the benefits therefrom, forecast operating and financial results, including 2023 revenue, and the impact of certain cost-saving measures, the development, timing and success of strategic accounts, the outcome of non-dilutive strategy initiatives, the competitiveness of the Company's solutions, the liquidity and capital resources of the Company, current claims against the Company and expiring patents will have on the Company's business, financial condition, results of operations and growth prospects; our executive management team and the effect the rating systems established by the U.S. Green Building Council will have on demand for products, systems and services in the U.S. market. Forward-looking statements are based on certain estimates, beliefs, expectations and assumptions made in light of management's experience and perception of historical trends, current conditions and expected future developments, as well as other factors that may be appropriate.

Forward-looking statements necessarily involve unknown risks and uncertainties, which could cause actual results or outcomes to differ materially from those expressed or implied in such statements. Due to the risks, uncertainties and assumptions inherent in forward-looking information, you should not place undue reliance on forward-looking statements. Factors that could have a material adverse effect on our business, financial condition, results of operations and growth prospects include, but are not limited to, the severity and duration of the coronavirus ("COVID-19") pandemic and related economic repercussions and other risks described in Item 1A. "Risk Factors," Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations," and elsewhere in this Annual Report. These factors include, but are not limited to, the following:

- the impact of the COVID-19 pandemic and any strain variants or resurgences thereof on our business;
- general economic and business conditions in the jurisdictions in which we operate, including inflation;
- our ability to implement our strategic plan, including realization of benefits from certain cost-optimization initiatives undertaken in 2022;
- the availability of capital or financing on acceptable terms, or at all, which may impact our liquidity and impair our ability to make investments in the business;
- turnover of our key executives and difficulties in recruiting or retaining key employees;
- the ability of our reconstituted board of directors ("Board of Directors") to successfully implement its transformation plan;
- we have a history of negative cash flow from operating activities;
- our ability to attract, train and retain qualified hourly labor on a timely basis to increase overall productive capacity in our manufacturing facilities to enable us to capture rising demand as the construction industry recovers from the COVID-19 pandemic;
- our ability to achieve and manage growth effectively;
- competition in the interior construction industry;
- competitive behaviors by our co-founders and former executives;
- the condition and changing trends of the overall construction industry;
- our reliance on our network of construction partners ("Construction Partners"), which we have previously referred to as our Distribution Partners, for sales, marketing and installation of our solutions;
- our ability to introduce new designs, solutions and technology and gain client and market acceptance;
- defects in our designing and manufacturing software and warranty and product liability claims brought against us;

- inflation and material fluctuations of commodity prices, including raw materials and our ability to set prices for our products that satisfactorily adjust for inflation and fluctuations in commodity prices;
- the effectiveness of our manufacturing processes and our success in implementing improvements to those processes;
- the effectiveness of certain elements of our administrative systems and the need for investment in those systems;
- shortages of supplies of certain key components and materials or disruption in supplies due to global events;
- global economic, political and social conditions and financial markets, such as the war in Ukraine;
- our exposure to currency exchange rates, tax rates, interest rates and other fluctuations, including those resulting from changes in laws or administrative practice;
- legal and regulatory proceedings brought against us;
- infringement on our patents and other intellectual property;
- cyber-attacks and other security breaches of our information and technology systems;
- damage to our information technology and software systems;
- our requirements to comply with applicable environmental, health and safety laws;
- the impact of increasing attention to environmental, social and governance (ESG) matters on our business;
- our ability to generate sufficient revenue to achieve and sustain profitability and achieve positive cash flows;
- periodic fluctuations in our results of operations and financial conditions;
- volatility of our share price;
- our ability to maintain our listing on Nasdaq (as defined herein);
- the effect of being governed by the corporate laws of a foreign country, including the difficulty of enforcing civil liabilities against directors and officers residing in a foreign country;
- the availability and treatment of government subsidies (including any current or future requirements to repay or return such subsidies);
- future mergers, acquisitions, agreements, consolidations or other corporate transactions we may engage in; and
- other factors and risks described under the heading “Risk Factors” in Item 1A. of this Annual Report.

These risks are not exhaustive. Because of these risks and other risks and uncertainties, our actual results, performance or achievement, or industry results, may be materially different from the anticipated or estimated results discussed in the forward-looking statements in this Annual Report. New risk factors emerge from time to time, and it is not possible for our management to predict all risk factors nor can we assess the effects of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in, or implied by, any forward-looking statements. Our past results of operations are not necessarily indicative of our future results. You should not place undue reliance on any forward-looking statements, which represent our beliefs, assumptions and estimates only as of the dates on which they were made, as predictions of future events. We undertake no obligation to update these forward-looking statements, even though circumstances may change in the future, except as required under applicable securities laws. We qualify all of our forward-looking statements by these cautionary statements.

PART I

Item 1. Business.

Overview

DIRTT is an interior construction company whose system of physical products and digital tools empowers design freedom, drives efficiency, supports sustainability goals, and readily adapts to change. Since 2004, DIRTT has grown to become a leader in industrialized construction for dynamic interior spaces, translating unique visions into compelling spaces where people work, learn, and heal.

DIRTT's construction system offers unrivaled design freedom, accuracy, and quality assurance together with greater certainty in cost, schedule, and outcomes. By empowering faster decision making, rapid manufacturing, and efficient installation, DIRTT can reduce construction timelines by as much as 30% compared to conventional construction methods.

DIRTT spaces are built for change and ready to adapt as organizational needs evolve. Design for disassembly ensures components are interchangeable and can be repurposed for small updates or full reconfigurations without major renovation, cost, or waste.

Our approach to industrialized construction combines a sophisticated product infrastructure with a dedicated team of construction experts and advanced digital tools. DIRTT's first-of-its-kind software called ICE® ("ICE" or "ICE Software") serves as the engine for our industrialized construction system, enabling solutions to be designed, visualized, organized, configured, priced, and manufactured off-site, with final assembly and installation completed at the job site. Our clients' design visions are translated into the intelligent software platform, empowering faster decision making during design with real-time changes, visualization, and pricing information. ICE connects directly to DIRTT manufacturing facilities for end-to-end integration, precise manufacturing, production management, and coordination of the DIRTT scope. In addition to the core ICE platform, our cloud-based virtual reality tool and app, called ICEreality, connects teams from anywhere in the world to walk through their virtual space together, while design changes can be made with real-time feedback on pricing.

We work with some of the most innovative clients, design teams, and construction professionals. We reach our clients through an internal sales team and international network of independent DIRTT Construction Partners ("Construction Partners" or "Partners"). Their DIRTT expertise makes them trusted professionals in their regions for pre-construction, order, installation, and adaptation of interior spaces. DIRTT Construction Partners work with clients and construction teams, ensuring effective management and execution of the DIRTT scope on every project. Long term, they support reconfigurations, adaptations, and adjustments, continuously protecting our clients' investments in DIRTT while ensuring their spaces stay relevant.

DIRTT was incorporated in Alberta, Canada, under the Business Corporations Act (Alberta) ("ABCA") on March 4, 2003. Our headquarters are located at 7303 30 Street SE, Calgary, Alberta, T2C 1N6, Canada, and our telephone number at that address is 403-723-5000. Our manufacturing facilities are in Calgary, Alberta and Savannah, Georgia.

We completed our initial public offering in Canada in November 2013 and listed our common shares on the Nasdaq Global Select Market ("Nasdaq") in October 2019. Our common shares trade on the Toronto Stock Exchange ("TSX") under the symbol "DRT" and on Nasdaq under the symbol "DRTT."

Unless otherwise specified or the context otherwise requires, references to "we," "us," "our," "its," "the Company" or "DIRTT" mean DIRTT Environmental Solutions Ltd. and, where the context so requires, includes our subsidiaries.

Available Information

We file or furnish annual, quarterly and current reports, proxy statements and other documents with the U.S. Securities and Exchange Commission ("SEC") under the Exchange Act. The SEC maintains a website (*www.sec.gov*) that contains reports, proxy and information statements, and other information regarding issuers, including DIRTT, that file electronically with the SEC. We are also subject to requirements of applicable securities laws in Canada, and documents that we file with the securities commissions or similar regulatory authorities in Canada may be found at *www.sedar.com*.

We make available free of charge through our website (*www.dirtt.com*) our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and, if applicable, amendments to those reports filed or furnished pursuant to Section 13(a) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC or the securities commissions or similar regulatory authorities in Canada. In addition to the reports filed or furnished with the SEC and the securities commissions or similar regulatory authorities in Canada, we publicly disclose information from time to time in our press releases, investor presentations posted on our website and at publicly accessible conferences. References to such information, including references to our Environmental, Social, and Governance (ESG) Report, and references to our website in this Annual Report are provided as a convenience and do not constitute, and should not be deemed, an incorporation by reference of the information contained on, or available through, the website, and such information should not be considered part of this Annual Report.

We will provide without charge to you, upon your request, a copy of our annual report on Form 10-K for the year ended December 31, 2022 filed with the SEC and the applicable securities commissions or similar regulatory authorities in Canada. Requests for copies should be addressed to 7303 30 Street SE, Calgary, Alberta, T2C 1N6, Canada, Attention: Investor Relations.

Our Solutions

Our ever-expanding array of products and integrations give our clients the tools to create high-performing interiors that stay relevant into the future. Unlike conventional prefabricated products, our solutions do not have predetermined shapes, sizes, or configurations, empowering clients with design freedom to meet their needs. The core of our product philosophy is a construction system that uses a universal interface. By allowing interchangeable parts, DIRTT can maximize the life cycle for most of our products. Committed to sustainability, we subscribe to non-obsolescence, where new DIRTT components work with DIRTT products that came before. Our solutions can be disassembled and reconfigured with minimal waste. With both design freedom and adaptability benefits, client spaces are tailored to their unique needs on Day One and can be more easily reconfigured or adapted to stay relevant on Day Two and beyond.

Our solutions are typically able to address over 90% of an interior space. Components are manufactured in DIRTT facilities and shipped to site for installation. The following table provides a brief description of our primary solutions:

DIRTT Solution	Description
Solid Walls	DIRTT’s solid walls offer extensive options with 4”, 6”, and 2” furring wall offerings. Solid walls connect seamlessly to other products in the DIRTT construction system and enable unique finishes, colors, and configurations. Wall cavities support electric, network, and technology integrations.
Glass Walls	DIRTT’s glass walls are available as double pane, classic center-mount, or Inspire™ profiles. DIRTT glass walls can accommodate base building variance and acoustic requirements.
Combination Walls	Solid and glass walls can be combined for a mix of privacy and transparency. Combination walls can be customized and configured to fit any design with the benefits of the DIRTT system.
Leaf Folding Walls®	The retractable modular wall system adds functionality with an effortless solution to quickly adapt space. Like other walls in the DIRTT portfolio, dimensions and finishes of Leaf™ can be customized.
Headwalls	This modular, multi-trade healthcare headwall system is an efficient, adaptable approach to healthcare construction. With extensive customization options and integrations, DIRTT Headwalls are an efficient way to meet unique healthcare compliance requirements.
Doors	DIRTT doors integrate seamlessly with DIRTT solid and glass wall assemblies. A wide range of types and styles are available, including swing doors, sliding doors, and pivot doors. Door options can meet smoke-rating and acoustic requirements.
Casework	DIRTT offers custom cabinets, closets, and storage solutions with consistent quality and efficient installation. Precision-manufactured casework is delivered with predictable lead times.
Timber	Traditional craftsmanship meets advanced, custom manufacturing to create striking designs and structural elements. Engineered to meet local requirements, DIRTT Timber integrates with broader DIRTT scopes to bring natural elements to spaces with rapid assembly on-site.
Electrical	DIRTT’s modular electrical system supports connected infrastructure needs. The pre-wired, modular distribution system includes pre-mounted and terminated device boxes installed at the factory to reduce project time and cost on-site. Plug-in connections allow for quick installations and easy modifications.
Networks	DIRTT’s Fiber to the Edge networks deliver unlimited bandwidth capability and longer-reaching signal strength while reducing supporting infrastructure needs and material costs. Industry-leading technology and future-ready infrastructure empowers smart building benefits. Copper-based network options reduce install time and increase flexibility.
Access Floors	Low-profile, fixed-height access floor provides an adaptable foundation for connected infrastructure with long-term accessibility for easy moves, additions, and changes.

In addition to our core product offering, DIRTT enables integrations with technology, custom graphics, writable surfaces, and Breathe® Living Walls. Further product information can be found on dirtt.com.

Sustainability and Environmental Matters

DIRTT aims to minimize the environmental impact of interior construction through careful material selection, efficient operations, a system designed for future adaptability, and long product lifecycles. We work with clients to understand their unique sustainability goals and identify how building with DIRTT can support LEED, WELL, Living Building Challenge, and other green building standards they may be targeting. Our sustainability team helps to calculate various elements of the DIRTT scope that support certification.

Approximately 40% of solid waste in the United States derives from construction and demolition. In contrast, DIRTT's agile construction system makes it quick, easy, and cost effective to evolve interior spaces through future reconfigurations and relocations, while minimizing waste. Our agile system is designed for disassembly to reduce the carbon footprint of new construction and future changes. We further reduce waste through efficient manufacturing and pre-assembled solutions.

We continuously evaluate the environmental impact of our materials, considering impact on the wellness of the occupants using the spaces we build and life cycles of the products we make. DIRTT endeavors to use materials with high recycled content, bio-based content, and low or no volatile organic compounds (VOCs). Most DIRTT assemblies are certified through Science Certification Systems (SCS) Indoor Advantage Gold, recognizing their low-emitting properties. DIRTT wall panel and casework facilities are certified to handle materials with FSC® certification (FSC-C006900), ensuring FSC certified products may be specified.

We recognize the vital importance of reducing embodied carbon within DIRTT products. Our environmentally conscious production facilities are continuously evaluated by cross-functional teams who assess and implement energy efficiency strategies. For example, to further reduce our operational carbon footprint, DIRTT's US factories are powered by renewable energy through our purchase of Green-e® certified renewable energy credits (RECs). We further reduce the impact of our operations with recycling and waste diversion programs.

DIRTT releases an annual Environmental, Social, and Governance (ESG) report outlining our commitments to sustainability and the environment. It also provides disclosure of our current environmental and sustainability impacts. By 2025, DIRTT has committed to reducing our landfill waste from 2021 levels by 35% and sourcing or producing renewable energy to cover 100% of our factory operations.

Further information about DIRTT's sustainability practices can be found at dirtt.com/sustainability.

Our Business Strategy

Our goal is to help clients envision and design interior construction projects and then build and deliver those projects faster, cleaner, more efficiently and with a better overall client experience and satisfaction than conventional construction methods. The modular aspect of our DIRTT construction system allows them to be easily reconfigured with a minimal amount of waste as client space needs change. Our innovative, technology-driven approach includes outstanding product design that is customized for each client application and delivered on time and on budget.

Our strategy is founded on the following priorities:

- The identification and pursuit of client segments that benefit most from DIRTT's value proposition;
- Client-centric, continuous innovation in DIRTT construction systems and our technology to enhance product differentiation and drive market penetration and growth;
- Technology-enabled manufacturing processes that facilitate short lead times, a reliable client service platform, and outstanding quality on a cost-effective basis; and
- Ongoing development and support of our Construction Partners to ensure flawless execution and a superior end client experience.

In combination with a focus on cost-discipline, a continuous improvement philosophy, and a focused approach to capital investment, we believe these strategic priorities will drive increased value creation for our employees, clients, Construction Partners, and shareholders.

Our Competitive Strengths

We believe the following attributes provide us with competitive strengths in the industrialized construction industry:

- *Leader in Integrated Design and Manufacturing Technology.* We believe our ICE Software is the only interior construction technology that efficiently integrates the design, configuration, and virtual reality visualization processes with the manufacturing process. The use of 3D technology in a design environment, utilizing video game technology for real time decision making, is an approach pioneered by DIRTT.
- *Easy and Intuitive Software Interface*. Our ICE Software is a fast, powerful tool with an intuitive user interface. Our software's ease of use enables rapid time-to-value for our clients and collaboration among all the stakeholders involved in the design, reconfiguration, budgeting and manufacturing processes. Our use of 3D virtual reality and augmented (mixed) reality technologies enables clients to visualize and modify their designs before manufacturing begins, thereby reducing cost and time to completion.
- *Proprietary Solutions Components.* The physical components that comprise our DIRTT construction system have been designed to provide clients with numerous options and full modularity. As a result, we are able to create interior environments that are fully customizable and not limited by a pre-set product list. The modular nature of our components allows them to be reconfigured or adapted easily, with minimal disruption to the occupants of the space and with minimal job site waste.
- *Strong Construction Partner and Sales Network.* Our strong network of Construction Partners and DIRTT sales representatives allows us to maximize our geographic reach, helps build brand awareness in the interior construction market, and enhances our positioning in our target markets.
- *Superior Results Compared to Conventional Design and Construction.* We believe we produce superior client results as compared with conventional design and construction methods in sequencing, certainty, budget allocation, and outcome.
- *Effective Sequencing*. Conventional construction generally follows a rigid sequencing process. Typically, wall framing is constructed first, followed by floors and electrical and data networks. This process is then followed by drywall installation, painting, and flooring, and then installation or building of casework (millwork) and fixtures. These steps generate significant waste and create opportunities for delay, change orders, cost overruns and rework. In contrast, DIRTT's approach integrates various product applications as tailored to specific project needs. They are manufactured off-site and arrive on-site organized, labeled and ready to be installed. This enables the interior solutions to be produced concurrently with on-site construction work, thereby reducing on-site time and the overall construction schedule.
- *Certainty*. Our technology-based design and manufacturing solutions address changes in design, communications with clients, and material costs with more certainty than conventional construction methods, which often involve retrofitting electrical and data networks, change orders, uncertain timelines, and costly rework. Our controlled manufacturing environment reduces deficiencies and errors and produces more consistent solutions in predictable time frames.
- *Budget.* Because of our integrated design, visualization and manufacturing technologies, we can price the effect of design choices and changes immediately and deliver the fully designed, manufactured interior solutions ready to install. This provides budget certainty both in the cost of our DIRTT Solutions as well as in on-site labor for the installation process.
- *Outcome*. Our interior spaces look like the images our clients expect from the design drawings and virtual visualizations, because those same drawings and visualizations drive the manufacturing process. Plumbing, electrical, A/V and data networks are integrated into the architecture of our DIRTT Solutions. For example, DIRTT Walls carry an aesthetic of permanent walls, but if an IT or facilities team needs to get inside the wall for any reason, they can use a tool to remove the surface of the wall to examine the wall cavity quickly, cleanly and quietly. This eliminates the need to knock down, and then patch and repaint, drywall or reconfigure fixtures and cabinetry. Our modular designs offer flexibility and interconnectivity with any technology, furniture, casework (millwork) or DIRTT Solutions that were previously used or that may be used in the future, allowing clients to reconfigure and repurpose their space while reducing disruptive and time-consuming demolition and waste removal.

Construction Partners and Sales Network

We primarily sell DIRTT Solutions through a network of independent DIRTT Construction Partners working in conjunction with local DIRTT sales representatives, as well as internal DIRTT industry specialists, business development professionals and a dedicated Construction Partner support team. Construction Partners and local sales representatives are located in cities throughout the United States and Canada, with additional locations in Singapore and the United Kingdom. The use of a dispersed network of Construction Partners greatly enhances our ability to drive awareness of the DIRTT brand and understanding of our approach to construction throughout our markets.

As part of our distribution agreements, our Construction Partners are typically required to invest in their own DIRTT Experience Center ("DXC") so that they are able to effectively showcase DIRTT Solutions. These DXCs are showrooms that provide mock-ups of DIRTT Solutions and related product offerings. As well, DIRTT maintains DXCs in Calgary, Chicago, New York City, and Dallas.

Our Construction Partners operate under agreements that outline sales goals and marketing territories which are generally non-exclusive. We expect our Construction Partners to build regional DIRTT-dedicated teams (sales, design and project management) and to use our ICE Software in the sales process. In addition to sales and marketing, our Construction Partners provide value throughout the construction process. At the pre-construction stage, Construction Partners provide design assistance services to the architect and designer; throughout the construction process, Construction Partners act as a specialty subcontractor to the general contractor and provide installation and other construction services. Post-move in, Construction Partners provide warranty work, ongoing maintenance and reconfiguring support. Local DIRTT sales representatives work closely with the Construction Partners throughout the process to ensure successful project implementation and the highest client satisfaction. Construction Partners generally place orders for DIRTT Solutions directly with us and pay us directly for such orders.

We have the ability to bring on new Construction Partners in a wide range of geographic areas, which permits us to quickly establish a presence in new market areas. Our Construction Partners also scale our virtual reality technology, such as our smart phone- and tablet-based applications, to fit their capacity and needs.

At December 31, 2022, we had a total of 67 Construction Partners and 46 sales representatives across North America. We are not dependent on any one Construction Partner or sales representative.

Strategic accounts are a cornerstone in our strategy to drive long-term sustainable and predictable growth. These types of clients manage large real estate footprints in numerous locations. For these clients it is advantageous and important to establish consistency in design and execution, repeatability, and speed to market. While these relationships can take time to develop, once they are established, the time and resources required to execute additional projects is reduced, which we believe will create profitable, predictable revenue streams. In return, clients benefit from a single point of accountability at DIRTT, a strong network of partners, full lifecycle support from established design standards and pre-construction expert support for their architects, designers and general contractors from field work to post installation support.

Manufacturing and Properties

Our DIRTT Solutions are currently manufactured at our facilities in Calgary, Alberta and Savannah, Georgia. On February 22, 2022 we announced the closure of our Phoenix Facility in Arizona. On August 23, 2022, we announced the temporary suspension of operations at our Rock Hill, South Carolina Facility as the Calgary and Savannah Facilities can meet current demands. Currently our wall surfaces (which we call panels), casework and timber solutions are manufactured in Calgary, while aluminum, glass and power components are manufactured in Calgary and Savannah. Through distributed manufacturing we can shift production of some components among our manufacturing sites, reduce transportation times and costs, and meet targeted lead times. Our Rock Hill Facility has capabilities to produce panels. If we experience additional growth, we may need to add or expand additional manufacturing facilities and resume operations at the Rock Hill Facility.

Suppliers and Raw Materials

Our inventory balances consist primarily of raw materials, which are kept on hand as components of our custom manufacturing process. Managing our raw material inventory is essential to our business, given our short lead times from order to shipment and our high level of order customization. Our key manufacturing materials are aluminum, hardware, wood and glass. For the twelve months ended December 31, 2022, aluminum accounted for approximately 35% of our purchased materials, while hardware, wood and finishing powder & paint accounted for approximately 12%, 12%, and 9%, respectively. While we maintain multiple suppliers for key materials, for the twelve months ended December 31, 2022, (i) two suppliers accounted for approximately 38% and 24% of our aluminum supply, respectively, and two additional suppliers providing approximately 14% each (ii) two suppliers accounted for approximately 33% and 37% of our wood supply (iii) one supplier accounted for approximately 94% of our paint & powder and (iv) one supplier accounted for approximately 38% of our hardware supply.

Materials are sourced domestically and, to a much lesser extent, overseas. Approximately 93% of our materials are manufactured and purchased in North America. Purchase decisions are made on the basis of quality, cost, and ability to meet delivery requirements. We do not typically enter into long-term agreements with suppliers. In general, adequate supplies of raw materials are available to all our operations and to date we have not been materially impacted by supply chain disruptions due to the COVID-19 pandemic, other than inflationary price pressures across substantially all of our raw material requirements, although aluminum purchases may be subject to market capacity constraints.

Technology and Development

We continue to focus on developing client-centric innovations and enhancements of both ICE Software and DIRTT Solutions with a primary focus on improving client experience, increasing market penetration and growing key markets. At December 31, 2022, we employed 90 employees within our technology and development groups and, including capitalized amounts, invested $10.3 million, $11.1 million and $11.6 million in 2022, 2021 and 2020, respectively, in innovation activities.

Clients

DIRTT's principal geographic markets are the United States and Canada. Our revenue is derived almost entirely from projects in North America sold by our North American Construction Partners.

Our revenue opportunities primarily come from commercial projects, including both new construction projects and renovations of existing buildings. Clients range from small owner-managed businesses to multinational Fortune 500 companies across a variety of industries, including healthcare, education, financial services, government and military, manufacturing, non-profit, energy, professional services, retail, technology, and hospitality. We view DIRTT Solutions as generally industry agnostic, with applications in many different industries with minimal adjustments. We are not dependent on any one client or industry segment. No single client represented more than 10% of our revenue for the years ended December 31, 2022, 2021, or 2020.

Competition

The overall market for interior construction is fragmented and highly competitive. The principal competitive factors in the interior construction industry include price (including cost certainty), speed, quality, customization, and service. Our main competitors are comprised primarily of conventional construction firms, individual tradespeople (including framers, drywall installers, and interior product designers) and modular systems manufacturers. Additionally, conventional construction firms are beginning to develop customizable wall paneling and other interior construction solutions and may directly compete with our DIRTT Solutions. We also compete with commercial furniture manufacturers, such as Teknion Corporation, Haworth Inc. and Allsteel Inc., who offer a variety of prefabricated interior wall solutions. We expect competition to increase as new entrants or solutions enter the interior construction market. See Item 1A. "Risk Factors".

Seasonality

The construction industry has also historically experienced seasonal slowdowns related to winter weather conditions and holiday schedules, which affect shipping and on-site installation dates, in the fourth and first quarters of each calendar year. Our business has generally, but not always, followed this trend with a slight time lag, leading to stronger sales in the second half of the year versus the first half. Weather factors can also influence third-party exterior construction schedules and site conditions, which may in turn affect timing of interior builds.

Due to the fixed nature of certain of our manufacturing costs, such as our facilities leases and related indirect operating costs, periods of higher revenue volume tend to generate higher gross profit and operating income margins while periods of lower volume tend to result in lower gross profit and operating income margins. Quarters that contain consistent monthly manufacturing volumes tend to generate higher gross profit than those where manufacturing levels vary significantly from month to month.

Patent and Intellectual Property Rights

Our success depends, in part, upon our intellectual property rights relating to our products, production processes, our technology, including our ICE Software, and other operations. We rely on a combination of trade secret, nondisclosure and other contractual arrangements, as well as patent, copyright and trademark laws, to protect our proprietary rights and competitive advantage. We register our patents and trademarks as we deem appropriate and take measures to defend patents where we deem others are infringing on our patents. The following table presents the status as of December 31, 2022 of our issued and pending patents relating to various aspects of DIRTT Solutions and ICE Software:

Jurisdiction	Granted Patents	Applications Pending
Canada	67	47
United States	126	16
European Union	48	28
Singapore	22	4
Patent Cooperation Treaty	-	8
Other	87	4
Total	**350**	**107**

Our issued patents expire between 2024 and 2039. We do not believe that the expiration of any individual patent will have a material adverse effect on our business, financial condition or results of operations. As we develop innovations and new technology, we expect to file additional and supplemental patents to protect our rights in those innovations and new technology.

Government Regulations

The operation of our business is subject to stringent and complex laws and regulations pertaining to health, safety, and the environment. As an owner or operator of various manufacturing facilities, we must comply with these laws and regulations at the federal, state, provincial and local levels in both the United States and Canada. Failure to comply with environmental laws and regulations may trigger a variety of administrative, civil, or criminal enforcement actions, including the assessment of monetary penalties, the imposition of investigative or remedial requirements, or the issuance of orders limiting current or future operations. Certain environmental statutes impose strict, joint and several liability for costs required to clean up and restore sites where hazardous substances or industrial wastes have been mismanaged or otherwise released.

While we do not believe that compliance with federal, state, provincial, or local environmental laws and regulations will have a material adverse effect on our business, financial position or results of operations, we cannot provide any assurances that future events, such as changes in existing laws or regulations, the promulgation of new laws or regulations, or the development or discovery of new facts or conditions related to our operations will not cause us to incur significant costs.

Legal and Regulatory Proceedings

We may be involved from time to time in various lawsuits, claims, investigations, and other legal matters that arise in the ordinary course of business, including matters involving our products, intellectual property, relationships with suppliers, relationships with Construction Partners, relationships with competitors, employees, and other matters. We may, for example, be a party to various litigation matters that involve product liability, tort liability, and claims under other allegations, including claims from our employees either individually or collectively. We do not believe that any current claims, individually or in the aggregate, will have a material adverse effect on our financial condition, liquidity or results of operations. For additional information regarding our current legal proceedings, see Item 3. "Legal Proceedings."

Implications of Being an Emerging Growth Company

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act enacted in April 2012. Certain specified reduced reporting and other regulatory requirements are available to public companies that are emerging growth companies. These provisions include:

- an exemption from the auditor attestation requirement in the assessment of our internal controls over financial reporting required by Section 404 of the Sarbanes-Oxley Act of 2002;
- an exemption from the adoption of new or revised financial accounting standards until they would apply to private companies;
- an exemption from compliance with any new requirements adopted by the Public Company Accounting Oversight Board requiring mandatory audit firm rotation or a supplement to the auditor's report in which the auditor would be required to provide additional information about our audit and our financial statements; and
- reduced disclosure about our executive compensation arrangements.

We will continue to be an emerging growth company until the earliest of:

- the last day of our fiscal year in which we have total annual gross revenues of $1.07 billion (as such amount is indexed for inflation every five years by the SEC to reflect the change in the Consumer Price Index for All Urban Consumers published by the Bureau of Labor Statistics, setting the threshold to the nearest $1 million) or more;
- December 31, 2024;
- the date on which we have, during the prior three-year period, issued more than $1 billion in non-convertible debt; or
- the date on which we are deemed to be a "large accelerated filer" under the rules of the SEC, which means the market value of our common shares that is held by non-affiliates (or public float) exceeds $700 million as of the last day of our second fiscal quarter in our prior fiscal year.

We have elected to take advantage of certain of the reduced disclosure obligations in this Annual Report and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information that we provide to our shareholders may be different than what you might receive from other public reporting companies in which you hold equity interests. However, we have irrevocably elected not to avail ourselves of the extended transition period for complying with new or revised accounting standards and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

Human Capital Resources

As of December 31, 2022, DIRTT employed 934 employees, 99% full time, 1% part time. We had 922 full-time employees consisting of 595 employees in production, 74 employees in sales and marketing, 90 employees in technology and development, 90 employees in operations support, and 73 general and administrative employees. At year-end, approximately 50% of our workforce are salaried employees and approximately 50% are compensated on an hourly basis. As of December 31, 2022, approximately 28% of our workforce was based in the United States, and approximately 72% was based in Canada. Our 2022 hiring efforts were directed towards both our manufacturing and non-manufacturing functions. This reflects the streamlining of our operations space, accounting for 79% of our hiring activities. The Company's recent gender diversity data shows that 25% (2021 – 28%) of our employees are female company wide. In 2022 we hired 213 employees, with 29% of new employees being female.

