INNOVATIVE & REVOLUTIONARY THREAT DETECTION

MANAGEMENT'S DISCUSSION AND ANALYSIS
YEAR ENDED DECEMBER 31, 2021

(*Expressed in U.S. dollars, unless otherwise stated and per share amounts)*

Dated: April 26, 2022

Liberty Defense Holdings, Ltd., ("Liberty" or the "Company") has prepared this Management's Discussion and Analysis ("MD&A") as of April 25, 2021 and should be read in conjunction with the Company's audited consolidated financial statements for the year ended December 31, 2021. Unless otherwise stated, all financial information has been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. All dollar amounts herein are expressed in U.S. dollars unless stated otherwise. References to $ means U.S. dollars, and CAD$ are to Canadian dollars. The MD&A should be read in conjunction with the Company's audited consolidated financial statements for the year ended December 31, 2021.

This MD&A may contain forward looking statements based on assumptions and judgments of management regarding events or results that may prove to be inaccurate as a result of development or other risk factors beyond its control. Actual results may differ materially from the expected results.

Additional information on the Company is available at the Company's website *www.libertydefense.com* and under the Company's profile at www.sedar.com.

Table of Contents

1) Overview

(a) Description of Business

Liberty Defense Holdings, Ltd., is a public company (TSXV: SCAN, Frankfurt: L2D, OTCQB: LDDFF), that was incorporated under the Business Corporation Act of Ontario on June 8, 2012. The Company's registered and records office address is 1055 West Georgia Street, 1500 Royal Centre, P.O. Box 11117. Vancouver, British Columbia, V6E 4N7, Canada.

The Company undertook a reverse takeover ("RTO") transaction with DrawDown Detection, Inc. ("DrawDown" or "DD") on March 17, 2021 in which Liberty acquired all of the issued and outstanding common shares of DrawDown on a post-DrawDown consolidation basis in exchange for common shares of Liberty on a one to one basis post-Liberty consolidation. As described to undertake this transaction, Liberty completed a share consolidation on a 6.2 old shares to 1 new share basis and DrawDown also completed a share consolidation on a 2 old shares to 1 new share basis. Drawdown has been identified as the accounting acquirer and, accordingly, the Company is considered to be a continuation of Drawdown, and the net assets of the Company at the date of the reverse acquisition are deemed to have been acquired by Drawdown. Financial information includes the results of operations of the Company from March 17, 2021.

The Company, through its wholly owned subsidiary Liberty Defense Technologies Inc. ("LDT"), is principally engaged in the commercialization of an active 3D imaging technology system, HEXWAVE, to detect concealed threats.

(b) Board Changes

Effective March 17, 2021, in connection with the RTO Jeremy Morton agreed to resign as a director and Aman Bhardwaj agreed to resign as President of US Operations, Interim Chief Executive Officer and Acting Chief Financial Officer and a director of the Company.

Effective March 17, 2021, the Company appointed William Frain, as Chief Executive Officer and director; Omar Garcia Abrego, as Chief Financial Officer and Corporate Secretary; Michael Lanzaro, as Chief Technology Officer; Aman Bhardwaj as Chief Operating Officer, Daryl Rebeck, John McCoach and Arjun Grewal as directors of the Company.

Effective August 5, 2021, the Company also added Linda L. Jacksta to its board of directors.

Effective November 29, 2021, John McCoach is no longer a director of the Company.

Effective December 31, 2021, Aman Bhardwaj is no longer the Chief Operating Officer.

(c) License Agreements

i) HEXWAVE Technology

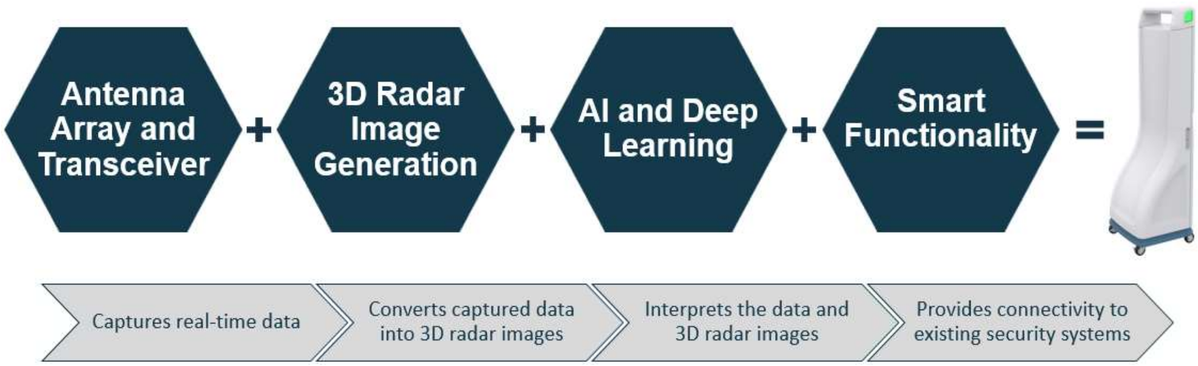
a. Active real-time 3D imaging technology licensed from MIT LL

Active video rate imaging technology was developed by the Massachusetts Institute of Technology Lincoln Labs ("MIT LL") and the technology has been in development since 2014. In October 2017, a concept demonstrator (pre-prototype) of the core technology was successfully tested under environmental conditions by MIT LL.

MIT LL undertook 4 years of research and development, including building a working prototype and testing the technology in both lab and real electromagnetic environments. LDT worked with MIT LL to transfer the active imaging technology starting in Q4 2018. In September 2019, Liberty and MIT LL were recognized by the FLC (Federal Laboratory Consortium) for the 2019 Excellence in Technology Transfer North East Region.

With the exclusive global license agreement (the "License Agreement") for the use of the active imaging technology, the Company has continued to develop HEXWAVE using the technology and concepts demonstrated by MIT LL. MIT LL, through the Technology Transfer Agreement ("TTA") has transferred the intellectual property and understanding to Liberty's Center of Excellence ("COE") in order for the technology to be further refined and developed. As part of the commercialization and go to market strategy, the Company has identified certain required changes and entered into the Cooperative Research and Development Agreement (CRADA) with MIT LL to leverage off their existing experience and accelerate the development of certain aspects of HEXWAVE. In addition to active imaging technology, the Company is also developing Automatic Threat Detection technology with the help of rich 3-dimension data and deep learning algorithms.

HEXWAVE Overview:



Since acquiring the License Agreement from MIT LL, Liberty has significantly advanced HEXWAVE which includes active imaging technology, automated threat detection ("ATD") and smart IoT technologies. This culminated in the demonstration of the four principal subsystems in September 2019. This step represented a significant de-risking of the product development phase.

b. AI and Deep Learning – Automatic Threat Recognition (ATR)

Automatic Threat Recognition utilizing deep learning algorithms was developed by Liberty Defense to recognize person-borne concealed metal and non-metal threats. The 3-D data and images produced by the HEXWAVE are used to train and enhance the Artificial Intelligence engine using deep-learning algorithms.

At a frame capture rate of 10 images/sec, the algorithms can exploit the changes in person's positioning from frame-to-frame, thus maximizing the total coverage area and threat detection performance.