Diversity & Inclusion

DIRTT recognizes the importance of progressing conversations and initiatives around diversity and inclusion. "Grow through diversity" is one of our core values. Our strategy encompasses leadership training around key topics related to unconscious bias, allyship, and the value of attracting and retaining a diverse and inclusive organization. The strategy further focuses on the establishment and deployment of learning streams, mentoring circles, and incorporation of inclusive language into our offer packages and benefit materials. Our efforts begin at the early stages of the employee life cycle, where diversity candidates are highlighted and presented to hiring managers for review. We seek to hire based on talent, skill, capability needs, and fit. DIRTT has also incorporated diversity into various internal programs including succession planning and risk profiles.

Culture & Engagement

DIRTT has put measures in place to assess and enhance the level of engagement and satisfaction of our employees. Specific activities include the deployment of a performance management tool, catered to drive discussions around team goals, performance and development opportunities, and greater transparency around policy and procedures, tied to cost and risk mitigation.

In the fourth quarter of 2022, we began the implementation of a new employee engagement platform called Employee Voice that will deploy company-wide surveys focused on core themes of workplace civility, communication, work-life balance, retention, job satisfaction, employee engagement and diversity and inclusion. The platform and targeted initiatives are being put in place company-wide to assess the progression of themes from the survey on overall employee engagement and experience.

Additional initiatives that we attribute to the progression of culture and engagement include launching learning and development opportunities, enhanced communication platforms, employee recognition programs, a company-wide philanthropic organization, and a strong focus on virtual social events to further support engagement and connection of remote employees.

Connecting to our community is a critical piece of the DIRTT story. We continue to focus on establishing a stronger community investment program that demonstrates our drive to put community at the center of the business. This involves developing a strategy, carving out a roadmap of initiatives, and establishing a committee of employees across the organization. As part of our strategy, we are focusing our efforts on establishing meaningful engagement opportunities, creating inclusive giving campaigns, driving sustainable impact, and enabling our employees to connect on philanthropic efforts. In the fourth quarter of 2022, we successfully completed our holiday giving campaign which was a coordinated in-person and virtual effort in support of food banks across North America, focusing on the cities in which we operate. The support for this campaign helped to reconnect DIRTT employees' desire to give back with tangible outcomes for their communities. We take measures to address the mental health of our employees through a variety of company-wide initiatives.

Our core commitment to organizational safety resulted in a Total Recordable Incident Frequency ("TRIF") of 0.1 in 2022, more than 97% below the industry average and a significant improvement from 0.5 TRIF in 2021. Our enhanced health and safety protocols have been effective thus far in mitigating the spread of COVID-19 infections within our facilities and have helped us to avoid any material production disruptions.

We use a range of compensation incentives which vary by role, including annual variable compensation determined based on a combination of achieving team objectives and financial targets for the Company; quarterly bonuses for our manufacturing personnel paid on adherence to targets related to safety, quality, delivery, inventory and productivity; and commissions based on sales. We also use various forms of stock-based compensation as a retention tool and to further align employee interests with the interests of our shareholders. We monitor our retention by way of voluntary turnover, which was 17% in 2022.

None of our employees are covered by collective bargaining agreements. We have never experienced labor-related work stoppages or strikes, and we believe we currently have a positive relationship with our employees.

Item 1A. Risk Factors.

Investing in our common shares involves a high degree of risk. You should carefully consider the risks described below, as well as the other information in this Annual Report, including our consolidated financial statements and the related notes and Part II, Item 7. entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations," and in any documents incorporated in this Annual Report by reference, before deciding whether to invest in our common shares. The occurrence of any of the events or developments described below could harm our business, financial condition, results of operations, and growth prospects. In such an event, the market price of our common shares could decline, and you may lose all or part of your investment. Although we have discussed all known material risks, the risks described below are not the only ones that we may face. Additional risks and uncertainties not currently known to us or that we currently deem immaterial may also impair our business operations. Certain statements below are forward-looking statements. See also "Special Note Regarding Forward-Looking Statements" in this Annual Report.

Risks Related to Our Business and Industry

Our business, financial condition, results of operations and growth could be harmed by the effects of the COVID-19 pandemic and related government measures.

The COVID-19 pandemic has created significant volatility, uncertainty, and economic disruption. The extent to which COVID-19, or other public health pandemics or epidemics, impact our employees, operations, customers, suppliers, and financial results will depend on numerous evolving factors that we may not be able to accurately predict, including: the duration and scope of the COVID-19 pandemic (and whether there is a resurgence or multiple resurgences of the virus in the future, including as a result of strain variations); the actions taken by governments and public health officials in response to the pandemic; the availability and effectiveness of vaccines, approvals thereof and the speed of vaccine distribution; the impact on construction activity (including related supply chain and labor shortages and their effects on construction schedules and timing); the effect on our customers' demand for our DIRTT solutions; our ability to manufacture and sell our products; and the ability of our customers to pay for our products. For example, while many of our products support life sustaining activities and essential construction, we, and certain of our customers or suppliers, may be impacted by state or provincial actions, orders and policies regarding the COVID-19 pandemic, including temporary closures of non-life sustaining businesses, shelter-in-place orders, and travel, social distancing and quarantine policies, the implementation and enforcement of which may vary by individual jurisdictions. On September 9, 2021, President Biden issued executive orders establishing, among other things, new vaccination requirements applicable to U.S. federal workers and contractors, large employers and healthcare workers. As a federal contractor, we are subject to the executive order. Although the Biden administration later updated its guidance to indicate that it will not enforce this vaccination requirement, additional vaccine mandates may be announced in jurisdictions in which our businesses operate. Our implementation of these rules may result in attrition, including attrition of skilled labor, and difficulty securing future labor needs. Additionally, our implementation of these rules may impact our ability to maintain satisfactory arrangements with third-party vendors and service providers, to the extent they are subject to vaccination requirements and they or their employees are unable or unwilling to comply. Any of the foregoing events could have a material adverse effect on our business, liquidity or results of operations.

We are under the leadership of a reconstituted Board of Directors who are in the process of implementing a variety of operational, organizational, cultural and other changes to our business, and we may not be able to achieve some or all of the anticipated benefits of this transformation plan. We are also undergoing changes at a senior management level, including the appointment of a new Chief Executive Officer in June 2022.

Our Board of Directors was entirely reconstituted at our annual and special meeting of shareholders held on April 26, 2022 and, following that meeting, there was significant turnover in the Company's leadership. In addition to overseeing the changes to DIRTT's leadership, the reconstituted Board of Directors has undertaken an extensive review of DIRTT's operations, a process which is still ongoing (see Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations – Outlook"), and are in the process of implementing a variety of operational, organizational, cultural and other changes to our business, including plans to meet pipeline demand and expand revenues. The timely integration of senior management will be critical in the successful implementation of the Board of Directors' plans. We may not be successful in achieving some or all of the anticipated benefits of these plans, which may have an adverse effect on our results from operations and financial condition.

The effectiveness of certain elements of DIRTT's administrative systems:

DIRTT has identified the need to upgrade its inventory management and cost accounting systems at some point in the future to enable scalable growth. Other information technology may require investment in the future. However, the success, in whole or in part, of this investment cannot be guaranteed.

We may not be successful in implementing our strategic plan or managing growth

Implementation of our strategy will require maturity of systems and processes across the organization. There is also no assurance that successful implementation will lead to sustainable, profitable growth, and may itself be disruptive to the Company. Failure to implement our strategic plan could materially and adversely affect our near-term sales, commercial activities, and ability to develop and sustain profitable growth. In addition, the success and timing of our implementation may be dependent upon external factors outside of our control, including the COVID-19 pandemic and its negative impact on construction activities as a whole. However, we remain confident that DIRTT's value proposition will be as or even more relevant in the post-pandemic world.

Our strategy also depends in part on our ability to maintain and manage growth effectively. Growth in our headcount and operations may place significant demands on our management and operational and financial resources. Additionally, managing growth of our operations and personnel requires continuous improvement of our internal controls and reporting systems and procedures. Failure to effectively manage growth could result in difficulty providing current DIRTT Solutions and introducing future solutions, difficulty in securing clients and Construction Partners, declines in quality or client satisfaction, increases in costs or other operational difficulties. Any of these difficulties could lead to a loss of investor confidence and adversely affect our business performance, financial condition and results of operations.

Our industry is highly competitive, and we may not be successful in educating potential clients about the benefits of our innovative and unique approach to interior construction as compared to conventional interior construction methods.

We operate in the highly competitive interior construction industry that is constantly developing and changing. We compete against conventional construction firms, individual tradespeople, modular systems, and commercial furniture manufacturers. New market entrants and conventional construction firms are also beginning to develop customizable wall paneling and other modular interior construction solutions, and we expect this trend to continue. In addition, we may face pricing pressure from competitors or new market entrants who take on projects at reduced prices or employ other competitive strategies. While we believe our innovative design, quality, schedule and cost certainty, and network of Construction Partners makes us well-positioned in the market, increasing competition could make it difficult to secure new projects at acceptable operating margins.

Our products are unique and offer an alternative to conventional construction techniques. Although offsite construction methods are gaining market acceptance, this still represents only a fraction of all construction methods and the overall construction market. Our ability to grow and increase market share depends, in part, on our success in continuing to increase demand for modular construction methods and products as an alternative to more traditional construction methods. While we intend to follow a strategy of innovative product development and strategic marketing efforts to enhance our position, there is no assurance that our solutions will attain a degree of market acceptance sufficient for sustained profitable operations. Failure to compete effectively by, among other things, meeting consumer preferences, developing and marketing innovative solutions, maintaining strong client service and distribution relationships, growing market share, and expanding our solutions capabilities could have a material adverse effect on our liquidity, financial condition, or results of operations.

Our former co-founders' competitive behavior against us could have an adverse effect on our business, financial condition and results of operations.

Our co-founders and former executives, Mogens Smed and Barrie Loberg, have started an interior construction and manufacturing company that we believe competes with us. They, along with a number of our former employees and Construction Partners who have joined their company have in-depth knowledge about our business, including our customers, employees, products and prospects, and we may be adversely affected by increased competition arising out of this business venture. We are engaged in litigation with Messrs. Smed and Loberg, entities with which they are involved, and other individuals relating to, among other things, enforcement of non-competition and non-solicitation obligations, and alleged misappropriation of proprietary information by them or by us. See Note 20 to the Consolidated Financial Statements. If Messrs. Smed and Loberg further engage in a competitive business against us or if we are not successful in litigation, our business, financial condition and results of operations may be adversely affected.

We depend heavily on our network of Construction Partners, and the loss or inattention of our Construction Partners, or the failure of our Construction Partners to meet their obligations to us, could materially and adversely affect our business, financial condition and results of operations.

We currently do not engage in many direct sales projects and rely almost exclusively on our network of Construction Partners to promote brand awareness, sell and market DIRTT Solutions, and provide design, installation, distribution and other services to clients on each project. While we are not dependent on any single Construction Partner, sales generated by approximately 10% of our Construction Partners comprised approximately 39% of our total revenues for 2022 (2021 – 40%). The loss of any top performing Construction Partners, particularly to our competitors, may negatively affect our sales, financial condition or results of operations. It may further impair our ability to maintain a market presence in a particular geographic region until a new Construction Partner relationship is established, which would require significant time and resources, given DIRTT is typically a standalone line of business in their portfolio.

Although we provide our Construction Partners with training, education, and support, they may be unable to successfully sell our DIRTT Solutions, execute projects or manage client experiences and relationships. In addition, our Construction Partners and their clients may face financial difficulties or may become insolvent, which could result in the delay or cancellation of their plans to purchase DIRTT Solutions or lead to our inability to obtain payment of accounts receivable that they may owe. If we are unable to maintain a successful Construction Partner network, our business, financial condition, and results of operations could be materially and adversely affected.

Increasing attention to environmental, social and governance (ESG) matters may impact our business

We have announced various voluntary ESG targets in our annual Environmental, Social, and Governance (ESG) report outlining our commitments to sustainability, the environment, health and safety, and diversity and inclusion. However, we may not be able to meet such targets in the manner or on such a timeline as initially contemplated, including, but not limited to, as a result of unforeseen costs or technical difficulties associated with achieving such results. Any actual or perceived failure to meet our ESG targets could adversely impact our reputation and our customers' image of our products and result in the loss of business or impede our growth initiatives. Adverse publicity regarding ESG issues and similar matters, whether or not justified, could have a negative impact on our reputation and may result in the loss of customers and our inability to secure new customer relationships. Further, our customers may be more selective for products that meet their ESG goals or standards, such as increasing demand for goods that result in lower emissions, and our products could be less competitive if we are unable to meet these standards. Despite our efforts to adapt to and address these concerns, our efforts may be insufficient. Additionally, the implementation of these initiatives may increase our costs. It is difficult to predict how our efforts with respect to social and sustainability matters will be evaluated by current and prospective investors or by our customers or business partners.

Furthermore, public statements with respect to ESG matters are becoming increasingly subject to heightened scrutiny from public and governmental authorities related to the risk of potential "greenwashing," i.e., misleading information or false claims overstating potential ESG benefits. For example, in March 2021, the SEC established the Climate and ESG Task Force in the Division of Enforcement to identify and address potential ESG-related misconduct, including greenwashing. Certain non-governmental organizations and other private actors have also filed lawsuits under various securities and consumer protection laws alleging that certain ESG statements, goals or standards were misleading, false, or otherwise deceptive. As a result, we may face increased litigation risk from private parties and governmental authorities related to our ESG efforts. In addition, any alleged claims of greenwashing against us or others in our industry may lead to further negative sentiment and diversion of investments. Additionally, we could face increasing costs as we attempt to comply with and navigate further regulatory ESG-related focus and scrutiny.

Risks Relating to Our Products and Software

We may be unsuccessful in designing, introducing, or selling new, innovative solutions, solution features, or software.

Our future success depends in part on our continuing ability to promote and demonstrate the value proposition of DIRTT Solutions, as well as our ability to develop and sell new, innovative solutions, solution features, or software that differentiate our solutions and achieve market acceptance in a timely and cost-effective manner. We incur significant costs associated with the investment in our research and development in furtherance of our strategy that may not result in increased revenue or demand for DIRTT Solutions and that could negatively affect our results of operations. Rapidly changing technology, evolving regulatory and industry standards, and changing consumer trends, demands, and requirements require us to continuously innovate and develop new, high-quality solutions, solutions features and software. Additionally, such rapid technological changes, standards and preferences could render the complex and proprietary technology of our software and solutions obsolete. We may also be unable to successfully address these developments on a timely basis, or at all. New solutions, solution features, or software may also be less successful than we anticipated, and such offerings may fail to achieve market acceptance. If we fail to respond quickly and cost-effectively to a changing market and changing consumer preferences, our competitive position, financial condition, and results of operations could be materially and adversely affected.

Our software and products may have design defects, deficiencies, or risks, and we may incur additional costs to fix any defects, deficiencies, or risks, or be subject to warranty or product liability claims.

Our software and solutions are complex and must meet the technical requirements of our clients and applicable building codes and regulations. Our solutions may contain undetected errors or design and manufacturing defects, and our software may experience quality or reliability problems, or contain bugs or other defects. Software defects may also cause errors in our manufacturing or miscalculations in ordering pricing and could lead us to incur losses and lose market share to competitors. Product or software defects could cause us to incur warranty costs, product liability costs, and repair and remediation costs. Although we maintain warranty reserves based on production, historical claims, and estimates, future warranty claims may exceed this amount. Similarly, while we maintain insurance of the types and amounts we consider commercially prudent and consistent with industry practice, such insurance coverage may not be sufficient to protect us against substantial claims. Such claims can be expensive to defend, could divert the attention of management and other personnel for significant periods, regardless of the ultimate outcome, and could result in negative publicity. Increased costs to address product warranty claims or to defend against product liability claims may result in increased expenses and adversely affect our financial condition and results of operations.

We are subject to fluctuations in the prices of raw materials and commodities, which could adversely affect our liquidity, operating margins and financial condition.

We purchase raw materials, including aluminum, glass, and wood, from a number of local and global suppliers. The costs of these commodities can fluctuate due to changes in global supply and demand, inflation, peculation in commodities futures, and changes in tariffs or trade barriers, which can also interrupt supply. In addition, we have not historically entered into long-term agreements with vendors and may be exposed to short-term and long-term price fluctuations as a result.

Aluminum represents the largest component of our raw materials consumption. We have experienced fluctuations in the price of aluminum and anticipate that these fluctuations will continue in the future. In particular, during 2021 and 2022 we experienced significant price inflation across substantially all of our materials, largely due to pandemic-induced supply chain constraints, and it is unclear whether such price increases will be temporary or permanent in nature. From time to time, the U.S. government has imposed tariffs on steel and aluminum and limited the amounts of steel and aluminum coming into the United States based on the countries of origin of those imports. In 2022 and 2021, we sourced the majority of our aluminum from North America and sourced under 10% of our raw materials from outside North America. Nonetheless, substantial, prolonged upward trends in aluminum and other commodity prices, along with tariffs and import limitations, could significantly increase our costs and adversely affect our liquidity, operating margins, and financial condition.

We rely on a limited number of outside suppliers for certain key components and materials, and failure or delay in obtaining the necessary components or materials could delay or prevent the manufacturing or distribution of our DIRTT Solutions.

We rely on certain key suppliers for raw materials and components, including aluminum, glass, wood, paint, and hardware. We maintain multiple suppliers for key materials, although for the year ended December 31, 2021, (i) two suppliers accounted for approximately 38% and 24% of our aluminum supply, respectively, and two additional suppliers provided approximately 14% each, (ii) two suppliers accounted for approximately 33% and 37% of our wood supply, (iii) one supplier accounted for approximately 94% of our paint and powder supply, and (iv) one supplier accounted for approximately 38% of our hardware supply**.** While we believe there are other vendors for most of our key requirements, certain materials and components meeting our quality standards are available only through a limited number of vendors. If we are required to obtain another source for these materials or components, we may not be able to obtain pricing on as favorable terms or on terms comparable to our competitors. Any failure or delay in obtaining the necessary raw materials or components in the quantities and quality required may result in increased costs and delays in manufacturing or distributing our products, which could have a material adverse effect on our liquidity, financial condition, or results of operations. A vendor may also choose, subject to existing contracts, to modify its relationship with us due to general economic concerns or specific concerns relating to that vendor or us, at any time. These modifications might include additional requirements from our suppliers that we provide them additional security in the form of prepayments or with letters of credit. Any significant change in the terms that we have with our key suppliers could materially and adversely affect our liquidity, financial condition, or results of operations.

Risks Relating to Market Conditions

Global economic, political and social conditions and financial markets may impact our ability to do business and adversely affect our liquidity, financial condition, and results of operations.

Our industry is cyclical and highly sensitive to macroeconomic conditions. Overall declines or reductions in construction and renovation due to economic downturns, unemployment and office vacancies, difficulties in the financial services sector and credit markets, and imposition of trade barriers can impact the demand for our products. Financial difficulties experienced by our suppliers, Construction Partners or clients could also result in, among other things, inadequate project financing, project delays, inability to pay accounts receivable or disruptions in our supply chain. Any general economic, political, or social conditions that may contribute to financial difficulties experienced by us, our suppliers, Construction Partners, or clients may adversely affect our liquidity, financial condition and results of operations.

We are exposed to currency exchange rates, interest rates, tax rates, and other fluctuations, including those resulting from changes in laws.

Our revenues and expenses are collected and paid in different currencies, including the U.S. dollar and Canadian dollar. Fluctuations in the relative values of any such currency expose us to foreign exchange risk and could have a material and adverse effect on our cash flows, revenues and results of operations. We also have currency exchange exposure to the extent of a mismatch between foreign-currency denominated revenues and expenditures – in particular, where U.S. dollar revenues do not equal U.S. dollar expenditures. We are not currently using exchange rate derivatives to manage currency exchange rate risks. There are currently no significant restrictions on the repatriation of capital and distribution of earnings to foreign entities from any of the jurisdictions in which we operate. There can be no assurance that such restrictions will not be imposed in the future.

Most of DIRTT's debt is on fixed interest rates. The Extended RBC Facility is subject to market interest rates. We are not currently using interest rate derivatives to manage interest rate risks. If interest rates rise this could have a material and adverse effect on our cash flows, revenues and results of operations and may adversely affect our ability to access financing.

Compliance with new or amended tax laws and regulations could have a material adverse effect on our business. We base our tax positions upon our understanding of the tax laws (including, applicable tax treaties) of the countries in which we have assets or conduct business activities. However, our tax positions are subject to review and possible challenges by taxing authorities, including as to the computation and allocation of income, transfer pricing and other complex issues. This includes adverse changes to the manner in which Canada, the United States and other countries tax local and foreign corporations and interpret or change their tax laws and applicable tax treaties, including in light of the increased focus by the U.S. Congress, the Canadian government, the Organization for Economic Co-operation and Development and other government agencies in jurisdictions where we do business on issues related to the taxation of multinational corporations. We cannot determine in advance the extent to which such jurisdictions may amend their tax laws, review our tax positions, or assess additional taxes or interest and penalties on such taxes. In addition, our effective tax rate may be increased by changes in the valuation of deferred tax assets and liabilities, our cash management strategies, local tax rates, or interpretations of tax laws.

Risks Relating to Intellectual Property and Information Security

We may be unable to protect our intellectual property adequately from infringement by third parties, and we may also be subject to claims that we infringe on intellectual property rights of others.

We rely on a combination of contract, copyright, patent, trademark and trade secret laws, confidentiality procedures and other measures to protect our intellectual property. There can be no assurance that our various patents, copyrights or trademarks will offer sufficient protection and prevent misappropriation of our proprietary rights in our products, software or processes. We also may not be granted patents, copyrights or trademarks on our pending or proposed applications, and granted applications may be challenged, invalidated or circumvented in the future. Despite our precautions, it may be possible for unauthorized third parties to copy our applications and use information that we regard as proprietary to create products or services that compete with ours. We enforce our intellectual property rights where appropriate, but the cost of doing so may be substantial and could outweigh the potential benefits, and we may be unsuccessful in our enforcement efforts. Failure to protect or maintain the proprietary nature of our intellectual property could adversely affect our ability to sell original products and materially and adversely affect our business, financial condition and results of operations.

Additionally, our competitors or other third parties may own or claim to own intellectual property in technology areas relating to our technology, including ICE Software, manufacturing processes, and DIRTT Solutions. Although we do not believe that our software or DIRTT Solutions infringe on the proprietary rights of any third parties, claims may arise regarding infringement or invalidity claims (or claims for indemnification resulting from infringement claims). Such assertions or prosecutions, regardless of their merit, may subject us to significant liabilities, require us to enter into royalty and licensing arrangements on unfavorable terms, prevent us from assembling or licensing certain of our products, subject us to injunctions restricting our sale of products, cause severe disruptions to our operations or the marketplaces in which we compete, or require us to satisfy indemnification commitments with our clients, including contractual provisions under various license arrangements. A damages award against us could include an award of royalties or lost profits and, if the court finds willful infringement, treble damages and attorneys' fees. This may cause us to expend significant costs and resources, and could adversely affect our business, financial condition or results of operations.

If we are unable to protect our information systems against data corruption, cyber-based attacks or network security breaches, our operations could be disrupted and our reputation and profitability could be negatively affected.

In the ordinary course of our business, we generate, collect and store confidential and proprietary information, including intellectual property and business information. The secure storage, maintenance, and transmission of and access to this information is important to our operations and reputation. We use automated software and hardware solutions to protect our on-premise and cloud infrastructure; conduct routine third-party evaluations and vulnerability testing to identify and mitigate risks; and deploy training programs throughout the company. We have experienced cyber-based attacks, but to our knowledge, we have not experienced any material disruptions or breaches of our information technology systems or platforms. However, there is no guarantee that our security systems, processes or procedures are adequate to safeguard against all data security breaches, misuse of data, cyber-attacks, acts of vandalism, computer viruses, misplaced or lost data, programming or human errors or other similar events. Any security breach involving the misappropriation, loss or other unauthorized disclosure of confidential information of a client, Construction Partner, employee, supplier or Company information could result in financial losses, exposure to litigation risks and liability (including regulatory liability), damage to our reputation, and disruptions in our operations, all of which could have a material adverse effect on our business, financial condition and results of operations. While we maintain cybersecurity insurance for the types of coverage and amounts we consider commercially prudent and consistent with industry practice, such insurance may not be sufficient to cover all losses relating to an information security breach.

The regulatory environment related to information security, data collection and use, and privacy is increasingly rigorous, with new and frequently changing requirements, and compliance with those requirements could result in additional costs. The costs associated with information security, such as increased investment in technology, the costs of compliance with privacy laws, and costs incurred to prevent or remediate information security breaches, could be substantial and adversely affect our business. A significant compromise of sensitive employee, Construction Partner, client or supplier data in our possession could result in legal damages and regulatory penalties. In addition, the costs of defending such actions or remediating breaches could be material.

Damage to our information technology and software systems could impair our ability to effectively provide DIRTT Solutions and adversely affect our reputation, relationships with clients, financial condition and results of operations.

Our information technology and software networks and systems, which include the processing, transmission and storage of information, are integrated with our manufacturing processes and essential to our business operations. These systems are vulnerable to, among other things, damage or interruption from power outages, network failures or natural disasters, loss or corruption of data, human error, employee misconduct and difficulties associated with upgrades, installations of major software or hardware, and integration with new systems. While we maintain retention backups to geo-diverse digital and physical locations and have a recovery data center, the data center and other protective measures we take could prove to be inadequate. Any disruption in our systems or unauthorized disclosure of information could result in delayed manufacturing and delivery of our DIRTT Solutions, legal claims, a loss of intellectual property and a disruption in operations, all of which could adversely affect our reputation, relationships with clients, financial condition and results of operations.

Risks Relating to Government Regulations and Enforcement

We may incur significant costs complying with environmental, health and safety laws and related claims, and failure to comply with these laws and regulations could expose us to significant liabilities, which could materially adversely affect our business and results of operations.

We are subject to laws, regulations, and other requirements with respect to workers' health and safety and environmental matters in the United States, Canada and other countries in which we operate. Environmental laws and regulations impose, among other things, restrictions, liabilities and obligations in connection with the production, processing, preparation, handling, storage, transportation, disposal and management of wastes and other substances, and the prevention and remediation of environmental effects. Health and safety laws and regulations impose, among other things, requirements designed to ensure the protection of workers. New or more stringent laws and regulations, including those relating to climate change and greenhouse gas emissions, may be adopted in the future and could impact our facilities, raw material suppliers, the transportation and distribution of our solutions, and our clients, which could reduce demand for our solutions or cause us to incur additional operating costs. In addition, certain foreign laws and regulations may affect our ability to export products outside of or import products into the United States or Canada. Failure to comply with these requirements may result in civil or criminal liability, damages and fines, and our operations could be curtailed, suspended or shutdown and our reputation, ability to attract employees, and results of operations could be adversely affected. Private lawsuits, including claims for remediation of contamination, personal injury or property damage, or actions by regional, national, state and local regulatory agencies, including enforcement or cost-recovery actions, may materially increase our costs.

These factors may materially increase the amount we must invest to bring our processes into compliance with legal requirements and impose additional expenses on our operations. In addition, any changes in these laws or regulations or changes in our manufacturing processes may require us to request changes to our existing permits or obtain new permits. We may also be unable to obtain or maintain, from time to time, all required environmental regulatory approvals. A delay in obtaining any required environmental regulatory approvals or the failure to obtain and comply with such approvals could materially adversely affect our business and results of operations.

Risks Relating to Financial Results

We have had negative cash flow from operating activities.

We had negative cash flow from operating activities for prior years, including the years ended December 31, 2022 and 2021. Continued negative operating cash flow may compromise our ability to make interest and principal payments on the convertible unsecured subordinated debentures issued on January 25, 2021 and December 1, 2021 (collectively, the "Debentures") on a timely basis, or at all, and to execute our strategic plan. Until we are able to generate positive cash flow from operating activities over a sustained period, our ability to finance our operations will be dependent on our cash reserves and available credit facilities and, if required, our ability to obtain additional external financing. Although we had $3.2 million in cash provided from operating activities during the fourth quarter of 2022 and we anticipate we will have positive cash flow from operating activities over at least the next twelve months, we cannot guarantee that such future cash flow will be sufficient or other changes to our circumstances will not necessitate additional financial resources to fund our operating activities.

In response to our negative cash flow from operations, on February 22, 2022, we commenced the process of closing our Phoenix aluminum manufacturing facility, shifting related manufacturing to both our Savannah and Calgary aluminum facilities. Additionally, we eliminated approximately 18% of our salaried workforce including manufacturing and office positions in February 2022, with further reduction of 36 positions in July 2022. Additionally, to offset cost inflation on our materials, we implemented product price increases comprised of 5% effective November 1, 2021, 5% effective June 1, 2022, and a further 10% effective July 21, 2022. We have also undertaken several strategic actions and a Private Placement (as defined herein) to improve our balance sheet in the short term, see "Management's Discussion and Analysis of Financial Condition and Results of Operations–Liquidity and Capital Resources". Although we anticipate these actions will strengthen our balance sheet and liquidity position, we cannot guarantee that such future cash flow will be sufficient or other changes to our circumstances will not necessitate additional financial resources to fund our operating activities.

We have experienced a history of losses, and despite certain periods of profitability in recent years, we may not be able to generate sufficient revenue to achieve and sustain profitability.

We have incurred significant losses since commencing business. We incurred net losses of $55.0 million, $53.7 million and $11.3 million for the years ended December 31, 2022, 2021 and 2020, respectively. At December 31, 2022, we had an accumulated deficit of $166.3 million. These losses and accumulated deficits were due in part to the substantial investments made to grow our business and acquire clients, to further develop our service offerings through product and software development, to ensure that we have sufficient production capacity and capability to deliver on our commitment of rapid delivery times and to preserve our production, innovation and commercial capabilities through the economic disruption caused by the global COVID-19 pandemic in anticipation of a significant increase in construction activity as the pandemic impacts abate. Net loss for the year ended December 31, 2022 includes $13.5 million of restructuring costs associated with initiatives taken by the reconstituted Board and management to restructure the business and improve profitability and cashflows. Past results may not be indicative of our future performance, and there can be no assurance that we will generate net income in the future.