ATR improves detection accuracy, reduces resources required for screening, and allows the security personnel to take necessary action instantly. As additional field data and images are collected by the system over time, our plan will be to continuously improve threat detection performance HEXWAVE can receive over-the-air updates to its algorithms as new and emerging threats are identified.

Global License Agreement – September 2018

The License Agreement for the use of the technology behind HEXWAVE with MIT is to be in effect until December 2035. Under the License Agreement, several milestones are required to be met to keep it in good standing. MIT continues to work closely with Liberty on developing this technology and recently amended the timeline to develop a beta prototype from on or before December 31, 2019, to November 1, 2020. The amendment also included additional details in relation to changes on required commercial sales dates, required total net sales by year, and payment dates on its license agreement. Refer to SEDAR (www.sedar.com) for further details on the MIT amendment.

HEXWAVE Key Discriminators

Central to positioning HEXWAVE is building on its key discriminators. These are enabled by the system architecture that aligns to key market needs. These include:

- Detects metal & non-metal threat objects

- Detects both indoor and outdoor locations including both overt and covert application
- Protects privacy (no personal data is collected or analyzed)
- ATD in real-time using rich 3D data and deep learning algorithms
- Smart functionality provides connectivity to existing security systems (VMS, door locks, networks)
- Routine software & AI updates
- Operationally agile (mobile and deployable across detection space)
- High throughput (over 1,000 screens per hour) with precise secondary screening

About the Explosives and Weapon Detection Market

The aggregate markets associated with the explosives and weapon detection market are expected to total over $11 billion by 2025. The verticals most relevant to the growing Urban Security Market ("USM") are public venues, secured perimeters & buildings, land transportation, government, and others (schools, hotels, casinos, places of worship, malls, workplace & community screening).

The complexity of the urban security threat environment has dramatically changed over the last decade, requiring a more proactive approach to preventing violent attacks against communities. Since the 9/11 events, the air transportation community has effectively deployed a combination of detection technologies that are being consistently upgraded in an attempt to "stay ahead" of evolving threats. The array of detection tools has largely been protecting access to aircraft systems as gated or "point" solutions. The public is forced to tolerate the delays associated with such inspections due to the extreme risks that explosives or weapons can have on an aircraft and its passengers.

In contrast, urban communities are largely unprotected against random acts of violence or use systems that significantly impede the flow of customers into and within business facilities. While the occasional violent act was more often considered an anomaly, the frequency and magnitude of violent attacks is forcing both businesses and governments to rethink how to move to more proactive measures. Since 2015, there have been over 300 mass shootings per year in the USA at a pace of nearly one per day. There is a market-driven need for security detection that can be broadly deployed across nearly all public and private facilities. The base requirements are that they be both highly accurate and nonintrusive to our daily lives.

Current Alternatives

The current alternatives in the USM are typically restricted to:

- principally focusing on metal threats, therefore non-metal threats can potentially go undetected
- airport solutions which are not able to be used across other verticals and do not have the requisite throughput
- limited outdoor application and therefore hinder the capability of providing a layered defense for proactive threat detection
- requiring large, dedicated areas or space versus integration into existing infrastructure
- limited capability for integration into existing security systems command & control

About Liberty's Management Team

Central to Liberty's team is the technical and management expertise are: CEO and Director, Bill Frain former Senior Vice President for L-3 Security & Detection Systems (NYSE – LHX), the world's leading supplier of security inspection systems. In this role Bill led global sales, business development and key account management. President and CTO, Mike Lanzaro former Vice President of Engineering and Technology at L-3 Security & Detection Systems. Vice President of Engineering Jeffrey Gordon who spent his last five years working at General Electric Global Research developing roadmaps for imaging and sensor technologies and over 35 years experience leading the development of ground-breaking sensing products for the military, medical, industrial, and commercial markets, including body scanners that can be seen deployed across most U.S. and EU airport checkpoints.

Liberty's Advisors

Liberty has assembled a group of Advisors that can provide unprecedented market access to several of our identified market verticals including stadiums National Hockey League and Federation Internationale de Football

Association and shopping malls. A key aspect to Liberty's success will be gaining access and developing the market for HEXWAVE.

ii) MIT License Agreement Description and Commitments

The Company, through its wholly owned subsidiary Liberty Defense Technologies Inc. ("LDT"), has entered into agreements with the Massachusetts Institute of Technology ("MIT") and MIT's Lincoln Laboratory ("MIT LL"), including an exclusive patent licence agreement between MIT and LDT dated September 10, 2018, as amended from time to time (the "Licence Agreement"), a technology transfer agreement between LDT and MIT LL, effective August 24, 2018 (the "Technology Transfer Agreement"), and a cooperative research and development agreement between LDT and MIT dated as of December 21, 2018 ("CRADA"), such agreements providing LDT with an exclusive licence for patents, design assets and MIT LL technical expertise related to active three-dimensional imaging technology that are the core technology behind the HEXWAVE product.

The obligations under the Technology Transfer Agreement and the CRADA have now been completed. Liberty may consider extending the CRADA (and therefore changing its scope) if it determines that additional MIT LL technical expertise related to active three-dimensional imaging technology is required. Pursuant to the License Agreement, LDT has been granted the exclusive rights to MIT's patent in "multistatic sparse array topology for FFT-based field imaging" (MIT Case No. l 8409L) (the "Patent"), which is being utilized in the development and application of the HEXWAVE product. The License Agreement is to be in effect until the expiration of the Patent, which is 14 years (December 2035). In granting LDT such patent rights, the Company shall pay MIT in addition to patent filling costs an annual maintenance fees as follows: 1) $20,000 for 2019 (paid); $50,000 for 2020 (paid); $60,000 for 2021 (paid); $100,000 for 2022; $200,000 for 2023 and $350,000 for 2024 and thereafter; and 2) a royalty of 5.7% of all future net sales of the Company. The Company shall also be required to achieve certain milestones

The continuity of the intangible assets is as follows:

	MIT Licenses	HEXWAVE Technology	Total
Balance, December 31, 2019 and 2020	$ -	$ -	$ -
Additions RTO transaction (note 4)	183,682	3,769,172	3,952,854
Additions	202,497	-	202,497
Amortization	(19,899)	-	(19,899)
Balance, December 31, 2021	**$ 366,280**	**$ 3,769,172**	**$ 4,135,452**

Intangible assets included as MIT licenses include payments in connection to reimbursement of global patent filing costs and annual maintenance fees. Additionally, intellectual property was generated through the RTO transaction.

iii) Battelle Memorial Institute License Agreement Description and Commitments

On March 22, 2021, the Company, through its wholly owned subsidiary DrawDown Detection, Inc. has entered into an agreement ("Battelle License Agreement") with Battelle Memorial Institute ("Battelle"), which operates the Pacific Northwest National Laboratory, to license the millimeter wave-based, High-Definition Advanced Imaging Technology (HD-AIT) body scanner and shoe scanner technologies. The agreement, as amended from time to time, provides the Company with a three-year exclusive license for the certain patents which will convert to a non-exclusive license for the remaining life of the patents. The agreement also provides the Company with non-exclusive license for certain patents for life.

As consideration for the Battelle License Agreement, the Company paid $30,000 upon signing (paid) and $30,000 six months after (paid).

Under the Battelle License Agreement, the Company shall pay a five percent royalty on net sales and a twenty-five percent in all sublicensing revenues if permitted. The Company is also required to pay a minimum royalty amount as follows, unless the agreement is terminated:

(Expressed in U.S. dollars)

		Amounts
Year 2021 (paid on March 25, 2022)	$	50,000
Year 2022		50,000
Year 2023		100,000
Year 2024 and each year thereafter		200,000

The Company is obligated to achieve certain milestones in the next twelve to thirty-six months and reimburse Battelle for ongoing patenting expenses, as well as past patenting expenses in the total amount of $50,000, which are payable as follows: 1) $25,000 due on or before February 28, 2022 (paid on March 25, 2022), and 2) $25,000 due on or before February 28, 2023. The outstanding balance of current royalties and patent expense reimbursements of $75,000 was recorded within accounts payable and accrued liabilities in the consolidated statement of financial position. The outstanding balance of long-term patent expense reimbursements of $25,000 has been accrued at year-end.

iv) DKL License Agreement Description

On October 11, 2018, the Company through its wholly owned subsidiary DrawDown Technologies, Inc ("DDT") entered into a license agreement ("the Licensing Agreement DKL") with DKL International, Inc ("DKL"), as amended on February 6, 2020, for the commercial development of DKL's passive detection techniques and products that detect smokeless gunpowder from a standoff distance (the "Detection Technology").

Pursuant to the last amendment to the Licensing Agreement DKL on February 6, 2020, DKL agreed to surrender back to DrawDown, 1,500,000 common shares in the capital of the Company with a fair value of $230,982 that were issued to DKL on April 2, 2019 as part of the consideration for the Licensing Agreement DKL. In addition to returning those shares, it was also agreed to cancel the cash portion of the consideration for an amount of $80,000 and the obligation to issue 500,000 common shares with an estimated value of $188,126 for a total of $268,126 recorded as a recovery in the statement of loss.

During the prior year ended December 31, 2020, DrawDown Detection agreed to pay a non-refundable license fee of $250,000 of which $18,500 was paid during the year 2020 and $175,000 paid in 2019. The remaining outstanding balance of $56,500 was recorded within accounts payable and accrued liabilities in the consolidated statement of financial position.

On March 23, 2021, DrawDown paid to DKL $70,000, which satisfied the payment of previously approved research and development costs of DKL for work performed until December 31, 2020.

On April 19, 2021, the Company gave notice of termination of the License Agreement DKL. Such notice of termination served as formal notice that the Licensing Agreement DKL was terminated in full effective six months following the date of this notice. Upon the effective date of the termination, the parties to the Licensing Agreement DKL will have no further rights and/or obligations pursuant thereto. In order to settle any and all outstanding amounts owed to DKL under the Licensing Agreement the Company paid $125,000 to DKL.

(d) Recent Developments

From inception, Liberty set itself an aggressive product development timeline by pursuing a concurrent engineering and development approach and prior to its financial constraints had managed to deliver upon this timeline.

Liberty has also established several collaboration agreements with multiple well-respected recognizable organizations across its various market verticals to participate in Beta testing HEXWAVE. These include the Port of Tampa, FL, University of Wisconsin Police Department, Greater Toronto Airport Authority, Metro Toronto Convention Center, Maryland Stadium Authority, a Hindu temple in Southeast United States, Virginia Division of Capitol Police, FC Bayern München, and Utah Attorney General, among others.

(Expressed in U.S. dollars)

In addition to advancing HEXWAVE and the market for it, Liberty achieved several significant corporate milestones which include:

- Received a $500K contract award from the Transportation Security Administration's ("TSA") (October 2021)
- Signed a license agreement with Battelle Memorial Institute (April 2021)
- Returned funding from the $1 million grant from The Israel-US Binational Industrial Research and Development (BIRD) Foundation (Mar 2021) due to Levitations' inability to achieve positive cash flow or attract an investment (Oct 2021).
- Complete the Reverse Takeover with DrawDown (March 2021)
- Closing of oversubscribed public offering for total gross proceeds of CAD$6.9 million (March 2021)
- Closing of oversubscribed public offering for total gross proceeds of CAD$7.1 million (June 2021)
- Closing of oversubscribed public offering for total gross proceeds of CAD$8.6 million (March 2022)

(e) Outlook and Going Concern

Expenditure in research and development activities undertaken with the prospect of gaining new scientific or technological knowledge and understanding is recognized in the statement of loss as an expense when incurred. No research and development costs have been deferred to date.

The Company's expenditures in development activities where research results are used in planning and designing the production of new or substantially improved products and processes is recognized under intangible assets if the product or process is technically and commercially feasible, if there is an intention and ability to complete the project and then use or sell it and expect economic benefits from the project, if the company has sufficient resources to complete development and if it is able to measure reliably the cost during development. The recognized research and development expenditures incurred are recognized in the statement of loss as an expense when incurred.

The Company incurred in a total loss during the year ended December 31, 2021, of $12,389,549 and cash outflows from operating activities of $7,206,513. In order to fully commercialize HEXWAVE, the Company will require additional funds to achieve its development timeline and bring HEXWAVE to market. The Company has certain committed development milestones over the next twelve months and based on the Company's current forecasted operational and development spend, the Company will require additional funds to meet these milestones. While the Company has been successful in arranging financing in the past, the success of such initiatives cannot be assured. This material uncertainty casts significant doubt upon the Company's ability to continue as a going concern.

In March 2020, the World Health Organization declared coronavirus COVID-19 a global pandemic. This contagious disease outbreak, which has continued to spread, and any related adverse public health developments, has adversely affected workforces, economies, and financial markets globally, potentially leading to an economic downturn. It is not possible for the Company to predict the duration or magnitude of the adverse results of the outbreak and its effects on the Company's business or ability to raise funds.

The application of the going concern concept is dependent upon the Company's ability to generate future profitable operations and receive continued financial support from its creditors and shareholders. These interim condensed consolidated financial statements do not give effect to any adjustments that might be required should the Company be unable to continue as a going concern.

Management plans to continue to pursue equity and/or debt financing to support operations. There can be no assurance that these financing efforts will be successful. Failure to maintain the support of creditors and obtain additional external financing will cause the Company to curtail operations and the Company's ability to continue as a going concern will be impaired. The outcome of these matters cannot be predicted at this time.

2) Results of Operations

Certain comparatives in prior periods may have been revised to conform to the current presentation.

During the three months ended and year ended December 31, 2021, the Company reported a total loss and comprehensive loss of $6,057,781 and $12,582,705 respectively (three months ended and year ended December 31, 2020 –$397,233 and $1,037,212 respectively), and basic and diluted loss per share of $0.10 and $0.25 (three months ended and year ended December 31, 2020 – $0.02 and $0.07 respectively). Despite the accumulated losses, Management of the Company is committed to continue with the research and development and future commercialization of its active 3D imaging technology system, HEXWAVE, along with its other different licensed technologies.