DIRTT's gross margins and resulting profitability have historically been negatively affected by the impacts of material cost inflation and the increased usage of discounting to drive higher demand. DIRTT has taken steps to improve gross margin by reducing discounts and increasing prices, including a 5% product price increase in Q4, 2021 and Q2, 2022 and a further 10% price increase in July 2022. Further, additional procurement and supply chain review procedures were established during the third quarter of 2022 to better monitor the volatility in our underlying material input costs. While the Company believes its pricing, discount structure and supply chain monitoring controls are sufficient, if we are unable to maintain or improve upon the gross profit margins delivered in the fourth quarter of 2022, if inflationary increases continue without corresponding increases in our pricing, or if such reduced discounting and price increases cause a material impact on demand, DIRTT's results of operations and financial condition could be adversely impacted.

We have experienced, and may experience in the future, quarterly and yearly fluctuations in results of operations and financial condition.

Our results of operations and financial condition may continue to fluctuate from one quarter or year to another due to a number of factors, some of which are outside of our control. For example, we usually experience seasonal slowdowns in the first and fourth quarters of each calendar year, leading to stronger sales in the second half of the year versus the first half, and weather conditions may also delay delivery and installation on some projects. Furthermore, sales that we anticipate in one quarter may be pushed into another quarter, affecting both quarters' results, and our actual or projected results of operations may fail to match our past performance. These events could in turn cause the market price of our common shares to fluctuate. In particular, if our results of operations do not meet the expectations of securities analysts or investors, who may derive their expectations by extrapolating data from recent historical results of operations, the market price of our common shares will likely decline. Due to our high fixed manufacturing costs and operating expenses, quarterly volatility in sales volumes could result in periods of low operating cash flow and negatively affect our liquidity. Due to these risk factors, quarter-to-quarter or year-to-year comparisons of our results of operations may not be an indicator of future performance.

We have recognized, and may recognize in the future, impairment charges for our goodwill and certain other non-current assets.

During the year ended December 31, 2021, we impaired the $1.4 million net carrying value of goodwill on our consolidated balance sheet. Significant negative industry or economic trends, disruptions to our business, planned or unexpected significant changes in the use of the assets, and sustained market capitalization declines may result in the impairment of non-current assets. For the past two years we have had an indicator of impairment for our non-current assets. Any further charges relating to impairments could have a material adverse impact on our results of operations in the period in which the impairment is recognized. We did not have any impairment charges for non-current assets during the year ended December 31, 2022.

Risks Related to Our Common Shares and Corporate Structure

Our share price has been and may continue to be volatile, which could cause the value of your investment to decline. If we fail to comply with the continuing listing standards of Nasdaq, our securities could be de-listed.

Our common shares are currently listed on the TSX under the symbol "DRT" and on Nasdaq under the symbol "DRTT." The price of our common shares has in the past fluctuated significantly, and may fluctuate significantly in the future, depending upon a number of factors, many of which are beyond our control and may adversely affect the market price of our common shares. These factors include: (i) variations in quarterly results of operations; (ii) deviations in our earnings from publicly disclosed forward-looking guidance; (iii) changes in earnings estimates by analysts; (iv) our announcements or our competitors' announcements of significant contracts, acquisitions, strategic partnerships or joint ventures; (v) general conditions in the offsite construction and manufacturing industries; (vi) sales of our common shares by our significant shareholders; (vii) fluctuations in stock market price and volume; and (viii) other general economic conditions.

In the past, following periods of volatility in the trading price of a company's securities, securities class action litigation has been brought against that company. If our share price is volatile, we may become the target of securities litigation in both the United States and Canada. Securities litigation could result in substantial costs and divert management's attention and resources from our business and could have an adverse effect on our business, financial condition and results of operations.

Further, if the closing bid price of our common shares is below the $1.00 Nasdaq minimum requirement for 30 consecutive business days, we may become subject to de-listing proceedings. On September 7, 2022, we received a letter from Nasdaq that we have not been in compliance with the minimum bid price requirement set forth in Nasdaq Listing Rule 5450(a)(1) for a period of 30 consecutive business days. In accordance with Nasdaq Listing Rule 5810(c)(3)(A), we are provided a compliance period of 180 calendar days from the date of the notice to regain compliance with the minimum closing bid price requirement. If we do not regain compliance during the compliance period, we may be afforded a second 180 calendar day period to regain compliance if, among other things, we meet certain listing requirements of, and elect to transfer to, the Nasdaq Capital Market. We can achieve compliance with the minimum bid price requirement if, during either compliance period, the closing bid price per share of our common shares is at least $1.00 for a minimum of ten consecutive business days. We intend to monitor the closing bid price of our common shares and assess potential actions to regain compliance, but there is no assurance that we will be able to regain compliance, including under the specified time frames.

Any de-listing of our securities could have an adverse effect on the market price of, and the efficiency of the trading market for, our securities, not only in terms of the number of shares that can be bought and sold at a given price, but also through delays in the timing of transactions and less coverage of us by securities analysts, if any. Also, if in the future we were to determine that we need to seek additional equity capital, having been de-listed or being subject to de-listing proceedings could have an adverse effect on our ability to raise capital in the public or private markets.

We are governed by the corporate laws of Alberta, Canada, which in some cases have a different effect on shareholders than the corporate laws of the United States.

We are governed by the ABCA and other relevant laws, which may affect the rights of shareholders differently than those of a company governed by the laws of a U.S. jurisdiction, and may, together with our charter documents, have the effect of delaying, deterring or discouraging another party from acquiring control of our company by means of a tender offer, a proxy contest or otherwise, or may affect the price an acquiring party would be willing to offer in such an instance. The material differences between the ABCA and Delaware General Corporation Law ("DGCL"), that may have the greatest such effect include, but are not limited to, the following: (i) for certain extraordinary corporate transactions (such as amalgamations or amendments to our articles), the ABCA generally requires the voting threshold to be a special resolution passed by not less than two-thirds of the votes cast by the shareholders who voted in respect of the resolution, whereas DGCL generally only requires a majority vote; and (ii) under the ABCA, registered holders or beneficial owners (as defined in the ABCA) of not less than 5% of our common shares in aggregate can requisition our directors to call a special meeting of shareholders, whereas such right does not exist under the DGCL. We cannot predict whether investors will find our company and our common shares less attractive because we are governed by the corporate laws of Alberta, Canada.

Because we are a corporation incorporated in Alberta and some of our directors and officers are residents of Canada, it may be difficult for investors in the United States to enforce civil liabilities against us or our directors and officers based solely upon the federal securities laws of the United States. Similarly, it may be difficult for Canadian investors to enforce civil liabilities against our directors and officers residing outside of Canada.

We are a corporation amalgamated and existing under the laws of Alberta with our principal place of business in Calgary, Alberta, Canada. Some of our directors and officers are residents of Canada and a substantial portion of our assets and those of such persons are located outside the United States. Consequently, it may be difficult for U.S. investors to effect service of process within the United States upon us or our directors or officers who are not residents of the United States, or to realize in the United States upon judgments of courts of the United States predicated upon civil liabilities under the Securities Act of 1933. Investors should not assume that Canadian courts: (i) would enforce judgments of U.S. courts obtained in actions against us or such persons predicated upon the civil liability provisions of the U.S. federal securities laws or the securities or blue sky laws of any state within the United States or (ii) would enforce, in original actions, liabilities against us or such persons predicated upon the U.S. federal securities laws or any such state securities or blue sky laws.

Similarly, some of our directors and officers are residents of countries other than Canada and all or a substantial portion of the assets of such persons are located outside Canada. As a result, it may be difficult for Canadian investors to initiate a lawsuit within Canada against these non-Canadian residents. In addition, it may not be possible for Canadian investors to collect from these non-Canadian residents judgments obtained in courts in Canada predicated on the civil liability provisions of securities legislation of certain of the provinces and territories of Canada. It may also be difficult for Canadian investors to succeed in a lawsuit in the United States, based solely on violations of federal, provincial or territorial securities laws.

General Risks

Difficulties in recruiting and retaining qualified officers or employees, or experiencing labor shortages or disruptions, could have a material adverse effect on our business and results of operations.

Our success will depend in part on our ability to attract, develop, and retain qualified personnel as needed. We have undergone significant changes at a senior management level during the year as discussed elsewhere in this Annual Report. Although we anticipate smooth transitions, any changes to members of our senior management may be disruptive to our operations, including by diverting our Board's and management's time and attention and a decline in employee morale. If there are any delays in this process, our business could be negatively impacted. We may be affected by labor shortages or disruptions, particularly in locations where we operate manufacturing facilities. If we fail to attract or retain qualified personnel, or experience labor shortages or disruptions, we could incur higher recruiting expenses, a loss of manufacturing capabilities, or inability to respond to significant increases in demand, all of which could have a material adverse effect on our business and results of operations.

We may have additional capital needs in the future and may not be able to obtain additional capital or financing on acceptable terms.

We plan to continually invest in business growth and may require additional funds to respond to business opportunities, such as expanding our sales and marketing activities, developing new software, acquiring complementary businesses, products or technology, and expanding or enhancing our manufacturing capabilities, including factory automation. To the extent that our existing capital is insufficient to meet our requirements, we may need to undertake equity or debt financings to secure additional funds. Further issuances of equity or convertible debt securities may result in significant share dilution. Additional new equity securities issued could have rights, preferences and privileges superior to those of our currently issued and outstanding common shares. Additional debt financings may involve restrictive covenants relating to our capital-raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities. We cannot provide any assurance that sufficient debt or equity financing will be available for necessary or desirable expenditures or acquisitions, or to cover losses, and accordingly, our ability to continue to support our business growth and to respond to business challenges could be significantly limited, and our liquidity could be materially and adversely affected.

We may engage in future mergers, acquisitions, agreements, consolidations, or other corporate transactions that could adversely affect our business, financial condition, and results of operations.

While we currently have no specific plans to acquire any businesses, we may, in the future, seek to expand our business and capabilities through acquiring compatible technology, products or businesses. Additionally, we may explore other corporate transactions, including mergers, agreements, consolidations, or joint ventures, that we believe may be beneficial to our business or further specific business goals. Acquisitions involve certain risks and uncertainties, including, among other things, (i) difficulty integrating the newly acquired businesses and operations in an efficient and cost-effective manner; (ii) inability to maintain relationships with key clients, vendors and other business partners of the acquired businesses; (iii) potential loss of key employees of the acquired businesses; (iv) exposure to litigation or other claims in connection with our assumption of certain claims and liabilities of the acquired businesses; (v) diversion of management's time and focus; and (vi) possible write-offs or impairment charges related to the acquired businesses. The occurrence of any of these risks could adversely affect our business, financial condition, and results of operations.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our principal executive offices are located in Calgary, Alberta, where we lease approximately 73,000 square feet of office and manufacturing space. Our lease expires in September 2027. Our principal manufacturing facilities are currently located in Calgary, Alberta; and Savannah, Georgia. On February 22, 2022 we announced our intention to close the Phoenix manufacturing facility and DXC and on August 23, 2022 we announced our intention to temporarily suspend operations in Rock Hill, South Carolina as discussed in Item 1. “Business” in this Annual Report.

Our wall surfaces (which we call panels), casework and timber solutions are manufactured in Calgary, while aluminum, glass and power components are manufactured in Calgary and Savannah. In Calgary, we lease an aggregate of approximately 400,000 square feet of manufacturing space across three facilities (excluding our principal offices), which leases expire in January 2024 and January 2026. In Phoenix, we lease approximately 130,000 square feet of manufacturing space across two facilities, which leases expire in March 2027. We are currently utilizing the Phoenix space as a storage facility and have sub-leased the remaining premises. In Savannah, we lease approximately 81,000 square feet of manufacturing space, which lease expires in February 2029. In October 2019, we entered into a 15-year lease, which DIRTT may extend for two additional 5 year periods at its option, for a panel factory of approximately 130,000 square feet in Rock Hill, South Carolina. Should the need arise, we have the expansion rights to lease an additional 130,000 square feet of space. In March 2020, we entered into an 8 year lease, which DIRTT may extend an additional 5 years at its option, of approximately 18,000 square feet of space for a DXC in Dallas, Texas.

Our ICE development offices are located in Calgary, Alberta and Salt Lake City, Utah. In our Salt Lake City development office, we lease approximately 6,600 square feet of office space pursuant to a lease that expires in December 2023. In New York City, New York, we lease approximately 4,100 square feet of space to operate a DXC; this lease expires in February 2024. In Chicago, Illinois, we own approximately 6,200 square feet of office space, which we use to operate a DXC.

Through distributed manufacturing, we can shift production of some components among our manufacturing sites, reduce transportation times and costs, and meet targeted lead times. We believe that our current and planned facilities are adequate for our current needs and that suitable additional or substitute space would be available if needed.

Item 3. Legal Proceedings.

We are pursuing multiple lawsuits against our former founders, Mogens Smed and Barrie Loberg, their new company Falkbuilt Ltd. (“Falkbuilt”), and other related individual and corporate defendants for violations of fiduciary duties and noncompetition and non-solicitation covenants contained in their executive employment agreements, and the misappropriation of our confidential and proprietary information in violation of numerous Canadian and U.S. state, and federal laws pertaining to the protection of our trade secrets and proprietary information and the prevention of false advertising and deceptive trade practices.

As of December 31, 2022, our litigation against Falkbuilt, Messrs. Smed and Loberg, and their associates was comprised of three main lawsuits: (i) an action in the Alberta Court of Queen’s Bench instituted on May 9, 2019 against Falkbuilt, Messrs. Smed and Loberg, and several other former DIRTT employees alleging breaches of restrictive covenants, fiduciary duties, and duties of loyalty, fidelity and confidentiality, and the misappropriation of our confidential information (the “Canadian Non-Compete Case”); (ii) an action in the U.S. District Court for the Northern District of Utah instituted on December 11, 2019 against Falkbuilt, Smed, and other individual and corporate defendants alleging misappropriation of our confidential information, trade secrets, business intelligence and customer information (the “Utah Misappropriation Case”); and (iii) an action in the U.S. District Court for the Northern District of Texas instituted on June 24, 2021 alleging that Falkbuilt has unlawfully used our confidential information in the United States and intentionally caused confusion in the United States in an attempt to steal customers, opportunities, and business intelligence, with the aim of establishing a competing business in the United States market (the “Texas Unfair Competition Case”). We intend to pursue the cases vigorously.

In the Canadian Non-Compete Case, we have conducted extensive document production and questioning of the defendants that support our claims, as follows: (i) Smed and Loberg, and others, breached their duties owed to DIRTT, including their contractual and fiduciary duties; (ii) Smed, Loberg, and others began developing the new competing company immediately after Smed’s departure; (iii) before it was called Falkbuilt, the new competing company operated through a covert group comprised of then-current DIRTT employees and Construction Partners known as the TTIMit Group (which stands for “This Time I Mean It”); (iv) members of the TTIMit Group took steps to conceal their communications by creating and using alias names, using private and personal email addresses and phone numbers, and holding secret meetings and gatherings; (v) the TTMit Group also used then-current DIRTT employees to build out Falkbuilt's warehouse premises and offices, source and purchase equipment for Falkbuilt, assist with market research and develop Falkbuilt's products, build vignettes and drawings, address Falkbuilt's software and computer needs, and name Falkbuilt; and (vi) members of the TTIMit Group conspired together to solicit DIRTT employees and Construction Partners, design and sell competing products using DIRTT's confidential information, including DIRTT's pricing lists, DIRTT's product designs, DIRTT's personnel information, and revenue forecast information for DIRTT's Construction Partners. DIRTT is seeking, among other things, an order stopping the defendants from competing with DIRTT, judgment for damages and losses, and an accounting and disgorgement of the defendants' gains from their wrongful misconduct. In April 2022, DIRTT filed a summary judgment application seeking an expedited, pre-trial, final determination of our claims against the defendants. We expect this application to be heard in the first half of 2023.

In the Utah Misappropriation Case, the Court dismissed certain of the defendants, Falkbuilt Ltd., Falkbuilt, Inc. and Mogens Smed without prejudice, finding that Utah was an inconvenient forum. We appealed that ruling and the appeal was heard in November 2022. The remaining portion of the Utah Misappropriation Case is stayed pending resolution of the appeal.

In the Texas Unfair Competition Case, the Court dismissed our complaint finding that Texas was an inconvenient forum. We disagree with the decision and have filed a notice of appeal with the Fifth Circuit Court of Appeals. The appeal is stayed pending resolution of the appeal in the Utah Misappropriation Case.

Falkbuilt also filed a lawsuit against us on November 5, 2019 in the Court of Queen's Bench of Alberta, alleging that DIRTT has misappropriated and misused their alleged proprietary information in furtherance of DIRTT's product development. Falkbuilt seeks monetary relief and an interim, interlocutory and permanent injunction of DIRTT's alleged use of the alleged proprietary information. We believe that the suit is without merit and filed an application for summary judgment to dismiss Falkbuilt's claim.

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.

Market Information; Holders of Record

Our common shares are traded on the TSX under the symbol "DRT" and on Nasdaq under the symbol "DRTT."

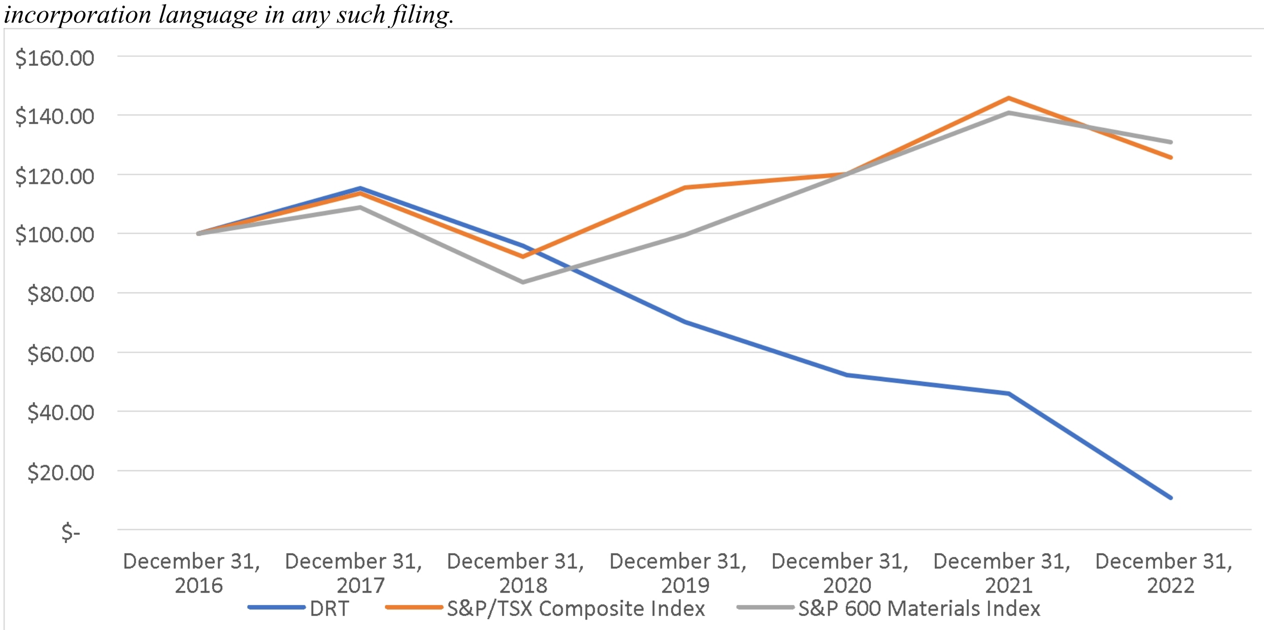
As of February 17, 2023, there were 97,961,655 common shares outstanding and 169 shareholders of record.

Dividends

We have not declared or paid any cash dividends on our common shares to date. The declaration and payment of dividends is at the discretion of the Board, taking into account (i) our earnings, capital requirements and financial condition, (ii) restrictions on our ability to pay dividends under our RBC Facility (as defined below), and (iii) such other factors as the Board considers relevant. Our RBC Facility generally limits our ability to pay any dividends or make any other distribution on our outstanding common shares. See Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations – Credit Facility" for more information. If and when our Board declares cash dividends on our common shares, such dividends may be declared and paid in either U.S. dollars or Canadian dollars.

Performance Graph

The following graph illustrates a comparison of the total cumulative shareholder return of our common shares with the cumulative return of the S&P/TSX Composite Index and the S&P 600 Materials Index for the period commencing December 31, 2016 and ending on December 31, 2022. The graph assumes an initial investment of $100 on December 31, 2016, in our common shares, the shares comprising the S&P/TSX Composite Index, and the shares comprising the S&P 600 Materials Index The below shareholder return calculations are based on the exchange rates as reported by the H.10 statistical release of the Board of Governors of the Federal Reserve System as of the year-end exchange rate for the applicable period. The comparisons in the table are required by the SEC and applicable securities laws in Canada and are not intended to forecast or be indicative of possible future performance of our common shares. *This graph and related materials shall not be deemed "soliciting material" or be deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities under that section, and shall not be deemed to be incorporated by reference into any of our filings under the Securities Act of 1933, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.*



$100 Investment in stock or index	Ticker	December 31, 2016	December 31, 2017	December 31, 2018	December 31, 2019	December 31, 2020	December 31, 2021	December 31, 2022
DIRTT Environmental Solutions Ltd	DRT	$ 100.00	$ 115.30	$ 95.89	$ 70.21	$ 52.22	$ 46.09	$ 10.92
S&P/TSX Composite Index	SPTSX	$ 100.00	$ 113.73	$ 92.19	$ 115.61	$ 120.05	$ 145.88	$ 125.81
S&P 600 Materials Index	SML	$ 100.00	$ 108.78	$ 83.65	$ 99.55	$ 120.04	$ 140.93	$ 130.92

Recent Sales of Unregistered Securities; Issuer's Purchases of Equity Securities

None.

Item 6. [Reserved]

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

You should read the following discussion and analysis of our financial condition and results of operations for the fiscal years ended December 31, 2022 and 2021 together with our consolidated financial statements and related notes and other financial information appearing in this Annual Report. The discussion contains forward-looking statements reflecting our current expectations and estimates and assumptions concerning events and financial trends that may effect our future operating results or financial position. Actual results and the timing of events may differ materially from those contained in these forward-looking statements due to a number of factors, including those described under the headings "Risk Factors" and "Special Note Cautionary Statement Regarding Forward Looking Statements" appearing elsewhere in the Annual Report.

Summary of Financial Results

DIRTT Environmental Solutions Ltd. and its subsidiary ("DIRTT", the "Company", "we" or "our") is a leader in industrialized construction for interior spaces. DIRTT's system of physical products and digital tools empowers organizations, together with construction and design leaders, to build high-performing, adaptable, interior environments. Operating in the workplace, healthcare, education, and public sector markets, DIRTT's system provides total design freedom, and greater certainty in cost, schedule, and outcomes.

DIRTT's proprietary design integration software, ICE® ("ICE" or "ICE software"), translates the vision of architects and designers into a 3D model that also acts as manufacturing information. ICE is also licensed to unrelated companies and Construction Partners of the Company.

Key Fourth Quarter 2022 Highlights

- The Company announced and successfully implemented a price increase of approximately 6.5% in November 2021. In addition, price increases of 5% and 10% were announced and implemented during June and July 2022, respectively. As of the fourth quarter of 2022, our revenue reflects the impact of virtually all of these price increases.
- Revenues for the fourth quarter of 2022 were $42.4 million, a decrease of $0.5 million or 1% from $42.9 million for the same period in 2021, and a $4.3 million or 9% decrease from the third quarter of 2022. Our fourth quarter of 2021 benefited from the price increases announced in November of that year, which motivated various customers to accelerate order and deliveries to avoid the price increases. As such, and compared to prior year, the improvement in revenue from the pricing actions discussed above, was offset by a return to a more seasonal demand pattern and higher incidents of project push-out rates. Sequentially, this is more pronounced given the increased seasonal demand during the months within the third quarter of 2022.
- Gross profit and gross profit margin for the fourth quarter of 2022 was $11.6 million or 27.3% of revenue, an increase of $3.2 million or 38% from $8.4 million or 19.6% of revenue for the same period of 2021, and an increase of $4.6 million or 65% from $7.0 million in the third quarter of 2022.
- Adjusted Gross Profit (see "– Non-GAAP Financial Measures") for the fourth quarter of 2022 was $13.6 million. This represents a $3.4 million or 33.4% increase over the third quarter of 2022 and a $2.7 million or 25.3% increase over the fourth quarter of 2021. Adjusted Gross Profit Margin (see "– Non-GAAP Financial Measures") for the fourth quarter of 2022 was 32.0%, a 1030 bps improvement over the third quarter of 2022 and a 670 bps improvement over the fourth quarter of 2021. The improved Adjusted Gross Profit and Adjusted Gross Profit Margin were driven by commercial discipline as well as the realization of most of our price increases discussed above. Beyond the more efficient recovery of material input costs through the pricing actions taken in 2022, general inflation in services and labor costs have been offset by the favorable impact from the weakening Canadian dollar.
- Net loss for the fourth quarter of 2022 was $5.9 million compared to $16.0 million for the same period of 2021. The lower net loss is primarily the result of the higher gross profit margin, explained above, of $3.2 million, a $0.2 million decrease in foreign exchange loss and a $9.7 million reduction in operating expenses offset by a $1.0 million decrease in government subsidies, a $0.2 million increase in interest expense, $0.6 million of tax expense and $1.2 million of reorganization costs. During the fourth quarter we benefited from the weakening Canadian dollar on Canadian dollar denominated costs.
- Adjusted EBITDA (see "– Non-GAAP Financial Measures") for the fourth quarter of 2022 was $0.6 million or 1.4% of revenue, an improvement of $10.3 million from a $9.7 million loss or (22.7)% of revenue for the fourth quarter of 2021 and an improvement of $6.0 million from a $5.4 million loss or (11.6)% of revenue for the third quarter of 2022.

- On November 30, 2022, the Company issued 8.7 million shares in a private placement to its two largest shareholders and all of its directors and executive officers for aggregate gross consideration of approximately $2.8 million (the "Private Placement"). Concurrent with the Private Placement, the Company's two largest shareholders collectively committed to purchase common shares having an aggregate subscription price of not less than $2.0 million in any rights offering conducted by the Company on or before November 30, 2023.
- The Company generated approximately $3.8 million of cash in the fourth quarter compared to cash used of $21.3 million, $19.1 million and $12.5 million in the first, second and third quarters of 2022, respectively. Our improved fourth quarter of 2022 cash flow was driven by proceeds from the Private Placement discussed above, improvement in Adjusted EBITDA and improved working capital management, offset by approximately $1.2 million ($13.5 million full year) of reorganization costs.

Key Annual 2022 Highlights

- Revenues for the year ended December 31, 2022 were $172.2 million, an increase of $24.6 million or 17% from $147.6 million for the year ended December 31, 2021 driven primarily by the pricing actions discussed above and an increase in demand, primarily from the COVID impacted periods during 2021.
- Gross profit for the year ended December 31, 2022 was $28.2 million or 16.4% of revenue, an increase of $4.7 million or 20% from $23.5 million or 15.9% of revenue for the year ended December 31, 2021. Included in gross profit is inventory write-downs of $1.0 million (0.6% of total revenue), primarily related to the discontinuance of the Reflect and other product lines and accelerated amortization and depreciation of $2.1 million on discontinued product lines and the closure of the Phoenix Facility.
- Adjusted Gross Profit (see "– Non-GAAP Financial Measures") for the year ended December 31, 2022 was $39.0 million, an increase of $4.9 million or 14.7% of revenue from $34.0 million or 23.1% of revenue for the year ended December 31, 2021. Adjusted Gross Profit Margin (see "– Non-GAAP Financial Measures") for the year ended December 31, 2022 was 22.6%, a 500 bps decline from 23.1% for the year ended December 31, 2021. 2022 results include certain inventory write-downs of $1.0 million (0.6% of revenue), primarily related to the discontinuance of the Reflect and other product lines. The improved Adjusted Gross Profit and Adjusted Gross Profit Margin were driven by a combination of improved demand for our products and commercial discipline. Beyond the more efficient recovery of material input costs through the pricing actions taken in 2022, general inflation in services and labor costs have been offset by the favorable impact from the weakening Canadian dollar.
- Management has taken steps to align our manufacturing footprint and salaried workforce with our current activity levels as well as cost reduction and profitability initiatives. In February 2022, we announced the closure of our Phoenix Facility and elimination of manufacturing and office positions. In July 2022, we announced a further reduction of salaried positions and in August 2022, we announced the temporary closure of our Rock Hill Facility as the Calgary manufacturing facility has sufficient capacity to absorb production and meet expected demand for the near term.
- Net loss for the year ended December 31, 2022 was $55.0 million compared to $53.9 million for the year ended December 31, 2021. The higher net loss is primarily the result of the above noted increase in gross profit offset by a $1.8 million increase in operating expenses which included $13.5 million of reorganization costs (added back to Adjusted EBITDA), a $2.0 million increase in interest expense, a $3.7 million decrease of government subsidies and a $0.2 million increase in income tax expense. These decreases were partially offset by an increase of $1.8 million in foreign exchange gain. The Company benefited from a weakening Canadian dollar on Canadian dollar denominated costs compared to the prior year.
- Adjusted EBITDA (see "– Non-GAAP Financial Measures") for the year ended December 31, 2022 was a $26.2 million loss or (15.2)% of revenue, an improvement of $15.1 million from a $41.3 million loss or (28.0)% of revenue for the year ended December 31, 2021 for the above noted reasons.
- The Company continues to evaluate certain non-dilutive, strategic initiatives expected to generate additional cash flows in the first half of 2023.

Outlook

Annual revenue of $172.2 million fell just below the low end of the guidance range of $175 million to $185 million set during the second quarter of 2022, primarily driven by jobsite and project delays.

During 2022, our key focus was on stabilizing the Company's balance sheet, slowing the pace of cash usage and implementing a number of initiatives designed to optimize both the cost and pricing structure. As early as the third quarter of 2022, we began seeing the improved financial effects of these changes. During the fourth quarter, this was even more magnified as Adjusted Gross Profit returned to greater than 30% for the first time since 2020. Improvements in operational and supply chain led to reductions in labor and inventory carrying costs during the fourth quarter. Further, we reduced costs needed to operate our back office and general and administrative overhead to levels commensurate with our current and expected revenue levels.