The net loss for the three months ended and year ended December 31, 2021, and 2020 is comprised of the following items:

	Three months ended December 31, 2021	Three months ended December 31, 2020	Year ended December 31, 2021	Year ended December 31, 2020
Research and development:				
Consideration recovery for the DKL licensing agreement (note 7 (b))	$ –	$ –	$ –	$ (268,126)
Product development	(214,120)	–	398,930	–
Technology costs	200,792	1,325	513,057	67,449
Legal fees	20,269	–	159,791	–
Salaries & Consulting Fees (note 9 and 19)	1,658,761	–	3,148,134	–
Stock-based Compensation (note 15 and 19)	120,133	–	275,740	–
Office, rent and administration	31,467	–	72,139	–
Travel and miscellaneous	75,887	–	107,343	–
Depreciation (note 6)	54,495	–	130,252	–
Amortization (note 7 (a))	13,091	–	19,899	–
General expenses:				–
Consulting fees, salaries and benefits (note 9 and 19)	(751,246)	152,328	573,381	562,534
Depreciation (note 6)	(5,924)	–	13,670	–
Legal and professional fees	494,948	100,723	698,476	314,710
Stock based compensation (note 15 and 19)	2,405,440	5,561	2,627,300	76,392
Office, rent and administration	111,004	1,974	208,036	7,854
Regulatory and shareholder information	3,620	(63)	51,639	8,764
Travel, promotion and investor relations	108,393	13,041	772,425	61,720
RTO transaction related costs and listing expense (note 4)	1,656,898	–	2,546,491	–
	5,983,908	274,889	12,316,703	831,297
Other (income) expense:				
Interest income	87	(47,458)	(54,934)	(144,533)
Interest expense	5,652	36,886	48,030	100,407
Accretion expense (note 11 and 13)	638	32,935	41,819	96,006
Foreign exchange loss	90,950	169,906	37,931	166,127
	97,327	192,269	72,846	218,007
Total loss for the year	**$ (6,081,235)**	**$ (467,158)**	**$ (12,389,549)**	**$ (1,049,304)**
Other comprehensive (loss) income				
Items that may be reclassified subsequently to profit or (loss)				
Foreign currency translation adjustment	23,454	69,925	(193,156)	12,092
Total items that may be reclassified subsequently to profit or loss	23,454	69,925	(193,156)	12,092
Total loss and comprehensive loss for the year	**$ (6,057,781)**	**$ (397,233)**	**$ (12,582,705)**	**$ (1,037,212)**

Significant variances affecting the total loss for the period are discussed as follows:

On March 17, 2021, the Company undertook a reverse takeover transaction with DrawDown Detection, Inc., as a result all comparative figures only include the transaction of DrawDown and current balances are affected from March 17, 2021, onwards to include not only the transactions of DrawDown but also the transactions of Liberty.

(Expressed in U.S. dollars)

i) Research and development ("R&D") expenses for the three months ended and year ended December 31, 2021, was $1,960,775 and $4,825,285 in connection to expenses related to R&D of the Company's licensed technologies with the purpose to mainly continue advancing its HEXWAVE technology. During the year ended, the Company incurred $513,057 in connection to technology costs and $3,148,134 in salaries and consulting fees that relate to software development and beta testing. Travel and miscellaneous expenses of $107,343 were incurred as higher travel to and from our Atlanta and Boston office has increased with the growth of the team. It also includes stock-based compensation in the amount of $275,740 in connection to stock options granted to directors, officers, employees, and consultants of the Company on April 7, June 10, Jul 28, and Nov 1, 2021. During the comparative period, for the three months ended and year ended December 31, 2020, the Company spent $1,325 and recovered $200,677 in connection to its previous handheld gunpowder detection device technology which was completely discontinued early 2021.

ii) During the three month and year ended December 31, 2021, total general expenses in the amount of $4,023,133 and $7,491,418 were incurred mainly in connection to consulting fees, legal and professional fees, stock-based compensation and travel promotion and investor relations. The RTO transaction costs are the largest portion of the total general expenses in the amount of $1,656,898 and $2,546,491. Stock based compensation expenses of $2,405,440 and $2,627,300 were incurred in connection to stock options, restricted share units, and performance shares granted March 17, April 7, June 10, July 28, and Nov 1, 2021.

Consulting fees, salaries and benefits recorded for the year ended December 31, 2021, increased from $562,534 to $573,381 as the comparative period only includes transactions incurred by DrawDown. During the three months ended December 31, 2021, the Company recorded a recovery of $751,246 which relates to a large reclass from consulting fees, salaries and benefits to stock-based compensation as the performance shares needed to be recognized as stock-based compensation expense per the RTO transactions. Also, there is a significant increase in travel promotion and investor relations recorded for the year ended December 31, 2021, as it went from $61,720 to $772,425 in the current year. This is because there is a significant increase of various promotional initiatives that are underway to promote the Company and its licensed technologies to create public awareness.

iii) During the three months ended and year ended December 31, 2021, the Company recorded net other income in the amount of $97,327 and $72,846 compared to net other income of $192,269 and $218,007 incurred during the same period of the previous year. The main differences relate to interest income which in the comparative year was recorded an amount of $(144,533) in connection to interest on the loan between DrawDown and Liberty, since the closing of the RTO transaction these balances are now eliminated on consolidation. The Company also recorded a decrease in foreign exchange loss compared to the previous year due to foreign exchange rate differentials. The Company's functional currency is the Canadian dollar and holding financial assets and liabilities in other currencies, mainly the U.S. dollar, produce foreign exchange gains or losses.

3. Summary of Quarterly Results

Three months ended	Working capital (deficiency)	Total assets	Total loss and comprehensive income loss	Loss per share
	$	$	$	$
31-Dec-21	675,182	6,499,942	(6,057,781)	(0.10)
30-Sep-21	3,444,825	13,651,601	(3,012,091)	(0.04)
30-Jun-21	5,193,209	14,857,621	(2,518,392)	(0.06)
31-Mar-21	2,297,814	11,897,154	(994,441)	(0.05)
31-Dec-20	(527,519)	2,071,133	(397,233)	(0.02)
30-Sep-20	(135,847)	1,916,518	(207,176)	(0.02)
30-Jun-20	63,965	1,806,596	(339,998)	(0.02)
31-Mar-20	383,253	1,297,068	(92,805)	(0.01)

During the fourth quarter of 2021, the Company continued with the development of its different technologies and hired key individuals that will help the Company to support the success of the beta launch HEXWAVE product, along with the development of the product prototype for the Company's aviation checkpoint and other security solutions. The Company also secured 6,000 square feet of new office and engineering lab space in the Boston area to support the Company's growing needs.

During the second quarter of 2021, the Company closed a brokered private placement for gross proceeds of $5,777,490 (CAD$7,130,000), therefore with funding in place the Company started ramping up the necessary activities to finalize the beta testing of its HEXWAVE technology and prepare the company for manufacturing and commercialization.

(Expressed in U.S. dollars)

Additionally, the Company added more personnel to the different areas of the Company to start developing policies and procedures that will help the Company in its next phase of growth.

Effective March 17, 2021, the Company undertook a reverse takeover ("RTO") transaction with DrawDown. As part of the RTO transaction, on March 12, 2021, the Company closed a financing with a total of 17,250,000 subscription receipts for one Unit (the "Unit") at a price of $0.3209 (CAD$0.40) per Unit. Each Unit was comprised of one common share and one-half of one purchase warrant. Each whole purchase warrant entitles the holder thereof to purchase one share at CAD$0.60 per share for a period of two years. Gross proceeds of the financing were $5,535,499 (CAD$6,900,000), which includes the exercise of the agent's over-allotment option in full representing 2,250,000 subscription receipts. Additionally, as part of accounting for the RTO, the company recorded an intangible asset in the amount of $3,952,854 (Intangible asset $183,682 & Intangible asset – FV HEXWAVE technology $3,769,172) and had RTO transaction costs of $298,667 and listing expense of $2,546,491 recorded during the year ended December 31, 2021.

During the year 2020, the Company started to mainly focus on the asset acquisition opportunity with Liberty, as a result a good portion of the work done, and resources of the Company were directed to the due diligence. Additionally, in February of 2020, the Company requested DKL to amend its licensing agreement to accommodate for the asset acquisition with Liberty and cancelled shares and warrants previously issued to DKL and all the necessary regulatory and third-party approvals.

4. Liquidity and Capital Transactions Resources

(a) Liquidity

As of December 31, 2021, the Company had a cash balance of $1,341,573 and a working capital of $675,182. Current liabilities as of December 31, 2021, are in the amount of $891,862, which have been incurred in connection to continuing the development of the Company's licensed technologies and keeping the licenses and the Company's public registry in good standing.

	Year ended December 31, 2021		2020	
Cash (used in) provided by:				
Operating activities:				
Loss and comprehensive loss for the period	$	(12,389,549)	$	(1,049,304)
Items not involving cash:		5,593,539		(58,451)
Changes in non-cash working capital:		(410,503)		21,501
Cash used in operating activities		(7,206,513)		(1,086,254)
Cash used in investing activities		(571,828)		–
Cash provided by financing activities		9,267,914		71,697
Effect of foreign exchange rate changes on cash		(205,047)		103,657
Increase (decrease) in cash		1,284,526		(910,900)
Cash, beginning of the period		57,047		967,947
Cash, end of the period	**$**	**1,341,573**	**$**	**57,047**

During the year ended December 31, 2021, the Company used net cash in operating activities in the amount of $7,206,513 mainly due to expenses related to research and development, salaries and consulting fees, promotional and investor relations activities and RTO transaction costs incurred in the period. The Company incurred $571,828 in investing activities which relates to additions to intangible assets from the RTO. This includes $3,769,172 for the

(Expressed in U.S. dollars)

Hexwave Technology and $183,682 of acquired intangible assets. Also, provided cash in financing activities in the net amount of $9,267,914 which mainly relates to proceeds form issuance of common shares and warrants exercised, net of repayments and proceeds of working capital loans in the amount of $512,611.

The Company has not issued dividends to date and has no plans to pay dividends in the foreseeable future.

In comparison, during the year ended December 31, 2020, the Company used net cash in operating activities in the amount of $1,086,254 mainly due to the loss and comprehensive loss for the year and the reversal of non-cash transactions. The company also used cash in financing activities in the net amount of $71,697, which mainly relates to the convertible debentures issued and the cash used in financing provided to Liberty in connection with the business combination.

(b) Capital Transactions and Resources

Common share transactions for the twelve months ended December 31, 2021

i) On March 17, 2021, Liberty completed a share consolidation equivalent to 6.2 old common shares to 1 new common share and DrawDown also completed a share consolidation of 2 old common shares for 1 new common share in connection to the completion of the RTO transaction. All common shares and per share data presented in the Company's consolidated financial statements have been retroactively adjusted to reflect the share consolidation unless otherwise noted.

ii) On July 21, 2021, the Company issued 2,193,250 capital markets performance shares to certain employees and a consultant of the Company fair value of $691,986.

iii) On July 15, 2021, the Company issued 50,000 common shares for gross proceeds of $19,885 in connection with warrants exercised. The fair value of these warrants exercised was $10,723 and was transferred from the equity reserves and recorded against share capital.

iv) On June 17, 2021, the Company closed a brokered private placement of 14,260,000 units ("Units") at a price of $0.4052 (CAD$0.50) per Unit for gross proceeds of $5,777,490 (CAD$7,130,000). Each Unit consists of one common share of the Company and one-half of one common share purchase warrant (each whole warrant, a "Warrant "). Each Warrant entitles the holder thereof to acquire one additional common share of the Company at a price of CAD$0.75 per Common Share within 24 months. The Company paid to the agent a cash commission of $448,464 (CAD$553,450) and issued to the agent 1,106,900 non-transferable compensation warrants (the "Compensation Warrants"). Each Compensation Warrant entitles the Agent to acquire one common share of the Company at a price of CAD$0.50 per common share within 24 months with a fair value of $237,386. The Company also incurred $76,391 (CAD$94,380) in legal and filling fees.

v) As part of the RTO transaction on March 12, 2021, the Company closed a financing with a total of 17,250,000 subscription receipts for one Unit (the "March Unit") at a price of $0.3209 (CAD$0.40) per Unit for total proceeds of $5,535,499 (CAD$6,900,000). Each March Unit is comprised of one common share and one-half of one purchase warrant (each whole warrant, a "March Warrant"). Each whole purchase March Warrant entitles the holder thereof to purchase one common share at CAD$0.60 per common share for a period of two years. The Company issued 1,098,125 compensation warrants to the agents (the "Compensation March Warrants"). Each Compensation March Warrant entitles the agents to acquire one common share of the Company at a price of CAD$0.40 per common share within 24 months with a fair value of $197,832. The Company also incurred a cash commission and other filling and legal expenses of $597,800 (CAD$739,250).

vi) A total of 10,733,792 common shares were issued upon completion of the RTO transaction on March 17, 2021, with a fair value of $3,444,458. Also, the convertible debentures issued in connection to the RTO transaction were converted into DrawDown Units and immediately exchanged for Liberty shares on a one for one basis along with the warrants and finder's warrants. Each DrawDown Unit is comprised of one common share and one-half of one purchase warrant (each whole warrant, a "CD Warrant"). Each whole purchase CD Warrant entitles the holder thereof to purchase one common share at CAD$0.50 per common share for a period of two years. A total of 5,825,467 common shares were issued with a fair value of $1,495,507 in connection with the convertible debentures.

Also, during the year ended December 31, 2020 and as part of the convertible debentures transaction, the Company issued a total of 208,286 finder's warrants at a price of CAD$0.40 per share for a period of 24 months with an estimated fair value of $31,884.

Common share transactions for the twelve months ended December 31, 2020

i) Pursuant to the February 6, 2020, amendment to the Licensing Agreement, DKL agreed to surrender back to the Company, 1,500,000 common shares that were issued to DKL on April 2, 2019, as part of the consideration for the Licensing Agreement with a state value of $230,982 (CAD$300,000).

ii) On April 12, 2020, a total of 5,662,500 common shares were cancelled and return to treasury. These shares were issued in connection to a private placement closed on March 5, 2019, where the Company issued 5,662,500 at CAD$0.0005 for gross proceeds of $8,511 (CAD$11,325)

iii) During the year ended December 31, 2020, DrawDown incurred $nil in share costs.