We take great pride in our products' ability to adjust and conform to a changing workplace. Our ability to adapt and respond to an unknown future is at the core of our value proposition. During 2022, we made adjustments, and in some cases, discontinued certain product lines that did not align with this value; our Reflect wall line principally among them.

As we shift to 2023, we expect to leverage each of the changes made during 2022, as well as being much more focused on disciplined spending and continuing to ensure our investments align with our available cash and growth expectations.

As of January 1, 2023, our 12-month forward pipeline, which represents known projects and leads at various stages of maturation which our sales teams are working to convert into orders, was $391 million, in line with October 1, 2022, and 26% higher than the $311 million balance as of January 1, 2022. The increase over prior year is driven by a combination of higher pricing and the volume impact of the higher secured projects where the required shipment dates have pushed out due to stretched construction schedules, experienced in the fourth quarter of 2022. The pipeline comprises 62% commercial, 20% healthcare, 7% education and 11% government verticals. The relative split between verticals remains consistent with pre-pandemic actual percentage results.

The January 2023 pipeline is not only higher than January 2022, but we also believe it is healthier. The percentage of projects we believe are at the stage of the project lifecycle where the project has been costed and budgeted for the next twelve months has increased. Thus, while the macro-economic conditions impacting DIRTT continue to be volatile, we believe we have a better project outlook today, than one year ago. While we are encouraged by the pipeline growth, our order pace and quarterly revenue and supply chain forecasting continues to be challenged by the high push out rates and longer than normal engineering and design time associated with large and complex projects.

Our Construction Partners have been and remain a key element in our go-to-market strategy. Enhancing both partner effectiveness and accountability will again be a priority in 2023. Our Construction Partners are a direct conduit to many of our end customers and we recommenced a Partner Advisory Council to elevate partner feedback within our organization and provide further insight to support our commercial and operational decision making.

We continue to evaluate under-performing Construction Partners and are working to provide additional support and training to them. We have also placed an emphasis on those Construction Partners that have demonstrated a commitment to growth, commercial discipline, and collaborative success. We believe this approach will serve to strengthen our pipeline and provide a strong platform in which to drive better organic growth.

We are closely monitoring our cost structure, including the underlying materials that comprise our products. Although we believe we are insulated from the near-term effects of a recession in the United States or Canada, we are susceptible to the inflationary impact of labor and commodity pricing, particularly aluminum and wood.

In response to the risk associated with these items, we have taken additional actions over the past two months that will reduce annualized overhead costs by approximately $3 million to $5 million. These cost reductions are related to efficiencies and streamlining our back office and operational support functions, not pursuant to a planned restructuring program. We are also evaluating certain purchase arrangements that will hedge against inflation and volatility associated with our primary materials.

We believe that the combination of the growth in our sales pipeline, the improved margins from pricing actions already taken and reduced cost structure set us up well to deliver year over year growth in revenue, gross margin and Adjusted EBITDA during 2023.

The Company's current and immediate focus continues to be growing revenues, increasing profitability, and managing liquidity. Moving into 2023, the following items remain the focus of our management team:

- Re-focused training and development of our Construction Partner and employee base surrounding our go-to-market strategy.
- Continued offering of customer friendly incentives designed to improve volume and price certainty (e.g., price lock guarantee, quick pay discounts, rebate programs, etc.).
- Establishing customer loyalty programs that will provide concierge level service to Construction Partners and end customers based on various volume, project, and forecast accuracy metrics.
- Executing upon several supply chain optimization projects designed to improve Sales and Operational Planning and reduce slow moving and/or obsolete inventory items.
- Tightly managing discretionary spend and overtime during periods of order volatility.

As many of our end customers continue implementing ‘return to work’ strategies, we have seen many cases where there is a strong need to modify their workspace to accommodate a more flexible environment in the short-term, which in turn could change again over the medium- to long-term as post-pandemic requirements continue to evolve. Additionally, many organizations in different sectors are trying to enhance their physical presence in local communities by adopting a single design model that works in multiple jurisdictions. We believe we are well-positioned to capitalize on both trends.

In 2023, we expect to deliver low to mid-single digit growth in revenue and see higher gross margins, net income (loss) and Adjusted EBITDA compared to 2022. We also expect to continue to stabilize the balance sheet and grow unrestricted cash through a combination of improved financial performance and contribution from our non-dilutive cash initiatives previously discussed.

We may opportunistically take actions to improve our debt and equity structure, though we anticipate that that Company's cash flows from operations and current financing source will be sufficient for the cash needs of the Company in 2023.

Non-GAAP Financial Measures

Note Regarding Use of Non-GAAP Financial Measures

Our consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”). These GAAP financial statements include non-cash charges and other charges and benefits that we believe are unusual or infrequent in nature or that we believe may make comparisons to our prior or future performance difficult.

As a result, we also provide financial information in this Annual Report that is not prepared in accordance with GAAP and should not be considered as an alternative to the information prepared in accordance with GAAP. Management uses these non-GAAP financial measures in its review and evaluation of the financial performance of the Company. We believe that these non-GAAP financial measures also provide additional insight to investors and securities analysts as supplemental information to our GAAP results and as a basis to compare our financial performance period-over-period and to compare our financial performance with that of other companies. We believe that these non-GAAP financial measures facilitate comparisons of our core operating results from period to period and to other companies by removing the effects of our capital structure (net interest income on cash deposits, interest expense on outstanding debt and debt facilities, or foreign exchange movements), asset base (depreciation and amortization), the impact of under-utilized capacity on gross profit, tax consequences and stock-based compensation. We remove the impact of all foreign exchange from Adjusted EBITDA. Foreign exchange gains and losses can vary significantly period-to-period due to the impact of changes in the U.S. and Canadian dollar exchange rates on foreign currency denominated monetary items on the balance sheet and are not reflective of the underlying operations of the Company. We remove the impact of under-utilized capacity from gross profit, and fixed production overheads are allocated to inventory on the basis of normal capacity of the production facilities. In periods where production levels are abnormally low, unallocated overheads are recognized as an expense in the period in which they are incurred. In addition, management bases certain forward-looking estimates and budgets on non-GAAP financial measures, primarily Adjusted EBITDA.

Government subsidies, depreciation and amortization, stock-based compensation expense, reorganization expenses, foreign exchange gains and losses and impairment expenses are excluded from our non-GAAP financial measures because management considers them to be outside of the Company’s core operating results, even though some of those receipts and expenses may recur, and because management believes that each of these items can distort the trends associated with the Company’s ongoing performance. We believe that excluding these receipts and expenses provides investors and management with greater visibility to the underlying performance of the business operations, enhances consistency and comparativeness with results in prior periods that do not, or future periods that may not, include such items, and facilitates comparison with the results of other companies in our industry.

The following non-GAAP financial measures are presented in this Annual Report, and a description of the calculation for each measure is included.

Adjusted Gross Profit	Gross profit before deductions for costs of under-utilized capacity, depreciation and amortization
Adjusted Gross Profit Margin	Adjusted Gross Profit divided by revenue
EBITDA	Net income before interest, taxes, depreciation and amortization
Adjusted EBITDA	EBITDA adjusted to remove foreign exchange gains or losses; impairment expenses; reorganization expenses; stock-based compensation expense; government subsidies; and any other non-core gains or losses
Adjusted EBITDA Margin	Adjusted EBITDA divided by revenue

You should carefully evaluate these non-GAAP financial measures, the adjustments included in them, and the reasons we consider them appropriate for analysis supplemental to our GAAP information. Each of these non-GAAP financial measures has important limitations as an analytical tool due to exclusion of some but not all items that affect the most directly comparable GAAP financial measures. You should not consider any of these non-GAAP financial measures in isolation or as substitutes for an analysis of our results as reported under GAAP. You should also be aware that we may recognize income or incur expenses in the future that are the same as, or similar to, some of the adjustments in these non-GAAP financial measures. Because these non-GAAP financial measures may be defined differently by other companies in our industry, our definitions of these non-GAAP financial measures may not be comparable to similarly titled measures of other companies, thereby diminishing their utility.

Results of Operations

Year Ended December 31, 2022 Compared to the Year Ended December 31, 2021

	For the Year Ended December 31,		
	2022	2021	% Change
		($ in thousands)	
Revenue	172,161	147,593	17
Gross Profit[(1)]	28,160	23,460	20
Gross Profit Margin	16.4%	15.9%	
Operating Expenses			
Sales and Marketing	26,950	31,041	(13)
General and Administrative	25,462	30,595	(17)
Operations Support	9,498	9,372	1
Technology and Development	7,555	8,234	(8)
Stock-Based Compensation	4,277	4,713	(9)
Reorganization	13,461	-	100
Goodwill Impairment	-	1,443	(100)
Total Operating Expenses	**87,203**	**85,398**	**2**
Operating Loss	**(59,043)**	**(61,938)**	**5**
Operating Margin	**(34.3)%**	**(42.0)%**	

(1) Gross Profit for the year ended December 31, 2022 includes $1.0 million primarily related to the write off of inventory of discontinued product lines, and $2.1 million of accelerated depreciation and amortization on software associated with discontinued product lines and the closure of the Phoenix Facility

Revenue

The following table sets forth the contribution to revenue of our DIRTT Solutions and related offerings.

	For the Year Ended December 31,		
	2022	2021	% Change
		($ in thousands)	
Product	147,448	129,031	14
Transportation	18,030	13,231	36
License fees from Construction Partners	778	738	5
Total product revenue	**166,256**	**143,000**	**16**
Installation and other services	5,905	4,593	29
	172,161	**147,593**	**17**

In response to significant increases in the costs of raw materials, shipping materials, labor, and freight, effective November 16, 2021, DIRTT increased product and transportation prices on new projects by approximately 6.5%. On February 17, 2022, we implemented a further price increase of 5% that came into effect June 1, 2022. On June 21, 2022 an additional price increase of 10% was announced effective July 21, 2022. As of the fourth quarter of 2022, product sales reflect virtually all of these price increases. The first quarter of 2022 marked the transition of the COVID-19 pandemic to an endemic with the broad easing of health restrictions, including work-from-home mandates, across North America. While the resurgence in COVID-19 infections due to the Omicron variant at the beginning of the year temporarily sent many employees back to their home offices and delayed return dates, the Company and our Construction Partners experienced an uptick in planning activity and opportunity growth in our commercial vertical which began to translate into an increase in orders beginning in March 2022.

During the year ended December 31, 2022, revenue was $172.2 million, an increase of $24.6 million or 17% from the year ended December 31, 2021. The improvement in revenue was driven by the pricing actions and increased product demand discussed above, offset by secured projects where the required shipment dates have pushed out due to stretched construction schedules increased. Further, 2021 revenue benefited from the price increases announced in November 2021, which motivated various customers to accelerate order and deliveries into 2021 to avoid the price increases. During the fourth quarter of 2022, we returned to a normalized seasonal demand pattern.

Installation and other services revenue was $5.9 million for the year ended December 31, 2022 compared to $4.6 million in the year ended December 31, 2021. This revenue primarily reflects services performed by our ICE and design teams for third parties. Except in limited circumstances, our Construction Partners, rather than the Company, perform installation services, and accordingly, we are not anticipating significant growth in this revenue stream.

Our success is partly dependent on our ability to profitably develop our Construction Partner network to expand our market penetration and ensure best practices are shared across local markets. At December 31, 2022, we had 67 (December 31, 2021: 69) Construction Partners servicing multiple locations. In February 2022, we announced the establishment of a Partner Advisory Council to provide a greater link with Construction Partners and end clients who they service. The Partner Advisory Council will offer advice on sales and marketing, product issues and new market needs, market conditions, competitive landscape, and other related areas of mutual interest.

We periodically analyze our revenue growth by vertical markets in the defined markets of commercial, healthcare, government and education. The following table presents our product and transportation revenue by vertical market.

	For the Year Ended December 31,		
	2022	2021	% Change
	($ in thousands)		
Commercial	115,102	84,488	36
Healthcare	19,739	30,130	(34)
Government	16,564	16,012	3
Education	14,073	11,632	21
License fees from Construction Partners	778	738	5
Total product revenue	**166,256**	**143,000**	**16**
Service revenue	5,905	4,593	29
	172,161	**147,593**	**17**

	For the Year Ended December 31,	
	2022	2021
	(in %)	
Commercial	70	60
Healthcare	12	21
Government	10	11
Education	8	8
Total Product Revenue[(1)]	**100**	**100**

(1) Excludes license fees from Construction Partners.

Commercial revenues increased by 36% in the year ended December 31, 2022 from the prior year, reflecting improving market conditions as health restrictions and work-from-home requirements ease and include one large customer in the technology sector with revenue of $8.8 million. Healthcare decreased by 34% in the year ended December 31, 2022 from the prior year. Such sales tend to be larger individual projects and are subject to timing due to a typically longer sales cycle, resulting in variability in sales levels. In 2021, we had one large healthcare customer with revenue of $9.6 million which did not recur in 2022.

Education sales in 2022 increased by 21% over the prior year. At the beginning of the pandemic, education spending effectively paused with many institutions suspending in-person classes. There were no individually significant education projects and the increases represent higher volumes of projects due to the easing of health restrictions and many students returning to in-person learning. Government revenues in 2022 increased by 3% over 2021.

Revenue continues to be derived almost exclusively from projects in North America and predominantly from the United States. The following table presents our revenue dispersion by geography:

	For the Year Ended December 31,		
	2022	2021	% Change
		($ in thousands)	
Canada	25,477	17,299	47
U.S.	146,684	130,294	13
	172,161	**147,593**	**17**

Historically, approximately 15-25% and 75-85% of revenues are derived from sales to Canada and the United States, respectively. In 2020 and 2021, revenues from Canada fell to 11% and 12%, respectively, of total sales while sales to the United States increased to 89% and 88%, respectively, of total sales. COVID-19 infection rates and resulting regulatory responses by governments and public health officials have varied significantly by region, impacting the relative contribution of sales from each country. The geographical split for 2022 returned to historical averages and reflects the easing of health restrictions in Canada which occurred later than in the United States.

Sales and Marketing Expenses

Sales and marketing expenses decreased by $4.1 million to $27.0 million for the year ended December 31, 2022 from $31.0 million for the year ended December 31, 2021. The decrease was largely related to a decrease of $3.8 million in salaries and benefits costs and $0.7 million decrease in depreciation expense. The decreases were offset by $0.6 million increase in travel, meals and entertainment expenses as business activity has increased with the easing of restrictions during 2022.

General and Administrative Expenses

General and administrative (“G&A”) expenses decreased $5.1 million to $25.5 million for the year ended December 31, 2022 from $30.6 million for the year ended December 31, 2021. The decrease was related to a $3.3 million decrease in salaries and benefits costs associated with the planned headcount reductions as part of our cost savings initiatives, a $2.0 million decrease in professional services costs and a $0.7 million decrease in depreciation expense, offset by a $0.9 million increase in costs incurred associated with the contested election of directors to $1.8 million in 2022 from $0.9 million in 2021. The decreases were partially offset by increased office costs as employees returned to work during 2022.

Operations Support Expenses

Operations support is comprised primarily of project managers, order entry and other professionals that facilitate the integration of our Construction Partner project execution and our manufacturing operations. Operations support expenses of $9.5 million in 2022 increased marginally from $9.4 million in 2021. The increase was due to lower capitalized hours in 2022 compared to 2021 as there were limited internal design projects compared to the prior year. The increases were offset by lower travel, meals and entertainment costs compared to 2021.

Technology and Development Expenses

Technology and development expenses relate to non-capitalizable costs associated with our product and software development teams and are primarily comprised of salaries and benefits of technical staff.

Technology and development expenses decreased by $0.7 million to $7.6 million for the year ended December 31, 2022, compared to $8.2 million for the year ended December 31, 2021, primarily related to decreased salaries and benefits costs and professional fees in the current year offset by a decrease in capitalized software development costs.

Stock-Based Compensation

Stock-based compensation expense for the year ended December 31, 2022 was $4.3 million compared to $4.7 million in 2021. The movement in this expense was largely the impact of grants of RSUs to the Company's employees, including those in lieu of cash compensation to the Company’s former interim Chief Executive Officer in January 2022 and DSUs granted to the Board of Directors, lowered by the impact of fair value adjustments on cash settled awards as a result of our share price decreasing during the year ended December 31, 2022. The Board of Directors receives 100% of their remuneration in DSUs.

Goodwill Impairment

We test goodwill for impairment annually during the fourth quarter of the calendar year. Due to the impact of the COVID-19 pandemic on our financial results in 2021, we determined it was necessary to use the quantitative approach to perform our goodwill impairment test. Based on our testing, the fair value of goodwill did not exceed the carrying value of its net assets and, accordingly, the entire $1.4 million balance of goodwill was impaired as at December 31, 2021. There was no impairment charge for the year ended December 31, 2022.

Reorganization

For the year ended December 31, 2022, we incurred $13.5 million of reorganization costs. Reorganization costs for the year include insurance costs incurred on change of control of the Board of Directors following the contested director elections, costs associated with the closure of the Phoenix Facility, costs associated with the temporary suspension of operations at the Rock Hill Facility and termination benefits associated with these changes, cost reduction initiatives explained below and management changes that occurred during the year.

We have undertaken several initiatives to align our manufacturing footprint with our current activity levels. This included the closure of the Phoenix Facility completed in the second quarter of 2022, with related manufacturing to be undertaken by both our Savannah and Calgary Facilities. Of the initial estimate of cost savings of approximately $2.4 million from this closure, we expect to realize annualized savings of approximately $1.0 million, as $1.4 million of work force reductions were offset by additions in Calgary and Savannah due to increased demand. On August 23, 2022, we announced the temporary closure of our Rock Hill Facility, as the Calgary Facility has sufficient capacity to absorb production and meet expected demand for the near term.

Additionally, in February 2022, we announced a reduction of our salaried workforce including manufacturing and office positions which, along with other cost reduction initiatives, were expected to yield annualized savings of approximately $13.0 million. The reductions were followed by a further reduction of salaried positions, as announced in July 2022, and the temporary closure of our Rock Hill Facility, announced in August 2022, which are expected to result in approximately $5.0 million in annualized savings. Of these cost reduction initiatives, $15.0 million was implemented during 2022. $3.0 million comprising of certain manufacturing positions and other cost reductions, has been deferred as we work to increase manufacturing headcount in light of increased demand.

Government Subsidies

Government subsidies for the year ended December 31, 2022 was $7.8 million compared to $11.5 million for the same period of 2021. During the third quarter of 2022, the Company determined it was eligible for the Employee Retention Credit ("ERC") in the United States. The ERC is a refundable payroll tax credit based on qualified wages paid by an eligible employer between March 12, 2020, and October 1, 2021 for companies experiencing a significant decline in gross receipts during a calendar quarter or having operations fully or partially suspended during the quarter due to COVID-19. The Company is eligible for ERC for the first three quarters of 2021 and has filed a claim for $7.3 million in payroll tax credits ($7.1 million net of expenses). As of December 31, 2022 these credits have not been received and are included in other receivables in the balance sheet.

2021 government subsidies related to the Canadian Emergency Wage Subsidy ("CEWS") and the Canadian Emergency Rent Subsidy ("CERS"). At December 31, 2021, all amounts recorded at December 31, 2021 were collected. The last claim period under the CEWS and CERS programs ended on October 23, 2021. The Company is not eligible for and did not receive any new Canadian government subsidies in year ended December 31, 2022.

Interest expense

Interest expense increased by $2.0 million from $3.1 million for the year ended December 31, 2021 to $5.1 million for the year ended December 31, 2022. The increased interest expense is a result of the issuance of C$35.0 million ($27.4 million) of Debentures in December 2021 and draws on the Leasing Facilities.

Income Tax

The provision for income taxes comprises U.S. and Canadian federal, state and provincial taxes based on pre-tax income. Income tax expense for the year ended December 31, 2022 was $0.02 million, compared to a $0.2 million recovery for the same period of 2021. For the year ended December 31, 2022, the Company recorded valuation allowances of $13.6 million (2021 - $12.0 million) against deferred tax assets due to operating losses-which impacted our ability to generate sufficient taxable income in Canada and the United States to fully deduct historical losses. As at December 31, 2022, we had C$106.7 million of loss carry-forwards in Canada and $55.7 million in the United States. These loss carry-forwards will begin to expire in 2032.

Net Loss

Net loss increased to $55.0 million or $0.63 net loss per share in the year ended December 31, 2022 from a net loss of $53.7 million or $0.63 net loss per share for the year ended December 31, 2021. The increased loss is primarily the result of a $1.8 million increase in operating expenses (which includes $13.5 million of reorganization expenses), a $2.0 million increase in interest expense, a $3.7 million decrease in government subsidies, and a $0.2 million increase in income tax expense. These decreases were offset by a $4.7 million increased gross profit and $1.8 million increase in foreign exchange gains.

Three Months Ended December 31, 2022 Compared to the Year Ended December 31, 2021

	For the three months ended December 31,		
	2022	2021	% Change
		($ in thousands)	
Revenue	42,427	42,928	(1)
Gross Profit[1]	11,589	8,416	38
Gross Profit Margin	27.3%	19.6%	
Operating Expenses			
Sales and Marketing	5,856	9,271	(37)
General and Administrative	4,050	8,028	(50)
Operations Support	2,151	2,488	(14)
Technology and Development	1,841	2,229	(17)
Stock-Based Compensation	731	921	(21)
Reorganization	1,180	-	NA
Goodwill Impairment	-	1,443	(100)
Total Operating Expenses	**15,809**	**24,380**	**(35)**
Operating Loss	**(4,220)**	**(15,964)**	**74**
Operating Margin	**(9.9)%**	**(37.2)%**	

Annual 2022 Non-GAAP Measures

Adjusted Gross Profit and Adjusted Gross Profit Margin for the Years Ended December 31, 2022, 2021 and 2020

The following table presents a reconciliation for the years ended December 31, 2022, 2021, and 2020 of Adjusted Gross Profit to our gross profit and Adjusted Gross Profit Margin to gross profit, which are the most directly comparable GAAP measures for the periods presented:

	For the Year Ended December 31,		
	2022	2021	2020
		($ in thousands)	
Gross profit	**28,160**	**23,460**	**53,283**
Gross profit margin	**16.4%**	**15.9%**	**31.1%**
Add: Depreciation and amortization expense	10,789	8,808	8,110
Add: Costs of under-utilized capacity	-	1,756	2,010
Adjusted Gross Profit	**38,949**	**34,024**	**63,403**
Adjusted Gross Profit Margin	**22.6%**	**23.1%**	**37.0%**

For the year ended December 31, 2022, gross profit and gross profit margin increased to $28.2 million or 16.4% from $23.5 million or 15.9% in the prior year. Adjusted Gross Profit increased to $38.9 million and Adjusted Gross Profit Margin decreased to 22.6% for the year ended December 31, 2022, from $34.0 million or 23.1% for the year ended December 31, 2021. The 0.5% decrease in Adjusted Gross Profit Margin was a result of increased materials, transportation, packaging and other variable costs incurred prior to the effect date of the announced price increases, offset by the price actions discussed above. As a result of higher sales activities, gross profit benefited by 9.2% and 11.9% on utilization of labor and fixed costs, respectively. Labor costs increased $1.5 million for the year-to-date period as we incurred incremental costs during the second quarter associated with moving production to the Calgary and Savannah Facilities following the closure of the Phoenix Facility, rate increases, and adding capacity following an improvement in demand. Fixed costs increased $0.8 million due to cost inflation and the impact of adding the Rock Hill Facility in 2021 to the fixed cost base. In 2022 we incurred a $0.8 million charge, or 0.5% related to Reflect and other discontinued product lines. 2021 Adjusted Gross Profit benefited from the removal of $1.8 million, or 1.2% Adjusted Gross Profit impact, on under-utilized capacity not captured in product costs. 2022 gross profit was impacted by $2.1 million of incremental depreciation and amortization on the acceleration of useful lives associated with discontinued product lines and the Phoenix Facility. Gross profit for the year ended 2022 benefited by approximately $1.5 million from the impact of the weakening Canadian dollar on U.S. dollar reported results, which is included in the above variances.

During the first quarter of 2020, we determined that we were carrying abnormal excess capacity in our manufacturing facilities as a result of the slowdown in sales and determined certain production overheads should be directly expensed in cost of sales, representing production overheads that were not attributable to production. In the first quarter of 2021, we experienced the full impact of the slowdown in non-residential construction activity on our business. In anticipation of a recovery in demand for our products and services and to preserve our skilled workforce, we deliberately maintained manufacturing headcount, while implementing selective furlough days, in the first quarter of 2021 despite the shortfall in revenues relative to capacity. As a result, in the first quarter of 2021 we separately classified $1.8 million as costs related to our under-utilized capacity (1.2% of 2021 first quarter gross profit margin) in cost of sales. For the remaining quarters of 2021 and 2022, we did not have abnormal excess capacity as our workforce was better aligned with current production volumes.

In August 2022 we announced the temporary suspension of operations at the Rock Hill Facility. Idle facility costs incurred since suspension of operations of $0.5 million are included in cost of sales.

EBITDA and Adjusted EBITDA for the Years Ended December 31, 2022, 2021 and 2020

The following table presents a reconciliation for the results of 2022, 2021 and 2020 of EBITDA and Adjusted EBITDA to our net loss, which is the most directly comparable GAAP measure for the years presented:

	For the Year Ended December 31,		
	2022	2021	2020
		($ in thousands)	
Net loss for the period	(54,963)	(53,668)	(11,298)
Add back (deduct):			
Interest Expense	5,160	3,131	305
Interest Income	(51)	(77)	(238)
Tax expense (recovery)	21	(204)	2,104
Depreciation and Amortization	15,119	14,513	11,706
EBITDA	**(34,714)**	**(36,305)**	**2,579**
Foreign Exchange Gains	(1,445)	335	576
Stock-Based Compensation	4,277	4,713	2,351
Government Subsidies	(7,765)	(11,455)	(12,721)
Reorganization Expense	13,461	-	-
Goodwill Impairment	-	1,443	-
Adjusted EBITDA	**(26,186)**	**(41,269)**	**(7,215)**
Net Loss Margin[1]	**(31.9)%**	**(36.4)%**	**(6.6)%**
Adjusted EBITDA Margin	**(15.2)%**	**(28.0)%**	**(4.2)%**

(1) Net loss divided by revenue.

For the year ended December 31, 2022, Adjusted EBITDA and Adjusted EBITDA Margin increased by $15.1 million to a $26.2 million loss or (15.2)% from $41.3 million loss or (28.0)% in the same period of 2021. This reflects a $4.9 million increase in Adjusted Gross Profit and $1.8 million in lower costs of underutilized capacity, discussed above, a $7.0 million decrease in salary and wage expenses reflecting the impact of headcount reductions resulting from restructuring activities during 2022, $1.2 million of decreased professional fees, as well as the impact of a weakening Canadian dollar relative to the US dollar on Canadian-based operating expenses, excluding depreciation and stock-based compensation.

Reconciliation of Q4 2022 Non-GAAP Measures

Adjusted Gross Profit and Adjusted Gross Profit Margin for the Three Months Ended December 31, 2022, 2021 and 2020

The following table presents a reconciliation for the three months ended December 31, 2022, 2021, and 2020 of Adjusted Gross Profit to our gross profit, which is the most directly comparable GAAP measure for the periods presented:

	For the three months ended December 31,		
	2022	2021	2020
		($ in thousands)	
Gross profit	**11,589**	**8,416**	**11,540**
Gross profit margin	**27.3%**	**19.6%**	**27.4%**
Add: Depreciation and amortization expense	1,997	2,425	1,982
Add: Costs of under-utilized capacity	-	-	-
Adjusted Gross Profit	**13,586**	**10,841**	**13,522**
Adjusted Gross Profit Margin	**32.0%**	**25.3%**	**32.0%**

EBITDA and Adjusted EBITDA for the Three Months Ended December 31, 2022, 2021 and 2020

The following table presents a reconciliation for the three months ended results of 2022, 2021 and 2020 of EBITDA and Adjusted EBITDA to our net loss, which is the most directly comparable GAAP measure for the periods presented:

	For the three months ended December 31,		
	2022	2021	2020
		($ in thousands)	
Net loss for the period	(5,906)	(16,012)	(4,178)
Add back (deduct):			
Interest Expense	1,225	1,014	109
Interest Income	(1)	(15)	(16)
Tax expense (recovery)	37	(551)	(86)
Depreciation and Amortization	2,917	3,875	3,033
EBITDA	**(1,728)**	**(11,689)**	**(1,138)**
Foreign Exchange Gains	425	621	1,450
Stock-Based Compensation	731	921	751
Government Subsidies	-	(1,021)	(3,918)
Reorganization Expense	1,180	-	-
Goodwill Impairment	-	1,443	-
Adjusted EBITDA	**608**	**(9,725)**	**(2,855)**
Net Loss Margin[(1)]	**(13.9)%**	**(37.3)%**	**(9.9)%**
Adjusted EBITDA Margin	**1.4%**	**(22.7)%**	**(6.8)%**

(1) Net loss divided by revenue.

Year Ended December 31, 2021 Compared to the Year Ended December 31, 2020

Discussion and analysis of our financial condition and results of operations for the fiscal year ended December 31, 2021 compared to the fiscal year ended December 31, 2020 is included under the heading Item 7. “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, as filed with the SEC and applicable securities commissions or similar regulatory authorities in Canada on February 23, 2022.

Liquidity and Capital Resources

Cash and cash equivalents at December 31, 2022 totaled $10.8 million, an decrease of $49.5 million from December 31, 2021. The decrease in cash over the year primarily reflects the impact of $44.3 million of cash used in operations, of which $1.8 million related to one-time costs associated with the contested director elections and $13.5 million of reorganization costs. In addition, capital expenditures totaled $4.3 million and scheduled leasing repayments totaled $2.5 million.

The impact of COVID-19 on the Company’s sales and operations has been severe, including a contraction of demand since the beginning of the pandemic and more recently, significant inflation on raw material costs. This has resulted in a significant usage of cash which we have financed through existing cash on hand and external financings, as described further below. In response, we have implemented multiple initiatives during 2022 to reduce our overall fixed cost base and pricing actions to better recover the inflationary impacts to material, labor and transportation input costs, each of which has been discussed elsewhere in this Annual Report. During the second half of 2022, we began to realize the benefits of these actions. During the fourth quarter of 2022, cash and cash equivalents increased $4.0 million to $10.8 million from $6.8 million at September 30, 2022. The improved cash flow was driven by a combination of improved EBITDA from the pricing initiatives, cash flow provided from the working capital initiatives, and approximately $2.0 million of net proceeds received on the Private Placement during the quarter.

We expect the benefit of the actions discussed above to continue to be realized in 2023 and beyond. While these actions, combined with and our project pipeline are promising, we continue to see unpredictability in our pace of orders.

Accordingly, we are taking several actions to improve our balance sheet in the short term. First, we have determined our eligibility for the ERC for the first three quarters of 2021 and have filed a claim for $7.3 million in payroll tax credits ($7.1 million net of expenses). Second, we have certain properties that are currently owned that we are evaluating for sale and leasing back. We do not intend to vacate these premises as they still serve a valuable aspect of our value proposition, but we expect to receive a one-time cash payment, in exchange for future rent payments. Third, we are evaluating initiatives related to the use of ICE software by third parties to supplement the relatively small revenues we have previously recognized from our licensing of ICE software to certain strategic partners for use in their businesses and our related licensing and developer software support for these counterparties.

To finance the Company's short-term cash requirements, the Company entered into irrevocable subscription agreements with its two largest shareholders, 22NW and 726 and all the directors and officers of the Company on November 14, 2022 to issue 8.7 million shares for gross consideration of $2.8 million. The Private Placement closed on November 30, 2022. In addition, in connection with the Private Placement, 22NW and 726, or their principals, have irrevocably committed to backstopping any rights offering occurring by the Company within twelve months of closing the Private Placement in the aggregate amount of $2.0 million.

We have assessed the Company’s liquidity as at December 31, 2022 using multiple downside and upside scenarios, our sales outlook for the next twelve months in combination with existing cash balances, available credit facilities, the strategic transactions being evaluated and the Private Placement discussed previously, and potential equity or debt financing. Based upon this analysis, we believe the Company has sufficient liquidity to remain a going concern for at least the next 12 months. However, a number of factors, including our ability to satisfy the expected growth in pipeline demand and those discussed below, could adversely impact our liquidity over such period.

To the extent that existing cash and cash equivalents, available facilities and any increased liquidity from the aforementioned strategic actions are not sufficient to fund future activities, we may seek to raise additional funds through equity or debt financings. If additional funds are raised through the incurrence of indebtedness, such indebtedness may have rights that are senior to holders of our Debentures and our equity securities or contain instruments that may be dilutive to our existing shareholders. Any additional equity or debt financing may be dilutive to our existing shareholders. While we believe we can access capital markets when needed or under acceptable terms, there can be no assurance we will be able to do so.

During 2021, we completed financings to increase our liquidity in light of the highly uncertain economic conditions caused by the pandemic. In January 2021, we issued C$40.3 million of the January Debentures for net proceeds after costs of C$37.6 million ($29.5 million). The January Debentures accrue interest at a rate of 6.00% per annum and are convertible into common shares of DIRTT at an exercise price of C$4.65 per common share, or if not converted will mature and be repayable on the January Debenture Maturity Date. Interest and principal are payable in cash or shares at the option of the Company.

In February 2021, we entered into the RBC Facility, a C$25.0 million senior secured revolving credit facility with RBC. Under the RBC Facility, the “Borrowing Base” is a maximum of 90% of investment grade or insured accounts receivable plus 85% of eligible accounts receivable plus the lesser of 75% of the book value of eligible inventory and 85% of the net orderly liquidation value of eligible inventory less any reserves for potential prior ranking claims. Available borrowings under the RBC Facility at December 31, 2022 were C$7.2 million ($5.3 million). On February 9, 2023, the Company extended the RBC Facility (the “Extended RBC Facility”). The Extended RBC Facility has an borrowing base of C$15 million and a one year term.

On November 15, 2021, we issued C$35.0 million of the December Debentures for net proceeds after costs of C$32.7 million ($25.6 million). The December Debentures accrue interest at a rate of 6.25% per annum and are convertible into common shares of DIRTT at an exercise price of C$4.20 per common share, or if not converted will mature and be repayable on the December Debenture Maturity Date. Interest and principal are payable in cash or shares at the option of the Company.

The Company has a C$5.0 million Canada Leasing Facility of which C$4.4 million ($3.3 million) has been drawn, and a $14.0 million U.S. Leasing Facility of which $13.3 million has been drawn with RBC and one of its affiliates. The Leasing Facilities are available for equipment expenditures and certain equipment expenditures already incurred.

The following table summarizes our consolidated cash flows for the years indicated:

	For the Year Ended December 31,		
	2022	**2021**	**2020**
		($ in thousands)	
Net cash flows (used in) provided by operating activities	(44,260)	(31,210)	12,485
Net cash flows used in investing activities	(4,024)	(14,138)	(19,392)
Net cash (used in) provided by financing activities	(874)	62,452	5,724
Effect of foreign exchange on cash, cash equivalents and restricted cash	(11)	458	(145)
Net (decrease) increase in cash, cash equivalents and restricted cash	**(49,169)**	**17,562**	**(1,328)**
Cash, cash equivalents and restricted cash, beginning of period	63,408	45,846	47,174
Cash, cash equivalents and restricted cash, end of period	**14,239**	**63,408**	**45,846**

	For the Year Ended December 31,		
	2022	**2021**	**2020**
Cash and cash equivalents	10,821	60,313	45,846
Restricted cash	3,418	3,095	-
Total cash, cash equivalents and restricted cash	**14,239**	**63,408**	**45,846**

Operating Activities

Net cash flows used in operating activities were $44.3 million for the year ended December 31, 2022 compared to $31.2 million used by operating activities for the year ended December 31, 2021. Included in the $44.3 million used in operating activities in the year ended December 31, 2022 are $13.5 million of reorganization costs, $1.8 million of professional fees associated with the contested director elections, and $3.8 million of increased inventory arising from higher raw material prices and taking on incremental inventory from suppliers to mitigate against potential supply chain disruption, offset by the receipt of a $3.2 million income tax refund related to 2020. During the third and fourth quarter of 2022 we began to draw down our aluminum supply inventory. In the fourth quarter of 2022 we achieved positive operating cash flows through the realization of price increases, the implementation of a quick pay discount program which led to higher collections, and a focus on reduced spending. Apart from the above noted items, working capital changes primarily reflect government subsidies receivable offset by higher customer deposits.

Investing Activities

We invested $2.4 million in property, plant and equipment during the year ended December 31, 2022 compared to $11.8 million during 2021. The expenditures for 2022 comprised $1.0 million of working capital changes, $0.8 million of manufacturing upgrades, $0.3 million related to our website design and $0.3 million related to DXC refreshes and IT equipment. The decrease in investing activities is largely due to reduced spending as the Rock Hill Facility and Dallas DXC were completed in 2021.

We invested $1.7 million on capitalized software during the year ended December 31, 2022 compared to $2.3 million for the comparative period in 2021.

Actual capital expenditures of $4.3 million were below our 2022 capital budget of $7.0 million. Our 2022 capital expenditure program comprised approximately $2.5 million related to refreshes of DXCs, continued enhancement of our customer relationship management system and website redesign, approximately $2.5 million on software development and approximately $2.0 million on manufacturing and other capital upgrades of which actual expenditures have been less than budget.

Financing Activities

For the year ended December 31, 2022, $0.9 million of cash was used in financing activities, comprising mainly of $2.5 million of scheduled payments under the Leasing Facilities and $1.0 million relating to taxes paid on the vesting of RSUs for the year ended December 31, 2022 offset by the receipt of $2.0 million net proceeds from the Private Placement and a draw of C$0.9 million ($0.7 million) under the Canada Leasing Facility. For the year ended December 31, 2021, $62.5 million of cash was provided by financing activities, mainly due to the proceeds received from the issuance of C$37.6 million and C$32.7 million of Debentures in January and December of 2021, respectively, and the receipt of $9.8 million of cash consideration under the U.S. Leasing Facility.

We currently expect to fund anticipated future investments with available cash, which includes the net proceeds from the Private Placement, and drawings on the RBC Facility. We also expect to pursue additional strategic actions to improve available cash, which included filing an application for ERC for the first three quarters of 2021 for $7.1 million, net of expenses, evaluating properties we own for sale and lease back and evaluating multiple initiatives related to the use of our ICE software. Refer to "–Liquidity and Capital Resources" for further details. Apart from cash flow from operations, issuing equity and debt has been our primary source of capital to date. Additional debt or equity financing may be pursued in the future as we deem appropriate. We may also use debt or pursue equity financing depending on the price of our common shares at the time, interest rates, and nature of the investment opportunity and economic climate. No assurance can be given that any of these actions will be successful, will be sufficient for our needs.

Consolidated cash flows for the quarter as indicated:

	For the three months ended December 31,		
	2022	2021	2020
		($ in thousands)	
Net cash flows (used in) provided by operating activities	3,249	(7,338)	5,090
Net cash flows used in investing activities	(429)	(1,582)	(9,713)
Net cash (used in) provided by financing activities	928	26,369	(258)
Effect of foreign exchange on cash, cash equivalents and restricted cash	62	(123)	27
Net (decrease) increase in cash, cash equivalents and restricted cash	**3,810**	**17,326**	**(4,854)**
Cash, cash equivalents and restricted cash, beginning of period	10,429	46,082	50,700
Cash, cash equivalents and restricted cash, end of period	**14,239**	**63,408**	**45,846**

Credit Facility

On February 12, 2021, the Company entered into the RBC Facility. Under the RBC Facility, the Borrowing Base is up to a maximum of 90% of investment grade or insured accounts receivable plus 85% of eligible accounts receivable plus the lesser of 75%

of the book value of eligible inventory and 85% of the net orderly liquidation value of eligible inventory less any reserves for potential prior ranking claims. At December 31, 2022, available borrowings are C$7.2 million ($5.3 million), of which no amounts have been drawn. Interest is calculated at the Canadian or U.S. prime rate plus 30 basis points or at the Canadian Dollar Offered Rate or LIBOR plus 155 basis points. Under the RBC Facility, if the "Aggregate Excess Availability", defined as the Borrowing Base less any loan advances or letters of credit or guarantee and if undrawn including unrestricted cash is less than C$5.0 million, the Company is subject to a fixed charge coverage ratio ("FCCR") covenant of 1.10:1 on a trailing twelve month basis. Additionally, if the FCCR has been below 1.10:1 for the three immediately preceding months, the Company is required to maintain a reserve account equal to the aggregate of one year of payments on outstanding loans on the Leasing Facilities. The Company did not meet the three month FCCR requirement during the fourth quarter of 2022, which resulted in requiring the restriction of $3.4 million of cash. Should an event of default occur or the Aggregate Excess Availability be less than C$6.25 million for five consecutive business days, the Company would enter a cash dominion period whereby the Company's bank accounts would be blocked by RBC and daily balances will set-off any borrowings and any remaining amounts made available to the Company. On February 9, 2023, the Company extended the RBC Facility (the "Extended RBC Facility"). The Extended RBC Facility has an borrowing base of C$15 million and a one year term. Interest is calculated as at the Canadian or U.S. prime rate plus 75 basis points or at the Canadian Dollar Offered Rate or LIBOR plus 200 basis points. Under the Extended RBC Facility, until such time that the trailing twelve month FCCR is above 1.25 for three consecutive months, a cash balance equivalent to 1-years worth of Leasing Facilities payments must be maintained.

During 2020, the Company entered into the Leasing Facilities, consisting of the C$5.0 million Canada Leasing Facility and the $14.0 million U.S. Leasing Facility with RBC, which are available for equipment expenditures and certain equipment expenditures already incurred. The Leasing Facilities, respectively, have seven and five-year terms and bear interest at 4.25% and 5.59%. The U.S. Leasing Facility is amortized over a six-year term and is extendible at the Company's option for an additional year.

The Company has drawn $13.3 million of cash consideration under the U.S. Leasing Facility and commenced the lease term in 2020 for the equipment at the Rock Hill Facility. The Company has drawn C$4.4 million ($3.3 million) of cash consideration under the Canada Leasing Facility and commenced the lease term for the Canadian equipment expenditures during 2020. C$0.9 million ($0.7 million) of the Canada Leasing Facility was drawn during the year ended December 31, 2022.

We are restricted from paying dividends unless Payment Conditions (as defined in the RBC Facility) are met, including having a net borrowing availability of at least C$10 million over the proceeding 30-day period, and having a trailing twelve month fixed charge coverage ratio above 1.10:1 and certain other conditions. The RBC Facility is currently secured by substantially all of our real property located in Canada and the United States

Contractual Obligations

The following table summarizes DIRTT's contractual obligations at December 31, 2022:

	Payments due by period				
	Less than 1 year	**1 to 3 years**	**3 to 5 years**	**Greater than 5 years**	**Total**
			($ in thousands)		
Accounts payable and accrued liabilities	19,881	-	-	-	19,881
Other liabilities	2,056	-	-	-	2,056
Customer deposits and deferred revenue	4,866	-	-	-	4,866
Current and long-term portion of long-term debt and accrued interest[1]	6,567	13,594	61,507	131	81,799
Lease liabilities (undiscounted)	5,889	8,381	5,615	13,538	33,423
Purchase obligations	2,150	-	-	-	2,150
Total	**41,409**	**21,975**	**67,122**	**13,669**	**144,175**

(1) Includes principal and interest. See Note 14 to our Consolidated Financial Statements for additional information.

Critical Accounting Policies and Estimates

Our significant accounting policies are described in Note 2 to our Consolidated Financial Statements appearing elsewhere in this Annual Report. Our critical accounting estimates include the areas where we have made what we consider to be particularly difficult, subjective or complex judgments in making estimates, and where these estimates can significantly affect our financial results under different assumptions and conditions. We prepare our financial statements in conformity with GAAP. As a result, we are required to make estimates, judgments and assumptions that we believe are reasonable based upon the information available. These estimates, judgments and assumptions affect the reported amounts of assets and liabilities at the date of the financial statements and reported amounts of revenue and expenses during the periods presented. Actual results could be different from these estimates. Critical estimates and assumptions made by management include:

Estimates of liabilities associated with the potential and amount of warranty, legal claims and other contingencies

We have warranty obligations with respect to manufacturing defects on most of our manufactured products. Warranty periods generally range from one to ten years. We have recorded a reserve for estimated warranty and related costs based on historical experience and periodically adjust these provisions to reflect actual experience. We assess the adequacy of our warranty accrual on a quarterly basis, and adjust the previous amounts recorded, if necessary, to reflect the change in estimate of the future costs of claims yet to be serviced. Typically, product deficiencies requiring our warranty are identified and remediated within a year of production. The following provides information with respect to our warranty accrual. At December 31, 2022 and 2021, we had $1.3 million and $1.5 million, respectively, accrued for warranty and other provisions, and third-party costs associated with remedying deficiencies were $1.1 million during the fiscal year ended December 31, 2022, as compared to $0.8 million during the fiscal year ended December 31, 2021.

We establish reserves for estimated legal contingencies when we believe a loss on litigation is probable and the amount of the loss can be reasonably estimated. Revisions to contingent liability reserves are reflected in operations in the period in which there are changes in facts and circumstances that affect our previous assumptions with respect to the likelihood or amount of loss. Reserves for contingent liabilities are based upon our assumptions and estimates regarding the probable outcome of the matter. We estimate the probable cost by evaluating historical precedent as well as the specific facts relating to each contingency (including the opinion of outside advisors). Should the outcome differ from our assumptions and estimates, or other events result in a material adjustment to the accrued estimated reserves, revisions to the estimated reserves for contingent liabilities would be required and would be recognized in the period the new information becomes known. At December 31, 2022 and 2021, we had $0.05 million and $0.1 million provided for legal provisions, respectively.

Estimates of useful lives of depreciable assets and the fair value of long-term assets used for impairment calculations

We evaluate the recoverability of our property, plant, and equipment (“PP&E”), capitalized software costs and right of use assets when events or changes in circumstances indicate a potential impairment exists. If impairment is indicated, the impairment loss is measured as the amount the assets carrying value exceeds the fair value of the assets.

Our determination of the fair value associated with long-term assets involves significant estimates and assumptions, including those with respect to the determination of asset groups, future cash inflows and outflows, discount rates, and asset lives. In the current year, estimates of cash inflows are dependent on the timing and extent of recovery of the slowdown experienced as a result of the COVID-19 pandemic. These significant estimates require considerable judgment, which could affect our future results if the current estimates of future performance and fair values change.

We estimate the useful lives of PP&E, capitalized software costs and right of use assets based on the period over which the assets are expected to be available for use. The estimated useful lives are reviewed annually and are updated if expectations differ from previous estimates due to physical wear and tear, technical or commercial obsolescence and legal or other limits on the use of the relevant assets. In addition, the estimation of the useful lives of the relevant assets may be based on internal technical evaluation and experience with similar assets. It is possible, however, that future results of operations could be materially affected by changes in the estimates brought about by changes in factors mentioned above. The amounts and timing of recorded expenses for any period would be affected by changes in these factors and circumstances. A reduction in the estimated useful lives of the PP&E and capitalized software assets would increase the recorded expenses and decrease the non-current assets.

We test goodwill for impairment annually during the fourth quarter of the calendar year. Due to the ongoing impact of the COVID-19 pandemic on our financial results in 2021, we determined it was necessary to use the quantitative approach to perform our goodwill impairment test. Based on our testing, the fair value of goodwill did not exceed the carrying value of its net assets and, accordingly, the entire $1.4 million balance of goodwill was impaired as at December 31, 2021. There was no impairment charge for the year ended December 31, 2022.

Estimates of future taxable earnings used to assess the realizable value of deferred tax assets

We use the asset and liability method of accounting for income taxes. Under this method, deferred income tax assets and liabilities arise from temporary differences between the tax bases of assets and liabilities and their carrying amounts reported in the financial statements. Deferred income tax assets also reflect the benefit of unutilized tax losses that can be carried forward to reduce income taxes in future years. Such method requires the exercise of significant judgment in determining whether or not our deferred tax assets are probable of recovery from taxable income of future years and, therefore, can be recognized in the financial statements. Also, estimates are required to determine the expected timing upon which tax assets will be realized and upon which tax liabilities will be settled. We assess the ability to recover our deferred tax assets every quarter and concluded that a valuation allowance was required against our deferred tax assets at December 31, 2022 of $29.8 million (2021 - $17.3 million).

Tax interpretations, regulations, and legislation in the various jurisdictions in which the Company and its subsidiaries operate

The determination of our provision for income taxes requires significant judgment, the use of estimates and the interpretation and application of complex tax laws. Our provision for income taxes reflects a combination of income earned and taxed in the various U.S. federal and state, and Canadian federal and provincial, jurisdictions. Jurisdictional tax law changes, increases or decreases in permanent differences between book and tax items, accruals or adjustments of accruals for tax contingencies or valuation allowances, and the change in the mix of earnings from these taxing jurisdictions all affect the overall effective tax rate.

We have no liability for uncertain tax positions. However, should we accrue for such liabilities, when and if they arise in the future, we will recognize interest and penalties associated with uncertain tax positions as part of our income tax provision.

Estimates of the fair value of stock awards, including whether the performance criteria will be met and measurement of the ultimate payout amount

We use a fair-value based approach for measuring stock-based compensation and record compensation expense over an award's vesting period based on the award's fair value at the date of grant. Our awards vest based on service conditions, and compensation expense is recognized on a straight-line basis. Stock-based compensation expense is recognized only for those awards that ultimately vest.

Estimates of ability and timeliness of customer payments of accounts receivable

Our expected credit loss reflects reserves for customer receivables to reduce receivables to amounts expected to be collected. Management uses significant judgment in estimating expected credit losses. In estimating the Company's current estimate of expected credit losses, management considers historical credit loss experience as well as forward- looking information in order to establish rates for each class of financial receivable with similar risk characteristics. While we believe these processes effectively address our exposure for doubtful accounts and credit losses have historically been within expectations, changes in the economy, industry, or specific customer conditions may require adjustments to the expected credit loss. We have a contract with a trade credit insurance provider, whereby a portion of our trade receivables are insured. The trade credit insurance provider determines the coverage amount, if any, on a customer-by-customer basis. Based on our trade receivables balance as at December 31, 2022 and 2021, approximately 77% and 90%, respectively, of that balance was covered by trade credit insurance provider.

At December 31, 2022, we had an allowance for expected credit loss of $0.1 million (2021 - $0.1 million).

Recent Accounting Pronouncements

Please refer to Note 3 to our Consolidated Financial Statements presented elsewhere in this Annual Report.

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

Our financial assets and liabilities consist primarily of cash and cash equivalents, restricted cash, trade and accrued receivables, other receivables, long-term deposits and long-term receivables, accounts payable and accrued liabilities, other liabilities, lease liabilities and long-term debt and accrued interest. We are exposed to market, credit and liquidity risks associated with financial assets and liabilities. We currently do not use financial derivatives to reduce exposures from changes in foreign exchange rates, commodity prices, or interest rates. We do not hold or use any derivative instruments for trading or speculative purposes. Our Board has responsibility for the establishment and approval of overall risk management policies, including those related to financial instruments. Management performs continuous assessments to ensure that all significant risks related to financial instruments are reviewed and addressed in light of changes to market conditions and operating activities.

Credit risk

Our principal financial assets are cash and cash equivalents, restricted cash, trade and accrued receivables and other receivables.

Our credit risk is primarily concentrated in our trade and accrued receivables as we do not believe that we are exposed to any significant credit risk related to our cash and cash equivalents, other receivables (owing from government) and restricted cash balances. The amounts disclosed in the consolidated balance sheet for trade and accrued receivables and other receivables are net of allowances for doubtful accounts. Allowances are provided for the Company's current estimate of all expected credit losses using the lifetime expected credit loss model. In order to manage and assess our risk, management maintains credit policies that include regular review of credit limits of individual receivables and systematic monitoring of aging of trade receivables and the financial wellbeing of our customers. In addition, we acquired trade credit insurance effective April 1, 2020. At December 31, 2022, approximately 77% of our trade accounts receivable are insured, relating to accounts receivables from counterparties deemed creditworthy by the insurer and excluding accounts receivable from government entities, that have arisen since April 1, 2020, when the trade credit insurance became effective. Our trade balances are spread over a broad Construction Partner base, which is geographically dispersed. No Construction Partner accounts for greater than 10% of revenue. In addition, and where possible, we collect a 50% deposit on sales, excluding government and certain other clients. In November 2022 we also introduced a quick pay discount program.

The overall change and uncertainty in the economy as a result of the COVID-19 pandemic had caused us to increase our expectation of credit losses during the first quarter of 2020, and additionally, we believe the COVID-19 pandemic has affected the ability of certain Construction Partners and other customers to pay amounts owed or owing to DIRTT due to the impact of local shutdowns on businesses in certain markets. During the year ended December 31, 2021, we decreased our provision for expected credit losses by $0.5 million to $0.1 million which was related to an uncollectable amount written off during 2021. During 2022 no revisions to our credit loss estimate was required.

Market risk

Market risk is the risk that changes in market prices, such as interest rates and foreign currency exchange rates, will affect our income or the value of the financial instruments held.

Foreign exchange risk

Historically, the majority (approximately 80% to 88%) of our revenue is collected in U.S. dollars, and approximately 40% of our costs are also incurred in U.S. dollars. Most other revenue and costs are denominated in Canadian dollars. As a result, we are exposed to fluctuations in the U.S. dollar against the Canadian dollar, which could have a positive or negative impact on our revenue and costs. The recent strengthening of the U.S. dollar versus the Canadian dollar in the later half of 2022 has had a positive impact on results because reported cost reductions are higher than reported revenue reductions.

Our financial instruments are exposed primarily to fluctuations in the Canadian dollar. The following table details our exposure to currency risk at the reporting dates and a sensitivity analysis to changes in currency. The sensitivity analysis includes Canadian dollar-denominated monetary items and adjusts their translation at period end for their respective change in the Canadian dollar. For the respective weakening of the Canadian dollar, there would be an equal and opposite impact on net loss and comprehensive loss.

	Amount (C$ in thousands)	Change in Currency (%)	Effect of net loss and comprehensive loss for the year ended December 31, 2022
Cash and cash equivalents	2,868	10%	287
Restricted cash	1,149	10%	115
Trade and accrued receivables	3,937	10%	394
Other receivables	381	10%	38
Other assets	332	10%	33
Accounts payable and accrued liabilities	13,349	10%	1,335
Other liabilities	1,896	10%	190
Customer deposits	324	10%	32
Current portion of long-term debt and accrued interest	445	10%	45
Long-term debt	71,619	10%	7,162
Total	**96,300**	**10%**	**9,631**

Commodity price risk

We consume raw materials such as aluminum, hardware, wood and veneer, timber, plastic, electrical wiring and components, paint and powder, and fabric and vinyl. While aluminum represents the largest component of our raw materials' expenditures, overall aluminum spend comprises only approximately 14% of product revenues and, therefore, absolute exposure to price fluctuations has a minimal impact on profitability.

Interest rate risk

In February 2021, we entered into the RBC Facility. The RBC Facility had no amounts outstanding at December 31, 2020. An increase in overall interest rates by 0.5% would have increased interest expense related to these items and decreased net loss and comprehensive loss by $nil for 2022 and 2021. An equal decrease in rates would generate an equal amount of interest savings. On February 9, 2023, the Company extended the RBC Facility (the "Extended RBC Facility"). The Extended RBC Facility has an borrowing base of C$15 million and a one year term. Interest is calculated as at the Canadian or U.S. prime rate plus 75 basis points or at the Canadian Dollar Offered Rate or LIBOR plus 200 basis points.

The Company's Leasing Facilities and Debentures bear interest at fixed interest rates and are therefore not subject to interest rate risk.

Item 8. Financial Statements and Supplementary Data.

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Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of DIRTT Environmental Solutions Ltd.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of DIRTT Environmental Solutions Ltd. and its subsidiaries (together, the Company) as of December 31, 2022 and 2021, and the related consolidated statements of operations and comprehensive loss, of changes in shareholders' equity and of cash flows for each of the three years in the period ended December 31, 2022, including the related notes (collectively referred to as the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022 in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated 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 of these consolidated financial statements 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 consolidated 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 consolidated 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 consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Chartered Professional Accountants
Calgary, Canada
February 22, 2023

We have served as the Company's auditor since 2017.

PricewaterhouseCoopers LLP
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T: +1 403 509 7500, F: +1 403 781 1825

DIRTT Environmental Solutions Ltd.

Consolidated Balance Sheets

(Stated in thousands of U.S. dollars)

	As at December 31, 2022	As at December 31, 2021
ASSETS		
Current Assets		
Cash and cash equivalents	10,821	60,313
Restricted cash	3,418	3,095
Trade and accrued receivables, net of expected credit losses of $0.1 million at December 31, 2022 and at December 31, 2021	13,930	14,063
Other receivables	7,880	3,477
Inventory	22,251	18,457
Prepaids and other current assets	3,825	4,399
Total Current Assets	**62,125**	**103,804**
Property, plant and equipment, net	41,522	51,697
Capitalized software, net	4,406	7,395
Operating lease right-of-use assets, net	30,490	30,880
Other assets	5,110	5,663
Total Assets	**143,653**	**199,439**
LIABILITIES		
Current Liabilities		
Accounts payable and accrued liabilities	19,881	22,751
Other liabilities	2,056	2,379
Customer deposits and deferred revenue	4,866	2,420
Current portion of long-term debt and accrued interest	3,306	3,323
Current portion of lease liabilities	5,889	6,214
Total Current Liabilities	**35,998**	**37,087**
Long-term debt	62,129	67,319
Long-term lease liabilities	27,534	27,267
Total Liabilities	**125,661**	**131,673**
SHAREHOLDERS' EQUITY		
Common shares, unlimited authorized without par value, 97,882,844 issued and outstanding at December 31, 2022 and 85,345,433 at December 31, 2021	191,347	181,782
Additional paid-in capital	9,023	13,200
Accumulated other comprehensive loss	(16,106)	(15,916)
Accumulated deficit	(166,272)	(111,300)
Total Shareholders' Equity	**17,992**	**67,766**
Total Liabilities and Shareholders' Equity	**143,653**	**199,439**

Refer to Note 19 for commitments. The prior year comparatives have been revised in line with current year presentation - refer to Note 8.

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

DIRTT Environmental Solutions Ltd.

Consolidated Statements of Operations and Comprehensive Loss

(Stated in thousands of U.S. dollars, except per share data)

	For the Year Ended December 31,		
	2022	**2021**	**2020**
Product revenue	166,256	143,000	166,689
Service revenue	5,905	4,593	4,818
Total revenue	**172,161**	**147,593**	**171,507**
Product cost of sales	140,058	120,281	115,455
Service cost of sales	3,943	3,852	2,769
Total cost of sales	**144,001**	**124,133**	**118,224**
Gross profit	**28,160**	**23,460**	**53,283**
Expenses			
Sales and marketing	26,950	31,041	28,049
General and administrative	25,462	30,595	26,663
Operations support	9,498	9,372	9,381
Technology and development	7,555	8,234	8,111
Stock-based compensation	4,277	4,713	2,351
Reorganization	13,461	-	-
Goodwill impairment	-	1,443	-
Total operating expenses	**87,203**	**85,398**	**74,555**
Operating loss	**(59,043)**	**(61,938)**	**(21,272)**
Government subsidies	7,765	11,455	**12,721**
Foreign exchange gain (loss)	1,445	(335)	(576)
Interest income	51	77	238
Interest expense	(5,160)	(3,131)	(305)
	4,101	**8,066**	**12,078**
Loss before tax	**(54,942)**	**(53,872)**	**(9,194)**
Income taxes			
Current tax expense (recovery)	21	210	(3,521)
Deferred tax (recovery) expense	-	(414)	5,625
	21	**(204)**	**2,104**
Net loss	**(54,963)**	**(53,668)**	**(11,298)**
Loss per share			
Basic and diluted loss per share	(0.63)	(0.63)	(0.13)
Weighted average number of shares outstanding (in thousands)			
Basic and Diluted	87,662	85,027	84,681

2022 reorganization costs include $0.2 million paid to related parties (2021 and 2020 - $nil)

The prior year comparatives have been revised in line with current year presentation - refer to Note 9.