Other sources of funds

Other sources of funds potentially available to the Company are through the exercise of outstanding stock options, and share purchase warrants with the following terms:

As at December 31, 2021, the number of stock options outstanding and exercisable, adjusted for the share consolidation was:

	Outstanding		**Exercisable**	
Expiry date	**Number of stock options**	**Exercise price**	**Remaining contractual life (years)**	**Number of stock options**
1-May-24	50,000	CAD$ 0.50	2.33	50,000
15-Jun-24	37,500	CAD$ 0.50	2.46	37,500
1-Jul-24	75,000	CAD$ 0.50	2.50	75,000
8-Jul-24	75,000	CAD$ 0.50	2.52	75,000
31-Jul-24	50,000	CAD$ 0.50	2.58	50,000
23-Aug-24	37,500	CAD$ 0.50	2.65	37,500
25-Sep-24	37,500	CAD$ 0.50	2.74	37,500
29-Sep-24	75,000	CAD$ 0.50	2.75	75,000
Apr 9 and Jul 2, 2024	137,097	CAD$ 4.96	2.50	137,097
7-Apr-26	2,195,000	CAD$ 0.50	4.27	548,750
10-Jun-26	100,000	CAD$ 0.50	4.44	25,000
28-Jul-26	240,000	CAD$ 0.50	4.58	30,000
1-Nov-26	465,000	CAD$ 0.46	4.84	-
	3,574,597			**1,178,347**

As at December 31, 2021, the number of restricted share units outstanding and exercisable are as follows:

	Number of equity settled restricted share units
Outstanding, December 31, 2019 and 2020	-
Granted	1,000,000
Outstanding, December 31, 2021	**1,000,000**

None of the restricted share units are exercisable since they vest completely in April 2024 and are restricted until April 2026.

(Expressed in U.S. dollars)

The outstanding number of share purchase warrants, adjusted for the share consolidation outstanding are as follows:

	Outstanding		
Expiry date	Number of warrants	Exercise price	Remaining contractual life (years)
03-May-22	123,300	CAD$0.40	0.18
29-May-22	84,986	CAD$0.40	0.41
01-Sep-22	314,516	CAD$4.96	0.02
11-Mar-23	1,098,125	CAD$0.40	1.19
11-Mar-23	8,625,000	CAD$0.60	1.19
17-Mar-24	2,912,734	CAD$0.50	2.21
17-Jun-23	7,130,000	CAD$0.75	1.46
17-Jun-23	1,056,900	CAD$0.50	1.46
	21,345,561		

(c) Performance Shares

On March 17, 2021, Liberty deposited into escrow, and held in escrow, Operational Performance Shares ("OPS") and Capital Market Performance Shares ("CMPS") for certain directors, officers, and consultants of the Company upon the Company achieving certain performance milestones. Once these milestones were achieved the shares would be released. These performance shares included 2,000,000 of OPS and 8,773,000 of CMPS. In order to fair value these performance shares, management has run a probability analysis to estimate the number of shares the Company would be issued and its vesting period. Therefore, the fair value of these performance shares are based on the probability analysis and the share market price at grant date of CAD$0.40 per share.

As at December 31, 2021, none of the 2,000,000 OPS have been issued as neither of the two milestones have been met. The estimated vesting period of the OPS was set between March 2023 and September 2023. The estimated fair value of the OPS is CAD $800,000, with $183,368 (CAD$229,461) (December 31, 2020 - $nil) recognized as stock-based compensation in the consolidated statement of loss and comprehensive loss.

On July 21, 2021, the Company issued 2,193,150 from the total of 8,773,000 CMPS as the first established milestone was met. The Company set a total of four milestones with an equal number of CMPS to be issued when the Company achieves such milestones. The Company has estimated a probability of the number of CMPS it will issue in addition to an estimated vesting period between Jun 2021 and Sep 2022. The estimated fair value of the CMPS is CAD $3,509,200, with $2,088,053 (CAD$2,612,924) (December 31, 2020 - $nil) recognized as stock-based compensation in the consolidated statement of loss and comprehensive loss.

(d) Reconciliation of Use of Proceeds from March 2021 Subscription Receipt Offering

In March 2021, the Company undertook an offering of CAD$6,900,000 of subscription receipts. The following table sets out a comparison of how the Company used the proceeds during the year ended following the closing date in March 2021, an explanation of variances and the impact of variances on the ability of the Company to achieve its business objectives and milestones.

Intended Use of Proceeds of March 2021 Subscription Receipt Offering		Actual Use of Proceeds from March 2021 Subscription Receipt Offering	(Over)/under expenditure	Explanation of Variance and impact on business objectiv es
Estimated consolidated working capital deficiency of the Company as at December 31, 2020	CAD$558,000	CAD$855,600	(CAD$297,600)	The asset acquisition of Liberty closed on Mar 17, 2021, therefore the

(Expressed in U.S. dollars)

Intended Use of Proceeds of March 2021 Subscription Receipt Offering		**Actual Use of Proceeds from March 2021 Subscription Receipt Offering**	**(Over)/under expenditure**	**Explanation of Variance and impact on business objectives**
				working capital deficiency changed from the estimated figures at Dec. 31, 2020
Estimated consolidated working capital deficiency of DrawDown as at December 21, 2020	CAD$1,072,000	CAD$1,738,000	(CAD$666,000)	The asset acquisition of Liberty closed on Mar 17, 2021, therefore the working capital deficiency changed from the estimated figures at Dec 31, 2020
Agent's cash commission	CAD$439,250	CAD$439,250	CAD$0	N/A
Agent's legal fees, expenses and disbursements	CAD$166,000	CAD$166,000	CAD$0	N/A
Agent's corporate finance fee	CAD$150,000	CAD$150,000	CAD$0	N/A
Costs to the complete the reverse takeover transaction with DrawDown(1)	CAD$250,000	CAD$318,100	(CAD$68,100)	Additional costs related to higher than anticipated professional fees
General and administrative expenses(2)	CAD$1,409,000	CAD$1,409,000	CAD$0	N/A
Sales and marketing(3)	CAD$105,000	CAD$105,000	CAD$0	N/A
Research, development and implementation(4)	CAD$1,400,000	CAD$1,400,000	CAD$0	N/A
Unallocated working capital	CAD$1,350,750	CAD$319,050	CAD$1,031,700	Change in unallocated working capital due to increased expenditures
Total	**CAD$6,900,000**	**CAD$6,900,000**	**CAD$0**	

Notes:

(1) Such expenses were expected to include, among other things, legal, audit, advisory regulatory and other expenses related to completion of the DrawDown reverse takeover transaction not yet paid as of March 2021, as well as interest payments pursuant to DrawDown's prior bridge financing.

(2) Such expenses were expected to include, among other things, CEO and CTO salaries, CFO professional fees, compensation to supporting staff, office and administration costs of approximately CAD$1,159,000 and corporate insurance combined with public company regulatory costs, including legal and audit costs, transfer agent fees, and costs of shareholder communications, of approximately CAD$250,000.

(3) Such expenses were expected to include compensation for consultants, advertising, and other promotional expenditures.

(4) Such expenses were expected to include costs and expenses in connection to the continuation of the DrawDown's technology for approximately CAD$75,000 and Liberty's technology for approximately CAD$1,325,000.