Consolidated Statement of Comprehensive Loss

	For the Year Ended December 31,		
	2022	2021	2020
Loss for the year	(54,963)	(53,668)	(11,298)
Exchange differences on translation of foreign operations	(190)	1,102	1,010
Comprehensive loss for the year	**(55,153)**	**(52,566)**	**(10,288)**

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

DIRTT Environmental Solutions Ltd.

Consolidated Statements of Changes in Shareholders' Equity

(Stated in thousands of U.S. dollars, except for share data)

	Number of Common shares	Common shares	Additional paid-in capital	Accumulated other comprehensive loss	Accumulated deficit	Total shareholders' equity
As at December 31, 2019	**84,681,364**	**180,639**	**8,343**	**(18,028)**	**(45,967)**	**124,987**
Stock-based compensation	-	-	1,832	-	-	1,832
Foreign currency translation adjustment	-	-	-	1,010	-	1,010
Net loss for the year	-	-	-	-	(11,298)	(11,298)
As at December 31, 2020	**84,681,364**	**180,639**	**10,175**	**(17,018)**	**(57,265)**	**116,531**
Stock-based compensation	-	-	4,453	-	-	4,453
Issued on vesting of RSUs	664,069	1,143	(1,143)	-	-	-
RSUs and Share Awards withheld to settle employee tax obligations	-	-	(285)	-	(367)	(652)
Foreign currency translation adjustment	-	-	-	1,102	-	1,102
Net loss for the year	-	-	-	-	(53,668)	(53,668)
As at December 31, 2021	**85,345,433**	**181,782**	**13,200**	**(15,916)**	**(111,300)**	**67,766**
Stock-based compensation	-	-	3,943	-	-	3,943
Issued on vesting of RSUs and Share Awards	3,149,061	7,088	(7,088)	-	-	-
RSUs and Share Awards withheld to settle employee tax obligations	-	-	(1,032)	-	(9)	(1,041)
Issued for employee share purchase plan	720,901	296	-	-	-	296
Issued on private placement	8,667,449	2,181	-	-	-	2,181
Foreign currency translation adjustment	-	-	-	(190)	-	(190)
Net loss for the year	-	-	-	-	(54,963)	(54,963)
As at December 31, 2022	**97,882,844**	**191,347**	**9,023**	**(16,106)**	**(166,272)**	**17,992**

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

DIRTT Environmental Solutions Ltd.

Consolidated Statements of Cash Flows

(Stated in thousands of U.S. dollars)

	For the Year Ended December 31,		
	2022	2021	2020
Cash flows from operating activities:			
Net loss for the period	(54,963)	(53,668)	(11,298)
Adjustments:			
Depreciation and amortization	15,119	14,513	11,706
Stock-based compensation, net of settlements	3,342	4,248	2,351
Foreign exchange loss (gain)	(1,813)	112	746
Accretion of convertible debentures	676	352	-
Loss (gain) on disposal of equipment	(133)	12	(46)
Deferred income tax expense (recovery)	-	(414)	5,625
Goodwill impairment	-	1,443	-
Changes in operating assets and liabilities:			
Trade and accrued receivables	(179)	(2,118)	11,327
Other receivables	(4,432)	3,570	(5,260)
Inventory	(4,716)	(2,449)	1,638
Prepaid and other assets, current and long term	129	(1,132)	(241)
Accounts payable and accrued liabilities	260	2,702	752
Other liabilities	(109)	(213)	(3,971)
Customer deposits and deferred revenue	2,477	601	(1,754)
Current portion of long-term debt and accrued interest	(149)	948	-
Lease liabilities	231	283	910
Net cash flows (used in) provided by operating activities	**(44,260)**	**(31,210)**	**12,485**
Cash flows from investing activities:			
Purchase of property, plant and equipment, net of accounts payable changes	(2,394)	(11,781)	(16,597)
Capitalized software development expenditures	(1,677)	(2,340)	(2,998)
Other asset expenditures	(443)	(496)	(517)
Proceeds on sales of equipment	227	18	46
Recovery of software development expenditures	263	461	674
Net cash flows used in investing activities	**(4,024)**	**(14,138)**	**(19,392)**
Cash flows from financing activities:			
Proceeds received on long-term debt	647	64,912	6,130
Repayment of long-term debt	(2,470)	(1,808)	(406)
Proceeds received on private placement	1,990	-	-
Employee tax payments on vesting of RSUs	(1,041)	(652)	-
Net cash flows provided by financing activities	**(874)**	**62,452**	**5,724**
Effect of foreign exchange on cash, cash equivalents and restricted cash	(11)	458	(145)
Net (decrease) increase in cash, cash equivalents and restricted cash	**(49,169)**	**17,562**	**(1,328)**
Cash, cash equivalents and restricted cash, beginning of year	63,408	45,846	47,174
Cash, cash equivalents and restricted cash, end of year	**14,239**	**63,408**	**45,846**
Supplemental disclosure of cash flow information:			
Interest paid	(4,423)	(1,543)	(103)
Income taxes received	3,212	433	1,817

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the consolidated balance sheets.

	For the Year Ended December 31,		
	2022	2021	2020
Cash and cash equivalents	10,821	60,313	45,846
Restricted cash	3,418	3,095	-
Total cash, cash equivalents and restricted cash	**14,239**	**63,408**	**45,846**

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

1. GENERAL INFORMATION

DIRTT Environmental Solutions Ltd. and its subsidiary ("DIRTT", the "Company", "we" or "our") is a leader in industrialized construction. DIRTT's system of physical products and digital tools empowers organizations, together with construction and design leaders, to build high-performing, adaptable, interior environments. Operating in the workplace, healthcare, education, and public sector markets, DIRTT's system provides total design freedom, and greater certainty in cost, schedule, and outcomes.

DIRTT's proprietary design integration software, ICE® ("ICE" or "ICE software"), translates the vision of architects and designers into a 3D model that also acts as manufacturing information. ICE is also licensed to unrelated companies and Construction Partners of the Company.

DIRTT is incorporated under the laws of the province of Alberta, Canada, its headquarters is located at 7303 – 30th Street S.E., Calgary, AB, Canada T2C 1N6 and its registered office is located at 4500, 855 – 2nd Street S.W., Calgary, AB, Canada T2P 4K7. DIRTT's common shares trade on the Toronto Stock Exchange under the symbol "DRT" and on The Nasdaq Global Select Market ("Nasdaq") under the symbol "DRTT".

2. SIGNIFICANT ACCOUNTING POLICIES

Basis of presentation

These consolidated financial statements ("Financial Statements"), including comparative figures, have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP").

In these Financial Statements, unless otherwise indicated, all dollar amounts are expressed in United States ("U.S.") dollars. DIRTT's financial results are consolidated in Canadian dollars, the Company's functional currency, and the Company has adopted the U.S. dollar as its reporting currency. All references to US$ or $ are to U.S. dollars and references to C$ are to Canadian dollars.

Principles of consolidation

The Financial Statements include the accounts of DIRTT and its subsidiaries. All intercompany balances, income and expenses, unrealized gains and losses and dividends resulting from intercompany transactions have been eliminated upon consolidation.

Basis of measurement

These Financial Statements have been prepared on the historical cost convention except for certain financial instruments and stock-based compensation that are measured at fair value, as explained in the accounting policies below. Historical cost is generally based on the fair value of the consideration given in exchange for assets.

Use of estimates

The preparation of the Financial Statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and the disclosure of contingent liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting period. Such estimates primarily relate to unsettled transactions and events as of the date of the Financial Statements. Estimates are based on historical data and experience, as well as various other factors that management considers reasonable under the circumstances. Actual outcomes can differ from these estimates.

Significant estimates and assumptions made by management include:

- Estimates of ability and timeliness of customer payments of trade receivables;
- Estimates of useful lives of depreciable assets as well as the fair value of long-term assets and future cash flows used for impairment calculations;
- Estimates of future taxable earnings used to assess the realizable value of deferred tax assets;

- Tax interpretations, regulations and legislation in the various jurisdictions in which the Company and its subsidiaries operate;
- Estimates of the fair value of stock awards, including whether the performance criteria will be met and measurement of the ultimate payout amount; and
- Estimates of liabilities associated with the potential and amount of warranty, legal claims and other contingencies.

Segments

Management has determined that DIRTT has one operating segment. The Company's chief executive officer, who is DIRTT's chief operating decision maker, reviews financial information on a consolidated and aggregate basis, together with certain operating metrics principally to make decisions about how to allocate resources and to measure the Company's performance.

Foreign currency translation

DIRTT Environmental Solutions Ltd. is a Canadian company and its functional currency is the Canadian dollar. DIRTT's wholly owned subsidiary is domiciled in the United States and its functional currency is the U.S. dollar.

Assets and liabilities denominated in foreign currencies, other than those held through foreign subsidiaries, are translated into the transacting company's functional currency at the year-end exchange rate for monetary items and at the historical exchange rates for non-monetary items. Foreign currency revenues and expenses are translated at the exchange rates in effect on the dates of the related transactions. Foreign exchange gains and losses, other than those arising from the translation of the Company's net investments in foreign subsidiaries, are included in income.

The accounts of the Company's U.S. dollar subsidiary is translated into Canadian dollars, and the Financial Statements are translated into U.S. dollars for financial statement presentation. Assets and liabilities are translated using year-end exchange rates, and revenues, expenses, gains and losses are translated using average monthly exchange rates. Foreign exchange gains and losses arising from the translation of the Company's assets and liabilities are included in "comprehensive loss for the year".

Cash and cash equivalents and restricted cash

Cash and cash equivalents include cash on hand held at banks and cash equivalents, which are defined as highly liquid investments with original maturities of three months or less. Restricted cash is a reserve account not available for immediate or general business use and is required when certain requirements are not met under the terms of the Company's senior secured credit facility (as defined in Note 14).

Trade and other receivables, net of expected credit losses

Accounts receivable are recorded at the invoiced amount, do not require collateral and do not bear interest. The Company estimates its allowance for doubtful accounts using the current expected credit loss ("CECL") methodology, which is designed to capture the Company's current estimate of all expected credit losses.

Inventory

Inventory is comprised of raw materials and work in progress. The Company does not typically carry a significant amount of finished goods inventory. Inventory is valued at the lower of weighted average cost and net realizable value. Net realizable value is based on an item's usability in the manufacturing of the Company's products. The Company records an allowance for obsolescence when the net realizable value of inventory items declines below weighted average cost, net realizable value is determined based on current market prices for inventory less the estimated cost to sell. Work in progress is valued at an estimate of cost, including attributable overheads, based on stage of completion.

Fixed production overheads are allocated to inventory on the basis of normal capacity of the production facilities. In periods where production levels are abnormally low, unallocated overheads are separately recognized as an expense in the period in which they are incurred.

Leases

The Company categorizes leases at their inception as either operating or finance leases. Leases where the Company assumes substantially all of the rewards or ownership and leases where ownership is transferred at the end of the lease term, or by way of a bargain purchase option, are classified as finance leases. Upon initial recognition, the leased asset is measured at an amount equal to the lower of its fair value and the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability, so as to achieve a constant rate of interest on the balance of the liability. Finance charges are recognized in the statement of operations.

The Company's Leasing Facilities (as defined in Note 7) are accounted for as finance leases as ownership of the equipment is expected to return to the Company at the end of the lease term. These transactions are not accounted for as a sale of the underlying equipment as the Company continues to control the equipment.

For leases categorized as operating, the Company determines if an arrangement is a lease or contains a lease element at inception. The arrangement is a lease if it conveys the right to the Company to control the use of identified property, plant, or equipment for a period of time in exchange for consideration. Operating leases are separately disclosed as operating lease right-of-use ("ROU") assets, with a corresponding lease liability split between current and long-term components on the balance sheet. Operating leases with an initial term of 12 months or less are not included on the balance sheet.

The Company recognizes lease expense for these leases on a straight-line basis over the lease term. ROU assets represent the right to use an underlying asset for the lease term and operating lease liabilities represent the obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term.

Property, plant and equipment

Property, plant and equipment are recorded at cost, including direct costs, attributable indirect costs and carrying costs, less accumulated depreciation and any accumulated impairment losses. Expenditures for repairs and maintenance are expensed as incurred, while renewals and betterments are capitalized.

Depreciation is charged to the consolidated statement of operations on a straight-line basis over the estimated useful lives of the assets. The estimated useful lives of the Company's property, plant and equipment are as follows:

Building	25 years
Manufacturing equipment	10 years
Leasehold improvements	Over term of lease (1 to 10 years)
Office equipment	5 years
Tooling and prototypes	4 years
Computer equipment	3 years
Vehicles	3 years

When assets are disposed of or retired, the cost and accumulated depreciation and impairment losses are removed from the respective accounts and any resulting loss is reflected in operating expenses.

Capitalized software costs

The Company capitalizes costs related to internally developed software during the application development stage when (i) the preliminary project stage is completed, (ii) management has authorized further funding for the completion of the project, and (iii) it is probable that the project will be completed and performed as intended. Capitalized costs includes costs of personnel and related expenses for employees and third parties directly attributable to the projects. Capitalization of these costs ceases once the project is substantially complete and the software is ready for its intended purpose. Costs incurred for significant upgrades and enhancements are also capitalized. Costs related to preliminary project activities and post implementation activities, including training, maintenance and minor modifications or enhancements are expensed as incurred. Capitalized software costs are amortized on a straight-line basis over the estimated useful life of the developed asset, which is generally three to five years. Management evaluates the useful lives of these assets on an annual basis and tests for impairment whenever events or changes in circumstances occur that could impact the recoverability of the assets.

Software development is considered internal-use as it is used to design and sell the DIRTT products and is not included in the end client's product. Revenues received from Construction Partners for ICE Software are recognized as revenues as they are considered an element of the product sale. Any incidental third-party revenues received for the ICE Software are credited against capitalized software costs. The Company follows this accounting policy for cloud computing arrangements that are considered a service contract, however, these projects are capitalized to prepaids and other assets on the balance sheet and are expensed as an operating cost, as opposed to amortization, over the expected term of the software service contract. The Company adopted this amendment on January 1, 2020 using the prospective transition approach and classified $0.7 million as other assets on the consolidated balance sheet for the year ended December 31, 2021.

Impairment of long-lived assets

Management evaluates the recoverability of the Company's property, plant and equipment, capitalized software costs and ROU assets when events or changes in circumstances indicate a potential impairment exists. Events and changes in circumstances considered by the Company in determining whether the carrying value of long-lived assets may not be recoverable include, but are not limited to, significant changes in performance relative to expected operating results, significant changes in the use of the assets, significant negative industry or economic trends, and changes in the Company's business strategy. Impairment testing is performed at an asset level that represents the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities (an "asset group"). In determining if impairment exists, the Company estimates the undiscounted cash flows to be generated from the use and ultimate disposition of the asset group. If impairment is indicated based on a comparison of the assets' carrying values and the undiscounted cash flows, the impairment loss is measured as the amount by which the carrying amount of the assets exceeds the fair value of the assets.

Convertible Debentures

The Company accounts for convertible debentures as liabilities. Embedded features included in the convertible debentures that require bifurcation are accounted for separately. Costs incurred directly related to the issuance of convertible debentures are presented as a direct deduction against the carrying amount of the convertible debentures and are amortized to interest expense using the effective interest method.

Income taxes

Income tax expense is comprised of current and deferred tax. Income tax is recognized in the consolidated statement of operations and comprehensive income (loss) except to the extent it relates to items recognized directly in equity.

Current tax

Current tax expense is based on the results for the year, adjusted for items that are not taxable or not deductible. Current tax is calculated using tax rates and laws that were enacted at the end of the reporting period. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. Provisions are established where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred tax

Deferred tax is recognized, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated balance sheet. Deferred income tax assets and liabilities are determined based on differences between the financial reporting and tax bases of assets and liabilities using enacted tax rates and laws that will be in effect when the differences are expected to reverse.

The effect of a change in income tax rates on deferred income tax assets and liabilities is recognized in income in the period during which the change occurs.

When appropriate, the Company records a valuation allowance against deferred tax assets to reflect that these tax assets may not be realized. In determining whether a valuation allowance is appropriate, the Company considers whether it is more likely than not that all or some portion of the Company's deferred tax assets will not be realized, based on management's judgment using available evidence about future events.

At times, tax benefits claims may be challenged by a tax authority. Tax benefits are recognized only for tax positions that are more likely than not sustainable upon examination by tax authorities. The amount recognized is measured as the largest amount of benefit that is greater than 50% likely to be realized upon settlement. A liability for "unrecognized tax benefits" is recorded for any tax benefits claimed in the Company's tax returns that do not meet these recognition and measurement standards.

Revenue recognition

The Company accounts for revenue in accordance with topic 606, Revenue from Contracts with Customers, ("ASC 606") and Subtopic 340-40, Other Assets and Deferred Costs – Contracts with Customers. Under ASC 606, an entity recognizes revenue in a manner that reflects the transfer of promised goods or services to customers in an amount which the entity expects to be entitled in exchange for those goods or services.

The Company recognizes revenue upon transfer of control of promised goods or services to customers at transaction price, an amount that reflects the consideration the Company expects to receive in exchange for those goods or services. Transaction price is calculated as selling price net of variable consideration which may include estimates for sales incentives related to current period product revenue. Revenue is measured at the fair value of the consideration received or receivable, after discounts, rebates and sales taxes or income taxes and duties.

Product sales

The Company recognizes revenue upon transfer of control of products to the customer, which typically occurs upon shipment. The Company's main performance obligation to customers is the delivery of products in accordance with purchase orders. Each purchase order defines the transaction price for the products purchased under the arrangement. Construction Partners typically sell DIRTT product to end clients and issue purchase orders to the Company to manufacture the product. Construction Partners utilize ICE licenses to sell DIRTT products, the ICE licenses sold to Construction Partners are not considered a separate performance obligation as they are not distinct, and ICE license revenue is recognized in conjunction with product sales. The Construction Partner ICE Software revenue is recognized over the license period.

The Company's standard sales terms are Free On Board ("FOB") shipping point, which comprise the majority of sales. The Company usually requires a 50% progress payment on receipt of certain orders, excluding certain government orders or in some special contractual situations. Customer deposits received are recognized as a liability on the balance sheet until revenue recognition criteria is met. At the point of shipment, the customer is generally required to pay the balance of the sales price within 30 days. The Company's sales arrangements do not have any material financing components. In addition, the Company's customer arrangements do not produce contract assets that are material to its consolidated financial statements.

The Company provides sales commissions to internal and external sales representatives which are earned in the period in which revenue is recognized.

The Company accounts for product transportation revenue and costs as fulfillment activities and present the associated costs in costs of goods sold in the period in which the Company sells its product.

Contracts containing multiple performance obligations

The Company offers certain arrangements whereby a customer can purchase products and installation together which are generally capable of being distinct and accounted for as separate performance obligations. Where multiple performance obligations exist, the Company determines revenue recognition by (1) identifying the contract with the customer, (2) identifying the performance obligation in the contract, (3) determining the transaction price, (4) allocating the transaction price to the performance obligations based on the relative standalone selling prices, typically based on cost plus a reasonable margin, and (5) recognizing revenue as the performance obligations are satisfied.

Installation and other services

The Company provides installation and other services for certain customers as a distinct performance obligation. Revenue from installation services is recognized over time as the service is performed.

Principal vs Agent Considerations

The Company evaluates the presentation of revenue on a gross vs. net basis based on whether it acts as a principal by controlling the product or service sales to customers. In certain instances, the Company facilitates contracting of certain sales on behalf of Construction Partners. The Company records these revenues on a gross basis when the Company is obligated to fulfill the service and has the risk associated with service delivery. The Company records these revenues on a net basis when the Construction Partner has the obligation to fulfill the services and has the risk associated with service delivery.

Construction Partner rebates

Rebates to Construction Partners (“Partner Rebates”) are accrued for and recognized as a reduction of revenue at the date of the sale to the customer. Partner Rebates include amounts collected directly by the Company owed to Construction Partners in accordance with their Construction Partner agreements, being the difference between the price to the end customer and the Construction Partners’ price. Other sales discounts are deducted immediately from sales invoices.

Contract balances

Timing of revenue recognition may differ from the timing of invoicing to customers. The Company records an unbilled receivable when revenue is recognized prior to invoicing. As the Company’s contracts are less than one year in duration, the Company has elected to apply the practical expedients to expense costs related to costs to obtain contracts and not disclose unfulfilled performance obligations. As deferred revenue and customer deposits are typically recognized during the year the Company does not account for financing elements.

Warranties

The Company provides a warranty on all products sold to its clients and Construction Partner’s clients. Warranties are not sold separately to customers. Provisions for the expected cost of warranty obligations are recognized based on an analysis of historical costs for warranty claims relative to current activity levels and adjusted for factors based on management’s assessment that increase or decrease the provision. Warranty provision is recognized in cost of goods sold. Warranty claims have historically not been material and do not constitute a separate performance obligation.

Stock-based compensation

The Company follows the fair value-based approach to account for options, share awards and restricted share units (“RSUs”). Compensation expense and an increase in “Additional paid-in capital” are recognized for options and RSUs over their vesting period based on their estimated fair values on the grant date, as determined using the Black-Scholes option pricing model for the majority of options and the market value of the Company’s common shares on the grant date for share awards and RSUs. Certain executive stock options and RSUs have performance conditions and are valued using a Monte Carlo model.

On exercise of stock options and RSUs, the recorded fair value of the option or RSU is removed from “Additional paid-in capital” and credited to “Share capital”. For options, any consideration paid by employees is credited to “Share capital” when the option is exercised. The Company’s stock options and RSUs are not shares of the Company and have no rights to vote, receive dividends, or any other rights as a shareholder of the Company.

Stock based compensation expense is also recognized for performance share units (“PSUs”) and deferred share units (“DSUs”) using the fair value method. Compensation expense is recognized over the vesting period and the corresponding amount is recorded as a liability on the balance sheet.

Technology and development expenditures

Technology and development expenses are comprised primarily of salaries and benefits associated with the Company’s product and software development personnel which do not qualify for capitalization. These costs are expensed as incurred and exclude certain information and technology costs used in operations which are classified as general and administrative costs.

Government subsidies

The Company accounts for government subsidies on an accrual basis when the conditions for eligibility are met. The Company has adopted an accounting policy to present government subsidies as other income. The nature, significant terms and conditions of government subsidies are disclosed in the financial statements. (Refer to Note 3 on adoption of Accounting Standards Update No. 2021-10,*Government Assistance (Topic 832): Disclosures by Business Entities about Government Assistance,)*

Earnings per share ("EPS")

Basic earnings per share is calculated using the weighted average number of common shares outstanding during the year. Diluted earnings per share is calculated using the treasury stock method for determining the dilutive impact of stock options. The Company follows the "if converted" method for accounting for the impact of convertible debentures on earnings (loss) per share, whereby interest charges applicable to the convertible debentures are added to the numerator and the convertible debentures are assumed to have been converted at the beginning of the period (or time of issuance, if later), and the resulting common shares are added to the denominator.

Fair value of financial instruments

ASC 820, "Fair Value Measurements," requires entities to disclose the fair value of financial instruments, both assets and liabilities recognized and not recognized on the balance sheet, for which it is practicable to estimate fair value. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date.

The Company's fair value analysis is based on the degree to which the fair value is observable and grouped into categories accordingly:

- Level 1 financial instruments are those which can be derived from quoted market prices (unadjusted) in active markets for similar financial assets or liabilities.
- Level 2 financial instruments are those which can be derived from inputs that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices). Level 2 financial instruments include current and long-term debt. The carrying amounts of these instruments approximates fair value due to limited changes to interest rates and the Company's credit rating since issuance.
- Level 3 financial instruments are those derived from valuation techniques that include inputs for the financial asset or liability which are not based on observable market data (unobservable inputs). The Company does not have any Level 3 financial instruments.

The carrying amounts of cash and cash equivalents and restricted cash; trade and accrued receivables, other receivables; accounts payable and accrued liabilities; other liabilities; and customer deposits approximate fair value due to their short-term nature.

3. ADOPTION OF NEW AND REVISED ACCOUNTING STANDARDS

In 2021, the Financial Accounting Standards Board issued Accounting Standards Update No. 2021-10, Government Assistance (Topic 832): Disclosures by Business Entities about Government Assistance. The ASU provides guidance on required disclosures with respect to government assistance in a company's notes to the annual financial statements. The amendments in the ASU are effective for periods beginning after December 15, 2021. The Company has adopted this standard effective January 1, 2022 and notes there is no significant impact of this standard on our accounting or disclosures for government assistance.

Although there are several other new accounting standards issued or proposed by the Financial Accounting Standards Board, which the Company has adopted or will adopt, as applicable, the Company does not believe any of these accounting pronouncements has had or will have a material impact on its Financial Statements.

4. LIQUIDITY

The Company has been negatively impacted by the effect of COVID-19 on the non-residential construction industry, costs incurred associated with the Company's contested director elections, reorganization costs to reconstitute the executive team and align the Company's cost structure with current sales activity, and significant inflation on raw materials costs, which have resulted in a significant usage of cash in recent periods which has been funded through Convertible Debentures and Leasing Facilities entered into in the prior year (refer to Note 14). As at December 31, 2022, the Company had $10.8 million of cash on hand and C$7.2 million ($5.3 million) of available borrowings (December 31, 2021 - $60.3 million and $10.4 million of available borrowings).

We have implemented a number of restructuring initiatives to create a reduced cost structure moving forward (refer to Note 6) and have implemented multiple price increases during the year to mitigate the impact of inflation on raw material costs. While these actions and our project pipeline are promising, we continue to see unpredictability in our pace of orders. As a result, the Company has initiated certain actions to improve our balance sheet in the short term. First, we are evaluating initiatives related to the use of ICE software by third parties to supplement the relatively small revenues we have previously recognized from our licensing of ICE software to certain strategic partners for use in their businesses and our related licensing and developer software support for these counterparties. Second, we have certain properties that are currently owned that we are evaluating for potential sale and lease back arrangements. We do not intend to vacate these premises as they still serve a valuable aspect of our value proposition, but this type of arrangement would provide us with a one-time cash payment in the near term, in exchange for future rent payments. We expect these strategic initiatives to result in positive cash inflows in 2023. As these transactions are awaiting finalization, we completed a Private Placement (defined in Note 21) of common shares, supported by significant shareholders and directors and officers of the Company to bridge cash requirements between now and the completion and closing of the noted strategic transactions (refer to Note 21).

We have assessed the Company’s liquidity position as at December 31, 2022 using multiple scenarios taking into account our sales outlook for the next year, our existing cash balances and available credit facilities and the probability of executing the strategic transactions noted above. Based on this analysis we believe the Company has sufficient liquidity to support ongoing operations for the next twelve months. However, should anticipated profitable growth and increased labor headcount and manufacturing capacity not occur or should there be a delayed recovery of the North American construction activities from the pandemic, a sustained economic depression and its adverse impacts on customer demand or significant inflationary pressure on raw materials and transportation cost that we are unable to recover through price increases, the Company will need to identify alternative sources of financing, further reduce its cost structure, delay capital expenditures, evaluate potential asset sales and potentially curtail or cease certain operations. While the Company is confident that it will be able to raise additional capital when needed or under acceptable terms, there can be no absolute assurance it will be able to do so.

5. COVID-19

The impact of the COVID-19 pandemic on our future consolidated results of operations remains uncertain. The extent to which COVID-19 impacts our employees, operations, customers, suppliers and financial results depends on numerous evolving factors that we may not be able to accurately predict, including: the duration and scope of the pandemic (and whether there is a resurgence or multiple resurgences in the future, including the impact of new variants); government actions taken in response to the pandemic, including required shutdowns or vaccine or testing mandates; the availability, acceptance, distribution and continued effectiveness of vaccines; the impact on construction activity, including the effect on our customers’ demand for our interior construction systems; supply chain disruptions; rising inflation; labor shortages; sustained remote or hybrid work models; our ability to manufacture and sell our products; and the ability of our customers to pay for our products. While many of our products support life-sustaining activities and essential construction, we and certain of our customers or suppliers may be impacted by national, federal, state and provincial actions, orders and policies regarding the COVID-19 pandemic, including: temporary closures of non-life-sustaining businesses, shelter-in-place orders, and travel, social distancing and quarantine policies, the implementation and enforcement of which vary in each of the jurisdictions in which we operate. We did not record any asset impairments, inventory charges or material bad debt reserves related to COVID-19 during the years ended December 31, 2022 and 2021, but future events may require such charges which could have a material adverse effect on our financial condition, liquidity or results of operations.

Government subsidies

In the United States, the Employee Retention Credit ("ERC") was established by Section 2301 of the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") to provide an incentive for employers to keep their employees on their payroll during COVID-19 closures. The ERC is a refundable payroll tax credit based on qualified wages paid by an eligible employer between March 12, 2020, and October 1, 2021 for companies experiencing a significant decline in gross receipts during a calendar quarter or having operations fully or partially suspended during the quarter due to COVID-19. During the third quarter of 2022, the Company determined it was eligible for the ERC for the first three quarters of 2021 and has filed a claim for $7.3 million in payroll tax credits ($7.1 million net of expenses). As of December 31, 2022 these credits have not been received and are included in other receivables in the balance sheet.

As part of the Canadian federal government’s COVID-19 Economic Response Plan, the Canadian government established the Canadian Emergency Wage Subsidy (“CEWS”). The CEWS provided the Company with a taxable subsidy in respect of a specific portion of wages paid to Canadian employees during qualifying periods extending from March 15, 2020 to October 23, 2021 based on the percentage decline of certain of the Company’s Canadian sourced revenues during each qualifying period. The Company’s eligibility for the CEWS was subject to change for each qualifying period and was reviewed by the Company for each qualifying period, with amounts being received by the Company for various, but not each, qualifying period. Pursuant to amendments enacted as part of the 2021 Canadian federal budget, the Company is required to repay a portion of the CEWS amounts received for any qualifying period commencing after June 5, 2021 where the aggregate compensation for “specified executives” (within the meaning of the CEWS) during the 2021 calendar year exceeds the aggregate compensation for “specified executives” during the 2019 calendar year. Upon finalization of 2021 compensation to specified executives, approximately C$0.5 million ($0.4 million) of subsidies was repaid to the Canadian authorities in the second quarter of 2022. The repayment amount was fully provided for in the third quarter of 2021 in accounts payable and accrued liabilities and in the first quarter of 2022 the Company reversed a $0.6 million incremental provision related to this that is no longer necessary.

On November 19, 2020, the Canadian government also implemented the Canada Emergency Rent Subsidy ("CERS"). The CERS provided a taxable subsidy to cover eligible expenses for qualifying properties, subject to certain maximums, for qualifying periods extending from September 27, 2020 to October 23, 2021, with the amount of the subsidy available to the Company being based on the percentage decline of certain of the Company's Canadian-sourced revenues in each qualifying period. The Company's eligibility for the CERS was subject to change for each qualifying period and was reviewed by the Company for each qualifying period.

The last claim period under the CEWS and CERS programs ended on October 23, 2021. The Company is not eligible and did not receive any new Canadian government subsidies in year ended December 31, 2022.

6. REORGANIZATION

During the year ended December 31, 2022, the Company undertook a number of reorganization initiatives:

Closure of Phoenix Aluminum Manufacturing Facility (the "Phoenix Facility")

On February 22, 2022, we commenced the process of closing our Phoenix Facility, shifting related manufacturing to both our Savannah and Calgary aluminum manufacturing facilities. The closure of the Phoenix Facility was substantially completed in the second quarter of 2022. The Company entered into a sublease arrangement during the second quarter of 2022, commencing July 1, 2022, which exceeds the contractual lease commitments under the Right of Use assets.

Workforce Reductions, Board and Management Changes

In February and July of 2022, we announced our intention to eliminate a portion of our salaried workforce including manufacturing and office positions along with other cost reduction initiatives. The Company's Board of Directors was reconstituted following a contested proxy contest in April 2022 which was deemed a change of control under the Company's insurance policy resulting in additional insurance expenditures. Further, the Company made changes to several executive officer roles during the year ended December 31, 2022, which resulted in incurring certain termination benefits and recruitment costs.

Temporary Suspension of Operations at Rock Hill, South Carolina (the "Rock Hill Facility")

On August 23, 2022, we announced the temporary suspension of operations at our Rock Hill Facility, shifting related manufacturing to our Calgary manufacturing facility.

Reorganization costs incurred:

	For the Year Ended December 31,	
	2022	**2021**
Termination benefits	7,042	-
Insurance costs on change of control	3,691	-
Phoenix Facility closure	756	-
Professional services	1,021	-
Relocation and other costs	951	-
Total reorganization costs	**13,461**	**-**

	For the Year Ended December 31,	
	2022	**2021**
Opening reorganization costs in accounts payable and accrued liabilities	-	-
Reorganization expense	13,461	-
Reorganization costs paid	(11,184)	-
Reorganization costs in accounts payable and accrued liabilities at December 31, 2022	**2,277**	**-**

Of the $2.3 million payable, $2.1 million relates to termination benefits and $0.2 million relates to other reorganization costs.

Discontinuation of Reflect Product Line and Other Charges Incurred

In August 2022, the Company discontinued the Reflect and other product lines, resulting in a one time inventory write-down of $1.0 million, and an acceleration of amortization expense associated with ICE development for Reflect.

Additionally, the Company accelerated the depreciation of certain items of property, plant and equipment associated with the closure of the Phoenix Facility resulting in additional depreciation incurred in the first quarter of 2022.

These costs were included in cost of sales:

	For the Year Ended December 31,	
	2022	**2021**
Provision for inventory of discontinued product lines	1,035	-
Accelerated amortization associated with product line discontinuation	1,019	-
Accelerated depreciation and amortization associated with closure of the Phoenix Facility	1,054	-
Incremental cost of sales	**3,108**	**-**

7. LEASES

The Company leases office and factory space under various operating leases. As the Company's leases do not provide an implicit rate, the Company uses its incremental borrowing rate based on the information available at the commencement date in determining the present value of lease payments. The Company gives consideration to instruments with similar characteristics when calculating its incremental borrowing rate. The Company's operating leases have remaining lease terms of 1 year to 23 years. Lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option.

The weighted average remaining lease term and weighted average discount rate at December 31, 2022 were 13 years (2021 - 14 years) and 4.9% (2021 – 5.2%), respectively.

The following table includes ROU assets included on the balance sheet at December 31, 2022 and 2021:

	ROU Assets		
	Cost	**Accumulated depreciation**	**Net book value**
At January 1, 2021	**41,840**	**(8,197)**	**33,643**
Additions	2,401	-	2,401
Depreciation expense	-	(4,989)	(4,989)
Exchange differences	(186)	11	(175)
At December 31, 2021	**44,055**	**(13,175)**	**30,880**
Additions	139	-	139
Modifications	4,809	50	4,859
Depreciation expense	-	(5,057)	(5,057)
Exchange differences	(943)	611	(332)
At December 31, 2022	**48,061**	**(17,571)**	**30,490**

The following table includes lease liabilities included on the balance sheet at December 31, 2022 and 2021:

	Lease Liability	
	2022	**2021**
At January 1,	**33,481**	**35,284**
Additions	139	2,401
Modifications	4,809	-
Accretion	1,722	1,758
Repayment of lease liabilities	(6,558)	(6,509)
Lease inducements	124	720
Exchange differences	(295)	(173)
At December 31,	**33,423**	**33,481**
Current lease liabilities	5,889	6,214
Long-term lease liabilities	27,534	27,267

The following table includes maturities of operating lease liabilities at December 31, 2022:

2023	6,038
2024	4,630
2025	4,605
2026	4,013
2027	2,826
Thereafter	26,631
Total	**48,743**
Total lease liability	**33,423**
Difference between undiscounted cash flows and lease liability	15,320

8. TRADE AND ACCRUED RECEIVABLES AND OTHER RECEIVABLES

Accounts receivable are recorded at the invoiced amount, do not require collateral and do not bear interest. The Company estimates an allowance for credit losses using the lifetime expected credit loss at each measurement date taking into account historical credit loss experience as well as forward-looking information in order to establish rates for each class of financial receivable with similar risk characteristics. Adjustments to this estimate are recognized in the statement of operations.

In order to manage and assess our risk, management maintains credit policies that include regular review of credit limits of individual receivables and systematic monitoring of aging of trade receivables and the financial wellbeing of our customers. In addition, we acquired trade credit insurance effective April 1, 2020. At December 31, 2022, approximately 77% of our trade accounts receivable are insured, relating to accounts receivables from counterparties deemed creditworthy by the insurer and excluding accounts receivable from government entities.

Our trade balances are spread over a broad Construction Partner base, which is geographically dispersed. For the years ended December 31, 2022 and 2021 no Construction Partner accounted for greater than 10% of revenue. In addition, and where possible, we collect a 50% deposit on sales, excluding government and certain other clients.

	As at	
	December 31, 2022	**December 31, 2021**
Current	12,381	13,572
Overdue	1,675	621
	14,056	**14,193**
Less: expected credit losses	(126)	(130)
	13,930	**14,063**

During 2021, $0.5 million of receivables for a specific customer balance was written off. No change to our expected credit loss was required at December 31, 2022. Receivables are generally considered to be past due when over 60 days old unless there is a separate payment arrangement in place for the collection of the receivable.

As at December 31, 2022, the Company classified Other Receivables separately from Trade and Accrued Receivables on the balance sheet, as reconciled below:

	As at,	
	December 31, 2022	December 31, 2021
Trade receivables	14,056	14,193
Allowance for doubtful accounts	(126)	(130)
Accounts receivable	**13,930**	**14,063**
Sales tax receivable	251	196
Income taxes receivable	40	3,194
Government subsidies	7,319	-
Other receivables	270	87
Other receivables (reclassified on the balance sheet)	**7,880**	**3,477**
Total Trade and other receivables, as previously presented	**21,810**	**17,540**

9. INVENTORY

	As at December 31,	
	2022	2021
Raw material	22,218	18,388
Allowance for obsolescence	(1,242)	(646)
Work in progress	1,275	715
	22,251	**18,457**

In 2022, the Company provided $1.1 million (2021 - $0.6 million) for inventory that is not expected to be used in future production and the associated expense was recorded to cost of goods sold. During 2022, the Company wrote off $0.5 million of inventory against the provision (2021 - $0.4 million) and increased the allowance for obsolescence by $0.9 million (2021 - $0.1 million) mainly related to the discontinuation of Reflect product lines. In addition, the Company recorded direct write offs against inventory of $0.3 million. Production overheads capitalized in work in progress were $0.2 million at December 31, 2022 (December 31, 2021 - $0.1 million).

Additional costs included in cost of goods sold

During 2021 and 2020, the Company experienced periods where it was operating below normal capacity levels. During that period, overheads included in inventory were not increased and $1.8 million (2020: $2.0 million) was included in cost of sales. Previously this was presented as a separate part of cost of sales in the Consolidated Statement of Operations. In 2022, we have temporarily suspended operations at the Rock Hill Facility. Idle facility costs being incurred at the Rock Hill Facility are included in cost of sales.

	For the Year Ended December 31,		
	2022	2021	2020
Underutilized capacity	-	1,756	2,010
Idle facility costs	506	-	-
	506	**1,756**	**2,010**

Change in presentation in Consolidated Statement of Operations

	For the Year Ended December 31,		
	2022	2021	2020
Product cost of sales, as previously presented	140,058	118,525	113,445
Cost of under utilized capacity, as previously presented	-	1,756	2,010
Product cost of sales, per Statement of Operations	**140,058**	**120,281**	**115,455**

10. PROPERTY, PLANT AND EQUIPMENT, NET

	Office and computer equipment	Factory equipment	Leasehold improvements	Total
Cost				
At December 31, 2020	**24,988**	**66,523**	**43,105**	**134,616**
Additions	3,422	4,515	4,372	12,309
Disposals	-	(53)	-	(53)
Exchange differences	236	499	90	825
At December 31, 2021	**28,646**	**71,484**	**47,567**	**147,697**
Additions	738	775	341	1,854
Disposals	(1,347)	(2,983)	(6,688)	(11,018)
Exchange differences	(581)	(3,167)	(1,457)	(5,205)
At December 31, 2022	**27,456**	**66,109**	**39,763**	**133,328**
Accumulated depreciation and impairment				
At December 31, 2020	**16,362**	**35,524**	**32,883**	**84,769**
Depreciation expense	3,589	3,670	3,817	11,076
Disposals	-	(23)	-	(23)
Exchange differences	30	100	48	178
At December 31, 2021	**19,981**	**39,271**	**36,748**	**96,000**
Depreciation expense	2,355	4,425	3,680	10,460
Disposals	(1,272)	(2,831)	(6,688)	(10,791)
Exchange differences	(540)	(2,044)	(1,279)	(3,863)
At December 31, 2022	**20,524**	**38,821**	**32,461**	**91,806**
Net book value				
At December 31, 2021	**8,665**	**32,213**	**10,819**	**51,697**
At December 31, 2022	**6,932**	**27,288**	**7,302**	**41,522**

As at December 31, 2022, the Company had $0.1 million of assets in progress of completion which were excluded from assets subject to depreciation (December 31, 2021 – $2.2 million).

During the year ended December 31, 2022, depreciation expense included $1.1 million of incremental depreciation on the acceleration of useful lives associated with the closing of the Phoenix Facility. Refer to Note 6, Reorganization.

During the year ended December 31, 2022, the Company has incurred negative cash flows from operations and accordingly management determined that this was an indicator of property, plant and equipment assets. The Company estimated the undiscounted cash flows to be generated from the use and ultimate disposition of the property, plant and equipment assets. To estimate the undiscounted cashflows of the reporting unit, the Company applied the income approach. Sales and cost projections were based on assumptions driven by current economic conditions. The Company considered various scenarios and probability-weighted the likelihood of each scenario in determining the reporting unit's fair value. The average compounded annual growth rate of revenues was 5%- 10%. Other key assumptions used in the quantitative assessment of the reporting unit's undiscounted cashflows was terminal growth rate of 2%. The Company estimated the undiscounted cash flows to be generated from the use and ultimate disposition of the property, plant and equipment assets. The results of the test indicated that the undiscounted cash flows exceeded the carrying values of property, plant and equipment, therefore, no impairment charge was required at December 31, 2022.

During the year ended December 31, 2021, goodwill was impaired (see Note 12) and determined that this was an indicator of impairment for property, plant and equipment. The Company estimated the undiscounted cash flows to be generated from the use and ultimate disposition of the property, plant and equipment assets using the same methodology and assumptions included in the goodwill impairment test (see Note 12). The results of the test indicated that the fair value exceeded the carrying values of property, plant and equipment, therefore, no impairment charge was required at December 31, 2021.

11. CAPITALIZED SOFTWARE, NET

	For the Year Ended December 31,	
	2022	**2021**
Cost		
As at January 1	**37,492**	**35,480**
Additions	1,677	2,340
Recovery of software development expenditures	(263)	(461)
Disposals	(1,990)	-
Exchange differences	(2,370)	133
As at December 31	**34,546**	**37,492**
Accumulated amortization		
As at January 1	**30,097**	**27,136**
Amortization expense	3,887	2,878
Disposals	(1,916)	-
Exchange differences	(1,928)	83
As at December 31	**30,140**	**30,097**
Net book value	**4,406**	**7,395**

Estimated amortization expense on capitalized software is $1.6 million in 2023, $1.2 million in 2024, $1.0 million in 2025, $0.5 million in 2026, and $0.1 million in 2027.

During the year ended December 31, 2022, amortization expense was impacted by $1.0 million of incremental amortization on the acceleration of useful lives associated with discontinued product lines. Refer to Note 6, Reorganization.

12. GOODWILL

	For the year ended December 31,	
	2022	**2021**
As at January 1	-	1,449
Impairment	-	(1,443)
Exchange differences	-	(6)
As at December 31	**-**	**-**

In 2021, the Company's goodwill was assessed at the consolidated company level which represents the Company's sole operating and reporting unit. The Company tested its goodwill for impairment annually during the fourth quarter of the calendar year. Due to the impact of the COVID-19 pandemic on its financial results in 2021, the Company determined it was necessary to use the quantitative approach to perform its goodwill impairment test. The quantitative impairment test requires estimates to determine the fair value of the reporting unit, as such, required the Company to make significant assumptions and judgments.

To estimate the fair value of the reporting unit, the Company applied the income approach using discounted future cash flows. Sales and cost projections were based on assumptions driven by current economic conditions. Due to the uncertainty around the future impact of COVID-19 at that time, its projections considered various scenarios and the Company probability-weighted the likelihood of each scenario in determining the reporting unit's fair value. The average compounded annual growth rate of revenues was 10% and the Company assumed a 10% - 15% annualized reduction in operating costs in the model. Other key assumptions used in the quantitative assessment of the reporting unit's goodwill were the application of a discount rate of 13% and a terminal growth rate of 2%.

Based on its testing, the fair value of goodwill did not exceed the recoverable amount and, accordingly, the entire $1.4 million balance of goodwill was impaired as at December 31, 2021. The impairment charge on goodwill has been separately classified on the consolidated statement of operations and comprehensive loss for the year ended December 31, 2021.

13. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES AND OTHER LIABILITIES

	As at December 31,	
	2022	**2021**
Trade accounts payable	5,562	7,820
Accrued liabilities	8,776	9,649
Wages and commissions payable	3,410	4,275
Rebates accrued[1]	2,133	1,007
	19,881	**22,751**

[1] In 2022 $4.8 million of rebates were earned (2021 - $4.1 million) and $3.7 million were paid (2021 - $4.7 million).

Other liabilities

	As at,	
	December 31, 2022	**December 31, 2021**
Warranty provisions[1]	1,278	1,451
DSU liability	594	785
Sublease deposits	139	-
Other provisions	45	143
Other liabilities	**2,056**	**2,379**

[1] The following table presents a reconciliation of the warranty and other provisions balance:

	As at,	
	December 31, 2022	**December 31, 2021**
As at January 1	1,451	1,763
Adjustments to timber provision	-	(500)
Additions to warranty provision	1,134	1,019
Payments related to warranties	(1,307)	(831)
	1,278	**1,451**

14. LONG-TERM DEBT

	Revolving Credit Facility	**Leasing Facilities**	**Convertible Debentures**	**Total Debt**
Balance on December 31, 2020	-	**5,967**	-	**5,967**
Issuances	-	9,805	55,107	64,912
Accretion of issue costs	-	-	352	352
Accrued interest	-	556	1,935	2,491
Interest payments	-	(556)	(987)	(1,543)
Principal repayments	-	(1,808)	-	(1,808)
Exchange differences	-	(55)	326	271
Balance at December 31, 2021	-	**13,909**	**56,733**	**70,642**
Current portion of long-term debt and accrued interest	-	2,386	937	3,323
Long-term debt	-	11,523	55,796	67,319
Balance on December 31, 2021	-	**13,909**	**56,733**	**70,642**
Issuances	-	647	-	647
Accretion of issue costs	-	-	676	676
Accrued interest	-	735	3,539	4,274
Interest payments	-	(735)	(3,688)	(4,423)
Principal repayments	-	(2,470)	-	(2,470)
Exchange differences	-	(274)	(3,637)	(3,911)
Balance at December 31, 2022	-	**11,812**	**53,623**	**65,435**
Current portion of long-term debt and accrued interest	-	2,561	745	3,306
Long-term debt	-	9,251	52,878	62,129

Revolving Credit Facility

On February 12, 2021, the Company entered into a C$25.0 million senior secured revolving credit facility with RBC (the " RBC Facility"), replacing the Previous RBC Facility. Under the RBC Facility, the Company is able to borrow up to a maximum of 90% of investment grade or insured accounts receivable plus 85% of eligible accounts receivable plus the lesser of 75% of the book value of eligible inventory and 85% of the net orderly liquidation value of eligible inventory less any reserves for potential prior ranking claims (the "Borrowing Base"). At December 31, 2022, available borrowings are C$7.2 million ($5.3 million), of which no amounts have been drawn. Interest is calculated at the Canadian or U.S. prime rate plus 30 basis points or at the Canadian Dollar Offered Rate or LIBOR plus 155 basis points. Under the RBC Facility, if the Aggregate Excess Availability, defined as the Borrowing Base less any loan advances or letters of credit or guarantee and if undrawn including unrestricted cash, is less than C$5.0 million, the Company is subject to a FCCR covenant of 1.10:1 on a trailing twelve month basis. Additionally, if the FCCR has been above 1.10:1 for the 3 immediately preceding months, the Company is required to maintain a reserve account equal to the aggregate of one-year of payments on the Leasing Facilities (defined below). The Company did not meet the 3 month FCCR requirement during the fourth quarter of 2022 which would result in requiring the restriction of $3.4 million of cash at December 31, 2022. Should an event of default occur or the Aggregate Excess Availability be less than C$6.25 million for 5 consecutive business days, the Company would enter a cash dominion period whereby the Company's bank accounts would be blocked by RBC and daily balances will set-off any borrowings and any remaining amounts made available to the Company.

On February 9, 2023, the Company extended the RBC Facility (the "Extended RBC Facility"). The Extended RBC Facility has an borrowing base of C$15 million and a one year term. Interest is calculated as at the Canadian or U.S. prime rate plus 75 basis points or at the Canadian Dollar Offered Rate or LIBOR plus 200 basis points. Under the Extended RBC Facility, until such time that the trailing twelve month FCCR is above 1.25 for three consecutive months, a cash balance equivalent to 1-years worth of Leasing Facilities payments must be maintained.

Leasing Facilities

The Company has a C$5.0 million equipment leasing facility in Canada (the "Canada Leasing Facility") and a $14.0 million equipment leasing facility in the United States (the "U.S. Leasing Facility" and, together with the Canada Leasing Facility, the "Leasing Facilities") with RBC, and one of its affiliates, which are available for equipment expenditures and certain equipment expenditures already incurred. The Leasing Facilities, respectively, have seven and five-year terms and bear interest at 4.25% and 5.59%. The U.S. Leasing Facility is amortized over a six-year term and extendable at the Company's option for an additional year.

During 2022, the Company received $nil (2021 - $9.8 million) of cash consideration under the U.S. leasing facility related to reimbursements for equipment purchases for its South Carolina Facility. During 2022, the Company received C$0.9 million ($0.7 million) (2021 - $nil) of cash consideration under the leasing facility in Canada. The associated financial liabilities are shown on the consolidated balance sheet in current other liabilities and long-term debt and other liabilities.

Convertible Debentures

On January 25, 2021, the Company completed a C$35 million ($27.5 million) bought-deal financing of convertible unsecured subordinated debentures with a syndicate of underwriters (the "January Debentures"). On January 29, 2021, the Company issued a further C$5.25 million ($4.1 million) of the January Debentures under the terms of an overallotment option granted to the underwriters. These January Debentures will mature and be repayable on January 31, 2026 (the "January Debentures Maturity Date") and will accrue interest at the rate of 6.00% per annum payable semi-annually in arrears on the last day of January and July of each year commencing on July 31, 2021 until the January Debentures Maturity Date, interest and principal are payable in cash or shares at the option of the Company. These January Debentures will be convertible into common shares of DIRTT, at the option of the holder, at any time prior to the close of business on the business day prior to the earlier of the January Debentures Maturity Date and the date specified by the Company for redemption of these January Debentures at a conversion price of C$4.65 per common share, being a ratio of approximately 215.0538 common shares per C$1,000 principal amount of the January Debentures. Costs of the transaction were approximately C$2.7 million, including the underwriters' commission.

On November 15, 2021, the Company completed a C$35 million ($27.4 million) bought-deal financing of convertible unsecured subordinated debentures with a syndicate of underwriters (the "December Debentures" and, together with the January Debentures, the "Debentures"). These convertible debentures will mature and be repayable on December 31, 2026 (the "December Debentures Maturity Date") and will accrue interest at the rate of 6.25% per annum payable semi-annually in arrears on the last day of June and December of each year commencing on June 30, 2022 until the December Debentures Maturity Date, interest and principal are payable in cash or shares at the option of the Company. These December Debentures will be convertible into common shares of DIRTT, at the option of the holder, at any time prior to the close of business on the business day prior to the earlier of the December Debentures Maturity Date and the date specified by the Company for redemption of the December Debentures at a conversion price of C$4.20 per common share, being a ratio of approximately 238.0952 common shares per C$1,000 principal amount of the December Debentures. Costs of the transaction were approximately C$2.3 million including the underwriters' commission.

15. INCOME TAXES

Reconciliation of income taxes

The following reconciles income taxes calculated at the Canadian statutory rate with the actual income tax expense. The Canadian statutory rate includes federal and provincial income taxes. This rate was used because Canada is the domicile of the parent entity of the Company.

	For the Year Ended December 31,		
	2022	**2021**	**2020**
Net loss before tax	(54,942)	(53,872)	(9,194)
Canadian statutory rate	24.4%	23.3%	24.2%
Expected income tax	**(13,406)**	**(12,552)**	**(2,225)**
Effect on taxes resulting from:			
Valuation allowance	13,590	12,046	5,241
Non-deductible expenses	422	542	261
Non-deductible stock-based compensation	23	189	269
Tax rate impacts	(665)	(488)	(1,288)
Adjustments related to prior year tax filings	57	59	(105)
Other	-	-	(49)
Income tax expense (recovery)	**21**	**(204)**	**2,104**
Current tax expense (recovery)	21	210	(3,521)
Deferred tax expense (recovery)	-	(414)	5,625
Income tax expense (recovery)	**21**	**(204)**	**2,104**

The provision for income taxes is comprised of federal, state, provincial and foreign taxes based on pre-tax income. In the United States, the CARES Act of 2020 allows, among other provisions, for the recovery of taxes paid over the preceding five years from current year losses.

Deferred tax assets and liabilities

Significant components of the Company's deferred tax assets and liabilities at December 31, 2022 and 2021 were as follows:

	At December 31, 2022		
	Assets	**Liabilities**	**Net**
Operating losses	33,740	-	33,740
Research and development expenditures	336	-	336
Property and equipment	-	(6,017)	(6,017)
Capitalized software and other assets	-	(1,599)	(1,599)
Valuation allowance	-	(29,812)	(29,812)
Other	3,352	-	3,352
Net deferred taxes	**37,428**	**(37,428)**	**-**

	At December 31, 2021		
	Assets	Liabilities	Net
Operating losses	24,032	-	24,032
Research and development expenditures	362	-	362
Property and equipment	-	(7,572)	(7,572)
Capitalized software and other assets	-	(2,023)	(2,023)
Valuation allowance	(17,291)	-	(17,291)
Other		2,492	2,492
Net deferred taxes	**7,103**	**(7,103)**	**-**

Summary of temporary difference movements during the year:

	Balance January 1, 2022	Recognized in Income	Foreign Exchange	Balance December 31, 2022
Operating losses	24,032	10,924	(1,216)	33,740
Research and development expenditures	362	(3)	(23)	336
Property and equipment	(7,572)	1,410	145	(6,017)
Capitalized software and other assets	(2,023)	311	113	(1,599)
Valuation allowance	(17,291)	(13,590)	1,069	(29,812)
Other	2,492	948	(88)	3,352
Net deferred taxes	**-**	**-**	**-**	**-**

	Balance January 1, 2021	Recognized in Income	Foreign Exchange	Balance December 31, 2021
Operating losses	9,528	14,542	(38)	24,032
Research and development expenditures	360	(87)	89	362
Property and equipment	(4,588)	(2,844)	(140)	(7,572)
Capitalized software and other assets	(2,218)	209	(14)	(2,023)
Valuation allowance	(5,330)	(12,046)	85	(17,291)
Other	1,834	640	18	2,492
Net deferred taxes	**(414)**	**414**	**-**	**-**

For the year ended December 31, 2022, the Company recorded valuation allowances of $13.6 million against deferred tax assets ("DTAs") incurred during the year as the Company has experienced cumulative losses in recent years (December 31, 2021 –$12.0 million). Although earnings were positive in 2019, ongoing near-term uncertainties on the business caused by the COVID-19 pandemic and the related decline in business activity impacted the Company's ability to generate earnings. Accordingly, it is not more likely than not that the Company's DTAs will be utilized in the near term.

The amount shown on the balance sheet as deferred income tax liabilities represent the net differences between the tax basis and book carrying values on the Company's balance sheet at enacted tax rates.

On an annual basis the Company and its subsidiaries file tax returns in Canada and various foreign jurisdictions. In Canada, the Company's federal and provincial tax returns for the years 2019 to 2021 remain subject to examination by taxation authorities. In the United States, both the federal and state tax returns filed for the years 2018 to 2021 remain subject to examination by the taxation authorities.

Tax loss carryforwards and other tax pools

The significant components of the Company's net future income tax deductions in these consolidated financial statements are summarized as follows:

	2022	2021	2022	2021
	C$	C$	$	$
Non-capital loss carry-forwards	106,730	64,961	55,654	42,220
Undepreciated capital costs	9,207	12,267	9,765	10,268
Share issuance costs	3,603	-	-	-
Scientific research and experimental development tax incentives	1,971	1,971	-	-
Total future tax deductions	**121,511**	**79,199**	**65,419**	**52,488**

16. STOCK-BASED COMPENSATION

In May 2020, shareholders approved the DIRTT Environmental Solutions Ltd. Long-Term Incentive Plan (the "2020 LTIP") at the annual and special meeting of shareholders. The 2020 LTIP gives the Company the ability to award options, share appreciation rights, restricted share units, restricted shares, dividend equivalent rights granted in connection with restricted share units, vested share awards, and other share-based awards and cash awards to eligible employees, officers, consultants and directors of the Company and its affiliates. In accordance with the 2020 LTIP, the sum of (i) 5,850,000 common shares plus (ii) the number of common shares subject to stock options previously granted under the Company's Amended and Restated Incentive Stock Option Plan (the "Stock Option Plan") that, following May 22, 2020, expire or are canceled or terminated without having been exercised in full have been reserved for issuance under the 2020 LTIP. Upon vesting of certain LTIP awards, the Company may withhold and sell shares as a means of meeting DIRTT's tax withholding requirements in respect of the withholding tax remittances required in respect of award holders. To the extent the fair value of the withheld shares upon vesting exceeds the grant date fair value of the instrument, the excess amount is credited to retained earnings or deficit.

The change of 100% of the Board of Directors combined with the prior Board declining to endorse the incoming board constituted a Change of a Control, under the terms of the 2020 LTIP, as of April 26, 2022. As a result, all outstanding and unvested LTIP awards granted under the 2020 LTIP plan for any holder terminated without Cause within twelve (12) months following the Change of Control vested immediately upon such termination.

The Company also maintains the DIRTT Environmental Solutions Ltd. Deferred Share Unit Plan for Non-Employee Directors pursuant to which deferred share units ("DSUs") are granted to the Company's non-employee directors. DSUs are settled solely in cash.

Prior to the approval of the 2020 LTIP, the Company granted awards of options under the Stock Option Plan and awards of performance share units ("PSUs") under the DIRTT Environmental Solutions Ltd. Performance Share Unit Plan (the "PSU Plan"). Following the approval of the 2020 LTIP, no further awards will be made under either the Stock Option Plan or the PSU Plan, but both remain in place to govern the terms of any awards that were granted pursuant to such plans and remain outstanding

Stock-based compensation expense

	For the Year Ended December 31,		
	2022	2021	2020
Equity-settled awards	3,943	4,453	1,832
Cash-settled awards	334	260	519
	4,277	**4,713**	**2,351**

The following summarizes RSUs (as defined below), Share awards, PSUs, and DSUs activity during the periods:

	RSU Time-Based	RSU Performance-Based	Share Awards	PSU	DSU
	Number of units	Number of units	Number of units	Number of units	Number of units
Outstanding at December 31, 2020	**2,414,063**	**200,000**	**-**	**197,471**	**363,664**
Granted	1,976,697	878,601	-	-	144,969
Vested	(661,775)	(2,294)	-	(34,635)	(147,056)
Withheld to settle employee tax obligations	(174,103)	(1,960)	-	-	-
Forfeited	(338,346)	(52,608)	-	(5,636)	-
Outstanding at December 31, 2021	**3,216,536**	**1,021,739**	**-**	**157,200**	**361,577**
Granted	2,157,149	863,279	222,170	-	1,305,658
Vested or settled	(2,199,034)	(796,011)	(154,016)	-	(501,916)
Withheld to settle employee tax obligations	(526,346)	(242,460)	(68,154)	-	-
Forfeited	(762,968)	(502,628)	-	-	-
Expired	-	-	-	(157,200)	-
Outstanding at December 31, 2022	**1,885,337**	**343,919**	**-**	**-**	**1,165,319**

Restricted share units (time-based vesting)

Restricted share units that vest based on time have an aggregate time-based vesting period of three years and generally one-third of the RSUs vest every year over a three-year period from the date of grant (the "RSU's"). At the end of a three-year term, the associated RSUs will be settled by way of the provision of cash or shares to employees (or a combination thereof), at the discretion of the Company. The weighted average fair value of the RSUs granted in 2022 was C$2.37 (2021 – C$2.78) which was determined using the closing price of the Company's common shares on their respective grant dates.