(Expressed in U.S. dollars)

Although the Company intended to use the proceeds from the March 2021 subscription receipt offering as set forth above, the actual allocation of the net proceeds varied based on actual developments and unforeseen events.

(e) Reconciliation of Use of Proceeds from June 2021 Unit Offering

In June 2021, the Company undertook an offering of CAD$7,130,000 of units. The following table sets out a comparison of how the Company used the proceeds during the year ended following the closing date in June 2021, an explanation of variances and the impact of variances on the ability of the Company to achieve its business objectives and milestones.

Intended Use of Proceeds of June 2021 Unit Offering		**Actual Use of Proceeds from June 2021 Unit Offering**	**(Over)/under expenditure**	**Explanation of Variance and impact on business objectives**
Agent's cash commission	CAD$553,450	CAD$553,450	CAD$0	N/A
Agent's legal fees, expenses and disbursements	CAD$64,000	CAD$64,000	CAD$0	N/A
Research, development and implementation(1)	CAD$6,512,550	CAD$4,811,500	CAD$1,701,050	The Company has not yet used these proceeds, but anticipates using these proceeds in the first quarter of 2022
Total	**CAD$7,130,000**	**CAD$5,428,950**	**CAD$1,701,050**	

Notes:

(1) Such expenses were expected to include costs related to the research, development and implementation of the Company's technology that was licensed from the Pacific Northwest National Laboratory as well as further development of the Company's HEXWAVE technology.

Although the Company intended to use the proceeds from the June 2021 unit offering as set forth above, the actual allocation of the net proceeds may vary depending on future developments or unforeseen event.

5. Commitments

i) As at December 31, 2021, the minimum lease payments are:

		December 31, 2021
Maturity analysis - contractual undiscounted cash flows		
One year or less	$	160,693
Two to five years		590,859
Six and thereafter		190,409
Total lease liabilities	$	941,961
Effect of discounting		(194,996)
Lease liabilities included in the statement of financial position	$	746,965
Current	$	106,885
Non-current	$	640,080

(Expressed in U.S. dollars)

ii) As at December 31, 2021, the Company's minimum undiscounted sublease payments receivable are:

As a result of the completion of the RTO and under the new management's vision, the corporate office will now be located in Boston, MA. As a result, the Company subleased until the expiry of the headlease (April 2024) the office space located in Vancouver, BC., as it was not longer required. The Company's minimum undiscounted sublease payments receivable are: $22,362 during 2022 and $29,815 during 2023.

iii) Please refer to section 1(c) MIT License Agreement Description and Commitments and Battelle Memorial Institute License Agreement Description and Commitments, of this MD&A for additional disclosure on commitments.

6. Off-balance Sheet Arrangements

The Company does not utilize off-balance sheet arrangements.

7. Transactions Between Related Parties

The Company's related parties consist of the Company's directors, officers and companies associated with them including 1214852 B.C. LTD., a company where Omar Garcia Abrego, the Chief Financial Officer is a shareholder.

Compensation of key management personnel:

Key management personnel include members of the Board, the Chief Executive Officer, Chief Financial Officer, Chief Technology Officer, and Chief Operating Officer. The net aggregate compensation paid, or payable and related party transactions are shown as follows:

	Three months ended December 31, 2021	2020	December 31, 2021	December 31, 2020
Short-term benefits	$ 309,911	$ 118,968	$ 1,262,926	$ 429,571
Share-based compensation	2,482,129	-	2,729,567	-
Consulting services (1)	292,415	32,580	475,687	126,752
	$ 3,084,455	**$ 151,548**	**$ 4,468,180**	**$ 556,323**

(1) Includes fees paid or payable to 1214852 B.C. LTD.

Related party balances:

As of December 31, 2021, the Company had a balance payable of $235,040 to related parties (December 31, 2020 – $25,722). This payable balance includes accounts payable and accrued liabilities relating to consulting services from directors, officers or their related companies, included in compensation of key management personnel. These related party balances are unsecured, non-interest bearing and have no specific terms of settlement.

During the year ended December 31, 2020, the Company received working capital loans of $276,069 (December 31, 2020 - $275,627) from directors and officers or their related parties. During the year ended December 31, 2021, all of these working capital loans were paid in full and the outstanding balance at December 31, 2021 is $nil (December 31, 2020 - $275,627).

DKL International Inc:

Howard Sidman a former member of the Board of Directors of DrawDown is also the founder and president of DKL. Included in accounts payable and accrued liabilities as of December 31, 2021 was $nil (December 31, 2020 - $56,500) payable to DKL.

DrawDown also paid or accrued $nil for the year ended December 31, 2021 (December 31, 2020 - $49,829), to DKL in relation to research and development costs.

(Expressed in U.S. dollars)

8. Subsequent events

- On January 9, 2022, a total of 314,516 share purchase warrants with an exercise price of CAD$4.96 expired without being exercised.

- On January 14, 2022, 150,000 RSUs were granted to Aman Bhardwaj as part of his resignation agreement. The RSUs granted are not transferable or assignable except in accordance with the plan. The RSUs will vest on January 14, 2023.

- On January 14, 2022, 100,000 stock options were granted with an exercise price of CAD$0.36.

- On March 3, 2022, a total of 246,600 share purchase warrants were exercised at CAD$0.30 per share for total proceeds of CAD$73,980, of which 123,300 share purchase warrants were exercised in error and are in the process of being returned and canceled.

- On March 17, 2022, the Company closed a brokered private placement for gross proceeds of CAD$8,624,994. The Company issued 26,136,345 units (each a "Unit") of the Company at a price of CAD$0.33 per Unit. Each Unit comprised of one common share and one-half share purchase warrant. Each warrant entitles the holder thereof to purchase one additional common share of the Company at a price of CAD$0.50 within a period of 24 months. The Company paid the agents 1,996,363 broker warrants and cash commission of CAD$658,800. Each broker warrant will be exercisable to purchase one common share for a period of 24 months at an exercise price of CAD$0.33. Additionally, the Company also incurred in other cash costs in connection to filling and legal expenses in the amount of CAD$123,500 and paid a corporate finance fee of $100,000 in common shares of the Company (303,030 common shares issued). All securities issued under the private placement are subject to a hold period expiring four months and one day after the closing date of the private placement.

- In connection to the Mach 17, 2022, financing, an additional two milestones were reached related to the capital market performance shares and a total of 4,386,500 common shares will be released from escrow.

9. Critical Accounting Estimates

Full disclosure of the Company's accounting policies and significant accounting estimates and judgments in accordance with IFRS can be found in note 2 and 3 of its audited consolidated financial statements as at December 31, 2021 and have remained substantially unchanged and are still applicable to the Company unless otherwise indicated.

10. Changes in Accounting Policies including Initial Adoption

There were no new standards effective January 1, 2021 that impacted the Company's consolidated financial statements.

11. Financial Instruments

As of December 31, 2021, the Company's financial instruments comprise cash, amounts receivables, and accounts payable and accrued liabilities, none of which are valued at fair value. The fair values of amounts receivables and accounts payable and accrued liabilities approximate their carrying values due to their short-term maturity. The carrying amount of the CEBA loan approximates fair value as it is discounted using a market rate of interest.

The Company's financial instruments are exposed to certain financial risks including, credit risk, liquidity risk, foreign currency risks, equity price risk and capital risk management. Details of each risk are laid out in the notes to the Company's audited consolidated financial statements as at December 31, 2021. Details of each risk are summarized below:

a) Liquidity risk

Management's objective in managing liquidity risk is to ensure sufficient liquidity to meet financial obligations when due by maintaining sufficient cash and cash equivalents to settle current liabilities and meet anticipated working capital requirements.

b) Credit risk

Credit risk is the risk of an unexpected loss if a customer or third party to a financial instrument fails to meet its contractual obligations. The Company's cash are held through large Canadian, international, and foreign national financial institutions. The Company mitigates this risk by transacting only with reputable financial institutions. The carrying amount of financial assets recorded in the financial statements represents the Company's maximum exposure to credit risk. The Company believes it is not exposed to significant credit risk.

c) Market risk

Market risk is the risk of loss that may arise from changes in market factors such as interest rates and foreign exchange rates.

i. Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company is exposed to varying interest rates on cash. The Company has no amounts receivable or debt bearing variable interest rate.

ii. Foreign currency risk

The Company is exposed to currency risk by having balances and transactions in currencies that are different from its functional currency. The Company operates in foreign jurisdictions, which uses the U.S. dollar. The Company does not use derivative instruments to reduce upward, and downward risk associated with foreign currency fluctuations.

		Amounts US dollars
Financial assets denominated in foreign currencies	$	359,247
Financial liabilities denominated in foreign currencies		(524,191)
Net exposure	**$**	**(164,944)**

A 10% change in the U.S. dollar exchange rate relative to the Canadian dollar would change the Company's profit or loss by $16,494.

d) Price risk

The Company is exposed to price risk with respect to equity prices. Equity price risk is defined as the potential adverse impact on the Company's earnings due to movements in individual equity prices or general movements in the level of the stock market. The Company closely monitors individual equity movements, and the stock market to determine the appropriate course of action to be taken by the Company.

Capital Risk Management

The Company manages common shares and share purchase warrants as capital. The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to pursue the development of its products and to maintain a flexible capital structure which optimizes the costs of capital at an acceptable risk.

The Company manages its capital structure and makes adjustments to it in light of changes in economic conditions and the risk characteristics of the underlying assets. To maintain or adjust the capital structure, the Company may attempt to issue new shares, issue debt, acquire or dispose of assets, or adjust the amount of cash on hand.

In order to facilitate the management of its capital requirements, the Company prepares expenditure budgets that are updated as necessary depending on various factors, including successful capital deployment and general industry conditions.

The Company expects its current capital resources will be sufficient to carry its operations, and product development plans for the foreseeable future. The Company is not subject to externally imposed capital requirements.

There has been no change to the Company's approach to capital management during the year ended December 31, 2021 and 2020.

12. Other requirements

Outstanding share data

Authorized: Unlimited number of common shares

Number of common shares issued and outstanding adjusted for the share consolidation as at December 31, 2021: 63,993,345

Number of common shares issued and outstanding adjusted for the share consolidation as at April 26, 2022: 90,679,320

Stock options adjusted for the share consolidation as at April 26, 2022:

	Outstanding		Exercisable	
Expiry date	**Number of stock options**	**Exercise price**	**Remaining contractual life (years)**	**Number of stock options**
1-May-24	50,000	CAD$ 0.50	2.09	50,000
15-Jun-24	37,500	CAD$ 0.50	2.21	37,500
1-Jul-24	75,000	CAD$ 0.50	2.25	75,000
8-Jul-24	75,000	CAD$ 0.50	2.27	75,000
31-Jul-24	50,000	CAD$ 0.50	2.34	50,000
23-Aug-24	37,500	CAD$ 0.50	2.40	37,500
25-Sep-24	37,500	CAD$ 0.50	2.49	37,500
29-Sep-24	75,000	CAD$ 0.50	2.50	75,000
Apr 9 and Jul 2, 2024	137,097	CAD$ 4.96	2.26	137,097
7-Apr-26	2,195,000	CAD$ 0.50	4.02	1,097,500
10-Jun-26	100,000	CAD$ 0.50	4.20	37,500
28-Jul-26	240,000	CAD$ 0.50	4.33	60,000
1-Nov-26	465,000	CAD$ 0.46	4.59	58,125
14-Jan-27	100,000	CAD$ 0.36	4.79	12,500
	3,674,597			**1,840,222**

Share purchase warrants adjusted for the share consolidation as at April 26, 2021:

	Warrants outstanding	**Exercise Price**
Outstanding, December 31, 2019	1,740,000	CAD$ 0.20
Issued	208,286	0.40
Cancelled	(1,740,000)	0.20
Outstanding, December 31, 2020	208,286	**CAD$ 0.40**
RTO transaction	1,738,166	6.48
Issued	20,872,759	0.62
Cancelled	(1,423,650)	6.82
Exercised	(50,000)	0.50
Outstanding, December 31, 2021	21,345,561	**CAD$ 0.68**
Issued	13,068,172	0.50
Issued	1,996,363	0.33
Cancelled	(314,516)	4.96
Exercised	(123,300)	0.30
Outstanding, April 26, 2022	35,972,280	**CAD$ 0.56**

(Expressed in U.S. dollars)

Restricted Share Units outstanding and exercisable adjusted for share consolidation as at April 26,2021:

	Number of equity settled restricted share units		Weighted average market price
Outstanding, December 31, 2019 and 2020	-	CAD$	-
Granted	1,000,000	$	0.58
Outstanding, December 31, 2021	**1,000,000**	**$**	**0.40**
Granted	150,000	$	0.40
Outstanding, April 26, 2022	**1,150,000**	**$**	**0.40**

None of the restricted share units are exercisable since they vest completely in April 2024 and January 2023 and are restricted until April 2026 and January 2027.

Performance Shares

In connection to the Mach 17, 2022, financing, an additional two milestones were reached related to the capital market performance shares and a total of 4,386,500 common shares will be released form escrow.

13. Disclosure Controls and Procedures and Internal Controls over Financial Reporting

Disclosure controls and procedures are intended to provide reasonable assurance that information required to be disclosed is recorded, processed, summarized, and reported within the time periods specified by securities regulations and that the information required to be disclosed is accumulated and communicated to management. Internal controls over financial reporting are intended to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. In connection with National Instrument 52-109 (Certificate of Disclosure in Issuer's Annual and Interim Filings) ("NI 52-109"), the Chief Executive Officer and Chief Financial Officer of the Company have filed a Venture Issuer Basic Certificate with respect to the financial information contained in the audited consolidated financial statements for the years ended December 31, 2021 and 2020, and this accompanying MD&A (together, the "Annual Filings").

In contrast to the full certificate under NI 52-109, the Venture Issuer Basic Certificate does not include representations relating to the establishment and maintenance of disclosure controls and procedures and internal control over financial reporting, as defined in NI 52-109. For further information, the reader should refer to the Venture Issuer Basic Certificates filed by the Company on SEDAR at www.sedar.com.

(Expressed in U.S. dollars)