Restricted share units (performance-based vesting)

During 2022 and 2021, restricted share units were granted to executives with service and performance-based conditions for vesting (the "PRSUs"). If the Company's share price increases to certain values for 20 consecutive trading days, as outlined below, a percentage of the PRSUs will vest at the end of the three-year service period. All PRSUs awarded in 2020 were awarded to a single executive who forfeited those awards in January 2022 upon departure from the Company.

The grant date fair value of the 2022 and 2021 PRSUs were valued using the Monte Carlo valuation method and determined to have a weighted average grant date fair value of C$1.87 and C$3.27, respectively.

Based on share price performance since the date of grant, none of the 2022 PRSUs and 66.7% of the 2021 PRSUs will vest upon completion of the three-year service period.

	% of PRSUs Vesting			
	33.3%	**66.7%**	**100.0%**	**150.0%**
2022 and 2021 PRSUs	$ 3.00	$ 4.00	$ 5.00	$ 7.00

Share awards

During the first quarter of 2022, certain executives were issued share awards in lieu of cash paid variable incentive compensation ("Share Awards"). These Share Awards vested upon grant. The fair value of the Share Awards granted was C$2.40 ($1.88), which was determined using the closing price of the Company's common shares on the grant date. In the fourth quarter of 2022, 59,488 Share Awards were issued to employees as a component of their compensation.

During the third quarter of 2022, certain executives were provided a variable compensation plan for the achievement of certain financial targets payable partially in cash and partially in share awards. Based on the Company's performance to date relative to the financial targets, no share awards have been recorded under this compensation plan for the year ended December 31, 2022. Under the plan, 1.3 million shares could have been awarded if the maximum targets were achieved based on the Company's share price at December 31, 2022.

Deferred share units

The fair value of the liability and the corresponding expense is charged to profit or loss at the grant date. Subsequently, at each reporting date between the grant date and settlement date, the fair value of the liability is remeasured with any changes in fair value recognized in profit or loss for the year. DSUs outstanding at December 31, 2022 had a fair value of $0.6 million which is included in other liabilities on the balance sheet (2021 – $0.8 million).

Options

The following summarizes options granted, exercised, forfeited and expired during the periods:

	Number of options	Weighted average exercise price C$
Outstanding at December 31, 2020	**4,774,328**	**6.52**
Forfeited or expired	(709,839)	7.07
Outstanding at December 31, 2021	**4,064,489**	**6.64**
Forfeited or expired	(2,584,420)	6.41
Outstanding at December 31, 2022	**1,480,069**	**7.03**
Exercisable at December 31, 2022	**1,480,069**	**7.03**

Range of exercise prices outstanding at December 31, 2022:

	Options outstanding			**Options exercisable**		
Range of exercise prices	**Number outstanding**	**Weighted average remaining life**	**Weighted average exercise price C$**	**Number exercisable**	**Weighted average remaining life**	**Weighted average exercise price C$**
C$4.01 – C$6.00	15,025	1.89	4.12	15,025	1.89	4.12
C$6.01 – C$7.00	758,142	1.07	6.33	758,142	1.07	6.33
C$7.01 – C$8.00	706,902	1.37	7.84	706,902	1.37	7.84
Total	**1,480,069**			**1,480,069**		

Range of exercise prices outstanding at December 31, 2021:

	Options outstanding			**Options exercisable**		
Range of exercise prices	**Number outstanding**	**Weighted average remaining life**	**Weighted average exercise price C$**	**Number exercisable**	**Weighted average remaining life**	**Weighted average exercise price C$**
C$4.01 – C$6.00	22,537	2.89	4.12	15,025	2.89	4.12
C$6.01 – C$7.00	3,281,199	1.79	6.38	1,549,301	1.87	6.36
C$7.01 – C$8.00	760,753	2.37	7.84	515,153	2.37	7.84
Total	**4,064,489**			**2,079,479**		

Dilutive instruments

For the year ended December 31, 2022, 1.5 million options (2021 – 4.1 million, 2020 – 4.8 million) and 2.2 million RSUs and PRSUs (2021 – 3.4 million, 2020 - 2.7 million) and 109.1 million shares which would be issued if the principal amount of the Debentures were settled in our common shares at the year end share price (2021- 27.4 million and 2020 - nil) were excluded from the diluted weighted average number of common shares calculation as their effect would have been anti-dilutive to the net loss per share.

17. REVENUE

In the following table, revenue is disaggregated by performance obligation and timing of revenue recognition. All revenue comes from contracts with customers. See Note 18 for the disaggregation of revenue by geographic region.

	For the Year Ended December 31,		
	2022	2021	2020
Product	147,448	129,031	150,004
Transportation	18,030	13,231	15,491
License fees from Construction Partners	778	738	1,194
Total product revenue	**166,256**	**143,000**	**166,689**
Installation and other services	5,905	4,593	4,818
	172,161	**147,593**	**171,507**

DIRTT sells its products and services pursuant to fixed-price contracts which generally have a term of one year or less. The transaction price used in determining the amount of revenue to recognize from fixed-price contracts is based upon agreed contractual terms with each customer and is not subject to variability.

	For the Year Ended December 31,		
	2022	2021	2020
At a point in time	165,478	142,262	165,495
Over time	6,683	5,331	6,012
	172,161	**147,593**	**171,507**

Revenue recognized at a point in time represents the majority of the Company's sales. Revenue is recognized when a customer obtains legal title to the product, which is when ownership of the product is transferred to, or services are delivered to, the customer. Revenue recognized over time is limited to installation and ongoing maintenance contracts with customers and is recorded as performance obligations are satisfied over the term of the contract.

Contract Liabilities

	As at December 31,		
	2022	2021	2020
Customer deposits	4,458	1,959	1,292
Deferred revenue	408	461	527
Contract liabilities	**4,866**	**2,420**	**1,819**

Contract liabilities primarily relate to deposits received from customers and maintenance revenue from license subscriptions. The balance of contract liabilities was higher as at December 31, 2022 compared to the prior year period mainly due to the timing of orders and payments. Contract liabilities as at December 31, 2021 and 2020, respectively, totaling $2.4 million and $1.8 million were recognized as revenue during 2022 and 2021, respectively.

Sales by Industry

The Company periodically reviews product revenue by industry vertical market to evaluate trends and the success of industry specific sales initiatives. The nature of products sold to the various industries is consistent and therefore the periodic review is focused on sales performance.

	For the Year Ended December 31,		
	2022	2021	2020
Commercial	115,102	84,488	102,245
Healthcare	19,739	30,130	35,400
Government	16,564	16,012	14,128
Education	14,073	11,632	13,722
License fees from Construction Partners	778	738	1,194
Total product and transportation revenue	**166,256**	**143,000**	**166,689**
Installation and other services	5,905	4,593	4,818
	172,161	**147,593**	**171,507**

18. SEGMENT REPORTING

The Company has one reportable and operating segment and operates in two principal geographic locations, Canada and the United States. Revenue continues to be derived almost exclusively from projects in North America and predominantly from the United States. The Company's revenue from operations from external customers, based on location of operations, and information about its non-current assets, is detailed below.

Revenue from external customers

	For the Year Ended December 31,		
	2022	**2021**	**2020**
Canada	25,477	17,299	18,848
U.S.	146,684	130,294	152,659
	172,161	**147,593**	**171,507**

Non-current assets

	As at December 31,	
	2022	**2021**
Canada	28,251	34,912
U.S.	53,277	60,723
	81,528	**95,635**

19. COMMITMENTS

As at December 31, 2022, the Company had outstanding purchase obligations of approximately $2.2 million related to inventory and property, plant and equipment purchases (December 31, 2021 – $3.7 million). Refer to Note 7 for lease commitments.

20. LEGAL PROCEEDINGS

The Company is pursuing multiple lawsuits against its former founders, Mogens Smed and Barrie Loberg, their new company Falkbuilt Ltd. ("Falkbuilt"), and other related individual and corporate defendants for violations of fiduciary duties and non-competition and non-solicitation covenants contained in their executive employment agreements, and the misappropriation of DIRTT's confidential and proprietary information in violation of numerous Canadian and U.S. state, and federal laws pertaining to the protection of DIRTT's trade secrets and proprietary information and the prevention of false advertising and deceptive trade practices.

As of December 31, 2022, the Company's litigation against Falkbuilt, Messrs. Smed and Loberg, and their associates was comprised of four main lawsuits: (i) an action in the Alberta Court of Queen's Bench instituted on May 9, 2019 against Falkbuilt, Messrs. Smed and Loberg, and several other former DIRTT employees alleging breaches of restrictive covenants, fiduciary duties, and duties of loyalty, fidelity and confidentiality, and the misappropriation of DIRTT's confidential information (the "Canadian Non-Compete Case"); (ii) an action in the U.S. District Court for the Northern District of Utah instituted on December 11, 2019 against Falkbuilt, Smed, and other individual and corporate defendants alleging misappropriation of DIRTT's confidential information, trade secrets, business intelligence and customer information (the "Utah Misappropriation Case"); and (iii) an action in the U.S. District Court for the Northern District of Texas instituted on June 24, 2021 alleging that Falkbuilt has unlawfully used DIRTT's confidential information in the United States and intentionally caused confusion in the United States in an attempt to steal customers, opportunities, and business intelligence, with the aim of establishing a competing business in the United States market (the "Texas Unfair Competition Case"). DIRTT intends to pursue the cases vigorously.

Falkbuilt also filed a lawsuit against the Company on November 5, 2019 in the Court of Queen's Bench of Alberta, alleging that DIRTT has misappropriated and misused their alleged proprietary information in furtherance of DIRTT's product development. Falkbuilt seeks monetary relief and an interim, interlocutory and permanent injunction of DIRTT's alleged use of the alleged proprietary information. The Company believes that the suit is without merit and filed an application for summary judgment to dismiss Falkbuilt's claim.

No amounts are accrued for the above legal proceedings.

21. PRIVATE PLACEMENT AND RELATED PARTY TRANSACTIONS

On November 30, 2022, the Company closed a private placement of 8,667,449 common shares for aggregate gross consideration of $2.8 million (the “Private Placement”) with its two largest shareholders, 22 NW Fund, LP (“22NW”) and 726 BC LLC and 726 BF LLC (together “726”) and all the directors and officers, including 638,996 Common Shares issued at the deemed per share price equal to the Subscription Price, as reimbursement for the costs incurred by 726 in connection with the Company’s contested director elections in 2022. In addition, in connection with the Private Placement, the two shareholders, or their principals, have irrevocably committed to backstopping any rights offering occurring by the Company in the twelve months following the Private Placement in the aggregate amount of $2.0 million.

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

Disclosure controls and procedures are controls and other procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in the Company's reports filed or submitted under the Exchange Act is accumulated and communicated to management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

As required by Rule 13a-15 under the Exchange Act, our principal executive officer and principal financial officer carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2022. Based upon their evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) were effective.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) and 15(d)-15(f) under the Exchange Act, as amended. Our management conducted an evaluation of the effectiveness of our internal control over financial reporting based on the 2013 framework in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO framework) to evaluate the effectiveness of internal control over financial reporting. Management believes that the COSO framework is a suitable framework for its evaluation of financial reporting because it is free from bias, permits reasonably consistent qualitative and quantitative measurements of our internal control over financial reporting, is sufficiently complete so that those relevant factors that would alter a conclusion about the effectiveness of our internal control over financial reporting are not omitted and is relevant to an evaluation of internal control over financial reporting.

Based on its evaluation under the framework in Internal Control—Integrated Framework, our management concluded that the Company maintained effective internal control over financial reporting at a reasonable assurance level as of December 31, 2022, based on those criteria.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) and 15(d)-15(f) under the Exchange Act) during the quarter ended December 31, 2022, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information.

None.

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 this Item is incorporated herein by reference to the information that will be contained in our information circular and proxy statement (“proxy statement”) related to the 2023 Annual Meeting of Shareholders, which we intend to file with the SEC within 120 days of the end of our fiscal year pursuant to General Instruction G(3) of Form 10-K.

Item 11. Executive Compensation.

The information required by this Item is incorporated herein by reference to the information that will be contained in our proxy statement related to the 2023 Annual Meeting of Shareholders, which we intend to file with the SEC within 120 days of the end of our fiscal year pursuant to General Instruction G(3) of Form 10-K.

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

The information required by this Item is incorporated herein by reference to the information that will be contained in our proxy statement related to the 2023 Annual Meeting of Shareholders, which we intend to file with the SEC within 120 days of the end of our fiscal year pursuant to General Instruction G(3) of Form 10-K.

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

The information required by this Item is incorporated herein by reference to the information that will be contained in our proxy statement related to the 2023 Annual Meeting of Shareholders, which we intend to file with the SEC within 120 days of the end of our fiscal year pursuant to General Instruction G(3) of Form 10-K.

Item 14. Principal Accounting Fees and Services.

The information required by this Item is incorporated herein by reference to the information that will be contained in our proxy statement related to the 2023 Annual Meeting of Shareholders, which we intend to file with the SEC within 120 days of the end of our fiscal year pursuant to General Instruction G(3) of Form 10-K.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a) The following documents are filed as part of the report:

(1) Financial Statements

Report of Independent Registered Public Accounting Firm

Consolidated Balance Sheets, as at December 31, 2022 and 2021

Consolidated Statements of Operations and Comprehensive Loss for the Years Ended December 31, 2022, 2021 and 2020

Consolidated Statements of Changes in Shareholders' Equity for the Years Ended December 31, 2022, 2021 and 2020

Consolidated Statements of Cash Flows for the Years Ended December 31, 2022, 2021 and 2020

Notes to the Consolidated Financial Statements

(2) Financial Statement Schedules

All schedules have been omitted as they are either not required or not applicable or the required information is included in the Consolidated Financial Statements or notes thereto.

(3) See Item 15(b)

(b) Exhibits:

Exhibit No.	Exhibit or Financial Statement Schedule
3.1	Restated Articles of Amalgamation of DIRTT Environmental Solutions Ltd. (incorporated by reference to Exhibit 3.1 to the Registrant's Registration Statement on Form 10, File No. 001-39061, filed on September 20, 2019).
3.2	Amended and Restated Bylaw No.1 of DIRTT Environmental Solutions Ltd. (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, File No. 001-39061, filed on May 22, 2020).
4.1	Description of Registrant's Securities (incorporated by reference to Exhibit 4.2 to the Registrant's Annual Report on Form 10-K, File No. 001-39061, filed on February 26, 2020).
4.2	Base Indenture, dated January 25, 2021, by and among DIRTT Environmental Solutions Ltd., Computershare Trust Company of Canada and Computershare Trust Company, National Association as Trustees (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K, File No. 001-39061, filed on January 29, 2021).
4.3	Supplemental Indenture, dated January 25, 2021, by and among the Company, Computershare Trust Company of Canada and Computershare Trust Company, National Association as Trustees (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K, File No. 001-39061, filed on January 29, 2021).
4.4	Second Supplemental Indenture, dated December 1, 2021, by and among the Company, Computershare Trust Company of Canada and Computershare Trust Company, National Association as Trustees (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K, File No. 001-39061, filed on December 1, 2021).
4.5	Rights Agreement, dated as of December 7, 2021, by and between DIRTT Environmental Solutions Ltd. and Computershare Trust Company of Canada, as rights agent (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K, File No. 001-39061, filed on December 8, 2021).
10.1+#	Loan Agreement, dated February 12, 2021, by and among the Royal Bank of Canada, DIRTT Environmental Solutions Ltd. and DIRTT Environmental Solutions, Inc., as borrowers (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, File No. 001-39061, filed on February 19, 2021).
10.2+#	First Amendment and Consent to Loan Agreement, dated November 15, 2021, by and among the Royal Bank of Canada, as lender, and DIRTT Environmental Solutions Ltd. and DIRTT Environmental Solutions, Inc., as borrowers (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, File No. 001-39061, filed on November 23, 2021).

10.3+	Amended and Restated Incentive Stock Option Plan (incorporated by reference to Exhibit 10.2 to the Registrant's Registration Statement on Form 10, File No. 001-39061, filed on September 20, 2019).
10.4+	DIRTT Environmental Solutions Ltd. Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, File No. 001-39061, filed on May 22, 2020).
10.5+	Form of Option Award Agreement Under the DIRTT Environmental Solutions Ltd. Long-Term Incentive Plan (incorporated by reference to Exhibit 4.4 to the Registrant's Registration Statement on Form S-8, File No. 333-238689, filed on May 26, 2020).
10.6+	Form of Time-Based Restricted Share Unit Award Agreement Under the DIRTT Environmental Solutions Ltd. Long-Term Incentive Plan (incorporated by reference to Exhibit 4.5 to the Registrant's Registration Statement on Form S-8, File No. 333-238689, filed on May 26, 2020).
10.7+	DIRTT Environmental Solutions Ltd. 2022 Employee Share Purchase Plan (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q File No. 001-39061, filed on May 4, 2022).
10.8+	Form of Performance-Based Restricted Share Unit Award Agreement Under the DIRTT Environmental Solutions Ltd. Long-Term Incentive Plan (incorporated by reference to Exhibit 4.6 to the Registrant's Registration Statement on Form S-8, File No. 333-238689, filed on May 26, 2020).
10.9+	Deferred Share Unit Plan for Non-Employee Directors (incorporated by reference to Exhibit 10.4 to the Registrant's Registration Statement on Form 10, File No. 001-39061, filed on September 20, 2019).
10.10+	DIRTT Environmental Solutions Ltd. Amended and Restated Employee Share Purchase Plan (incorporated by reference to Exhibit 4.4 to the Registrant's Registration Statement on Form S-8, File No. 333-234143, filed on October 9, 2019).
10.11+	Executive Employment Agreement, dated September 8, 2018, by and between DIRTT Environmental Solutions Ltd. and Kevin O'Meara (incorporated by reference to Exhibit 10.7 to the Registrant's Registration Statement on Form 10, File No. 001-39061, filed on September 20, 2019).
10.12+	Amended and Restated Executive Employment Agreement, dated July 4, 2018, by and between DIRTT Environmental Solutions Ltd. and Geoffrey Krause (incorporated by reference to Exhibit 10.9 to the Registrant's Registration Statement on Form 10, File No. 001-39061, filed on September 20, 2019).
10.13+	Executive Employment Agreement, dated February 27, 2019, by and between DIRTT Environmental Solutions Ltd. and Jeffrey A. Calkins (incorporated by reference to Exhibit 10.10 to the Registrant's Registration Statement on Form 10, File No. 001-39061, filed on September 20, 2019).
10.14+	Executive Employment Agreement, dated January 15, 2019, by and between DIRTT Environmental Solutions Ltd. and Mark Greffen (incorporated by reference to Exhibit 10.14 to the Registrant's Registration Statement on Form 10, File No. 001-39061, filed on September 20, 2019).
10.15+	Employment Agreement, dated August 31, 2019, by and between DIRTT Environmental Solutions Ltd. and Jennifer Warawa (incorporated by reference to Exhibit 10.15 to the Registrant's Registration Statement on Form 10, File No. 001-39061, filed on September 20, 2019).
10.16+	Employment Agreement, dated March 13, 2020, by and between DIRTT Environmental Solutions, Inc. and Charles R. Kraus (incorporated by reference to Exhibit 10.2 to the Registrant's Form 10-Q, File No. 001-39061, filed on May 6, 2020).
10.17+	Executive Employment Agreement, dated May 1, 2019 by and between DIRTT Environmental Solutions Ltd. and Jeffrey Metcalf (incorporated by reference to Exhibit 10.3 to the Registrant's Form 10-Q, File No. 001-39061, filed on July 27, 2022).

10.18+	Executive Employment Agreement, dated June 22, 2022 by and between DIRTT Environmental Solutions Ltd. and Benjamin Urban (incorporated by reference to Exhibit 10.4 to the Registrant's Form 10-Q, File No. 001-39061, filed on July 27, 2022).
10.19+	Executive Employment Agreement, dated August 12, 2022, by and between DIRTT Environmental Solutions Inc. and Richard Hunter (incorporated by reference to Exhibit 10.2 to the Registrant's Form 10-Q, File No. 001-39061, filed on November 14, 2022).
10.20+	Executive Employment Agreement, dated August 17, 2022, by and between DIRTT Environmental Solutions Inc. and Bradley Little (incorporated by reference to Exhibit 10.3 to the Registrant's Form 10-Q, File No. 001-39061, filed on November 14, 2022).
10.21+	Executive Employment Agreement, dated December 24, 2019, by and between DIRTT Environmental Solutions Ltd and Nandini Somayaji (incorporated by reference to Exhibit 10.4 to the Registrant's Form 10-Q, File No. 001-39061, filed on November 14, 2022).
10.22+	Executive Employment Agreement, dated October 19, 2022, by and between DIRTT Environmental Solutions Ltd and Jeff Dopheide (incorporated by reference to Exhibit 10.5 to the Registrant's Form 10-Q, File No. 001-39061, filed on November 14, 2022).
10.23+	Indemnity Agreement, dated August 1, 2020, between the Company and Shauna R. King, together with a schedule identifying other substantially identical agreements between the Company and each of the other persons identified on the schedule (incorporated by reference to Exhibit 10.16 to the Registrant's Annual Report on Form 10-K, File No. 001-39061, filed on February 24, 2021).
10.24+	Indemnity Agreement, dated April 26, 2022, between the Company and Douglas A. Edwards, together with a schedule identifying other substantially identical agreements between the Company and each of the other persons identified on the schedule (incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q File No. 001-39061, filed on May 4, 2022).
10.25+	Indemnity Agreement, dated June 22, 2022, between DIRTT Environmental Solutions Ltd and Benjamin Urban, together with a schedule identifying other substantially identical agreements between the Company and each of the other persons identified on the schedule (incorporated by reference to Exhibit 10.5 to the Registrant's Form 10-Q, File No. 001-39061, filed on July 27, 2022).
10.26+	Indemnity Agreement, dated August 11, 2022, between DIRTT Environmental Solutions Ltd and Richard Hunter, together with a schedule identifying other substantially identical agreements between the Company and each of the other persons identified on the schedule (incorporated by reference to Exhibit 10.6 to the Registrant's Form 10-Q, File No. 001-39061, filed on November 14, 2022).
10.27+*	Indemnity Agreement, dated November 15, 2022, between DIRTT Environmental Solutions Ltd and Jeff Dopheide
10.28#	Industrial Lease, dated September 15, 2012, by and between Piret (7303-30th Street SE) Holdings Inc. and DIRTT Environmental Solutions Ltd. (incorporated by reference to Exhibit 10.23 to the Registrant's Registration Statement on Form 10, File No. 001-39061, filed on September 20, 2019).
10.29#	Agreement of Lease, dated November 5, 2013, by and between Dundee Industrial Twofer (GP) Inc. and DIRTT Environmental Solutions Ltd., as amended by the Lease Amending Agreement, dated October 21, 2016, by and between Dream Industrial Twofer (GP) Inc. (formerly known as Dundee Industrial Twofer (GP) Inc.) and DIRTT Environmental Solutions Ltd. (incorporated by reference to Exhibit 10.24 to the Registrant's Registration Statement on Form 10, File No. 001-39061, filed on September 20, 2019).
10.30#	Lease of Industrial Space, dated February 12, 2015, by and between Hoopp Realty Inc./Les Immeubles Hoopp Inc., by its duly authorized agent, Triovest Realty Advisors Inc., and DIRTT Environmental Solutions Ltd., as amended by the Amendment of Lease, dated April 16, 2015, the Lease Modification Agreement, dated October 27, 2015, the Third Amendment of Lease, dated November 12, 2015, and the Fourth Amendment of Lease, dated January 8, 2016 (incorporated by reference to Exhibit 10.25 to the Registrant's Registration Statement on Form 10, File No. 001-39061, filed on September 20, 2019).

10.31#	Lease Agreement, dated March 29, 2011, by and between EastGroup Properties, L.P. and DIRTT Environmental Solutions, Inc. (incorporated by reference to Exhibit 10.26 to the Registrant's Registration Statement on Form 10, File No. 001-39061, filed on September 20, 2019).
10.32#	Lease, dated July 1, 2015, by and between Majik Ventures, L.L.C. and DIRTT Environmental Solutions, Inc., as amended by the First Amendment to Lease, dated May 11, 2017, by and between CAM Investment 352 LLC and DIRTT Environmental Solutions, Inc. (incorporated by reference to Exhibit 10.27 to the Registrant's Registration Statement on Form 10, File No. 001-39061, filed on September 20, 2019).
10.33#	Industrial Lease Agreement, dated October 2, 2008, by and between 141 Knowlton Way, LLC and DIRTT Environmental Solutions, Inc., as amended by the First Amendment to Industrial Lease Agreement, dated March 11, 2009, and the Second Amendment to Industrial Lease Agreement, dated August 23, 2018, by and between SH7-Savannah, LLC and DIRTT Environmental Solutions, Inc. (incorporated by reference to Exhibit 10.28 to the Registrant's Registration Statement on Form 10, File No. 001-39061, filed on September 20, 2019).
10.34#	Lease Agreement, dated October 7, 2019, by and between DIRTT Environmental Solutions, Inc. and SP Rock Hill Legacy East #1, LLC (incorporated by reference to Exhibit 10.4 to the Registrant's Form 10-Q, File No. 001-39061, filed on November 7, 2019).
10.35#	Second Amendment to Lease made as of the 6th day of July, 2020, by and between SP ROCK HILL LEGACY EAST #1, LLC, an Indiana limited liability company, and DIRTT ENVIRONMENTAL SOLUTIONS, INC., a Colorado corporation (incorporated by reference to Exhibit 10.4 to the Registrant's Form 10-Q, File No. 001-39061, filed on July 29, 2020).
10.36#	Lease Agreement between Tennyson Campus Owner, LP and DIRTT Environmental Solutions, Inc. dated March 4, 2020 (incorporated by reference to Exhibit 10.1 to the Registrant's Form 10-Q, File No. 001-39061, filed on May 6, 2020).
10.37#	Lease Amending Agreement, dated April 6, 2022, by and between Piret (7303 - 30th Street SE) Holdings Inc. and DIRTT Environmental Solutions Ltd (incorporated by reference to Exhibit 10.2 to the Registrant's Form 10-Q, File No. 001-39061, filed on July 27, 2022).
10.38	Letter Agreement, dated as of January 18, 2022, by and between Todd W. Lillibridge and DIRTT Environmental Solutions Ltd. (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, File No. 001-39061, filed on January 19, 2022).
10.39	Letter Agreement, dated January 7, 2021, by and among DIRTT Environmental Solutions Ltd., DIRTT Environmental Solutions, Inc. and Royal Bank of Canada (incorporated by reference to Exhibit 1.1 to the Registrant's Current Report on Form 8-K, File No. 001-39061, filed on January 13, 2021).
10.40+	Indemnification Agreement, by and between DIRTT Environmental Solutions Ltd. and James A. Lynch, dated March 22, 2021 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K, File No. 001-39061, filed on March 23, 2021).
10.41+	Indemnification Agreement, by and between DIRTT Environmental Solutions Ltd. and Diana R. Rhoten, dated March 22, 2021 (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K, File No. 001-39061, filed on March 23, 2021).
10.42	Subscription Agreement, dated November 14, 2022, by and between DIRTT Environmental Solutions Ltd. and 22NW Fund, LP, together with a schedule identifying substantially identical agreements between DIRTT Environmental Solutions Ltd. and each shareholder and U.S. director and executive officer listed on the schedule and identifying the material differences between each of those agreements and the filed Subscription Agreement (incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, File No. 001-39061, filed on November 18, 2022).
10.43	Subscription Agreement, dated November 14, 2022, by and between DIRTT Environmental Solutions Ltd. and Mark Greffen, together with a together with a schedule identifying substantially identical agreements between DIRTT Environmental Solutions Ltd. and each shareholder and Canadian executive officer listed on the schedule and identifying the material differences between each of those agreements and the filed Subscription Agreement

	(incorporated by reference to Exhibit 10.2 to the Registrant's Form 8-K, File No. 001-39061, filed on November 18, 2022).
10.44	Release, dated November 30, 2022, by and among DIRTT Environmental Solutions Ltd., 726 BC LLC and 726 BF LLC ((incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K, File No. 001-39061, filed on November 30, 2022).
10.45*	Second Amendment to Loan Agreement, dated February 9, 2023, by and among DIRTT Environmental Solutions Ltd., DIRTT Environmental Solutions, Inc. and Royal Bank of Canada.
21.1*	Subsidiaries of DIRTT Environmental Solutions Ltd.
23.1*	Consent of PricewaterhouseCoopers, L.L.P., independent registered public accounting firm.
31.1*	Certification of the Principal Executive Officer required by Rule 13a-14(a) or Rule 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of the Principal Financial Officer required by Rule 13a-14(a) or Rule 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification of the Principal Executive Officer required by 18 U.S.C. 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Certification of the Principal Financial Officer required by 18 U.S.C. 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	Inline XBRL Instance Document
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith.
** Furnished herewith.
+ Compensatory plan or agreement.
# Information in this exhibit identified by brackets is confidential and has been omitted pursuant to Item 601(b)(10)(iv) of Regulation S-K because it is not material and is the type of information that the Company customarily treats as private or confidential. An unredacted copy of this exhibit will be furnished to the Securities and Exchange Commission on a supplemental basis upon request.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

DIRTT ENVIRONMENTAL SOLUTIONS LTD.

Date: February 22, 2023

By: /s/ Benjamin Urban
Name: Benjamin Urban
Title: Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Report has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Benjamin Urban Benjamin Urban	Chief Executive Officer and Director *(Principal Executive Officer)*	February 22, 2023
/s/ Bradley S. Little Bradley S. Little	Chief Financial Officer *(Principal Financial Officer and Principal Accounting Officer)*	February 22, 2023
/s/ Ken Sanders Ken Sanders	Director	February 22, 2023
/s/ Douglas Edwards Douglas Edwards	Director	February 22, 2023
/s/ Aron English Aron English	Director	February 22, 2023
/s/ Cory Mitchell Cory Mitchell	Director	February 22, 2023
/s/ Shaun Noll Shaun Noll	Director	February 22, 2023
/s/ Scott Ryan Scott Ryan	Director	February 22, 2023