



**SIXTH WAVE INNOVATIONS INC.**

**ANNUAL INFORMATION FORM**

For The Financial Year Ended August 31, 2021

Dated January 14, 2022

Suite 110, 210 Waterfront Drive  
Bedford, Nova Scotia  
B4A 0H3

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## INTRODUCTORY NOTES

### Date of Information

The information contained in this Annual Information Form (“AIF”) is current as of August 31, 2021 with subsequent events disclosed to January 14, 2022.

### Meaning of Certain References

In this AIF, unless the context otherwise dictates, references to the “Company”, “Sixth Wave”, “we” and “our” refer to Sixth Wave Innovations Inc.

### Currency and Exchange Rates

In this AIF, references to “\$”, “dollars” or “Canadian dollars” are to Canadian dollars and references to “US\$” are to United States dollars.

### Financial Information

This AIF should be read in conjunction with the Company’s audited annual financial statements and accompanying notes for the year ended August 31, 2021, and the related management’s discussion and analysis thereon, which are available under the Company’s issuer profile on SEDAR at [www.sedar.com](http://www.sedar.com). The Company presents its financial statements and management’s discussion and analysis in accordance with International Financial Reporting Standards (IFRS).

### Cautionary Note Regarding Forward Looking Statements

This AIF contains certain statements that are forward-looking statements or forward-looking information within the meaning of United States securities laws and Canadian securities laws, respectively (collectively “**forward-looking statements**”). Any statements that express, or involve discussions as to, expectations, beliefs, plans, objectives, assumptions or future events or performance (often, but not always, through the use of words or phrases such as “may”, “is expected to”, “anticipates”, “estimates”, “intends”, “plans”, “projection”, “could”, “vision”, “goals”, “objective” and “outlook”) are not historical facts and may be forward-looking and may involve estimates, assumptions and uncertainties which could cause actual results or outcomes to differ materially from those expressed in the forward-looking statements.

In particular, this AIF contains forward-looking statements relating to:

- the Company’s expectations with respect to pursuing new opportunities and future growth;
- the Company’s expectations with respect to its working capital requirements and financial obligations;
- the ability of the Company to continue to provide shareholders with exposure to cannabis cultivators, processors, and dispensaries throughout the United States;
- the ability of the Company to raise additional capital in the future;
- the Company’s expectations regarding the Company’s ability to generate returns from its revenue sources including licensing fees from its various product lines;

- the Company's plans with respect to the payment of dividends;
- the Company's ability to obtain additional funds through the sale of equity or debt instruments;
- the ability of the Company to commercialize its various technologies;
- the ability of the Company's products and services to access markets;
- the Company's ability to derive gross revenue and net income from its operating agreements;
- the Company's ability to develop its operations servicing the medicinal, adult-use cannabis and CBD industries; or
- the Company's ability to enter new markets.

These forward-looking statements are necessarily based on a number of factors and assumptions that, while considered reasonable by the Company as of the date of such statements, are inherently subject to significant business, economic and competitive uncertainties and contingencies. With respect to the forward-looking statements, the Company has made assumptions, which may prove to be incorrect, including, among other things:

- the Company will be able to generate cash flow from operations and obtain necessary financing on acceptable terms;
- government regulation of the Company's activities will remain the same;
- consumer interest in the Company's products and perception of the medicinal-use and adult-use cannabis industry continues to affect the market price of cannabis-related products;
- general economic, financial market, regulatory and political conditions in which the Company operates will remain the same;
- the Company will be able to compete in the cannabis extraction industry;
- the Company will be able to manage anticipated and unanticipated costs;
- The Company will be able to complete the development of its products;
- The Company's products will be economic and there will be a market for its products;
- the Company will be able to recruit and retain qualified staff and obtain equipment and services in a timely and cost-efficient manner; and
- the Company will be able to enter contracts with target companies.

This list is not exhaustive of the factors that may affect any of forward-looking statements or information of the Company. Readers should not place undue reliance on forward-looking information contained in this AIF. Further, any forward-looking statement speaks only as of the date on which such statement is made, and, except as required by applicable law, the Company does not undertake any obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for management of the Company to predict all such factors and to assess in advance the impact of

each such factor on the business of the Company or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statement. See “Risk Factors”.

A number of factors could cause actual events, performance or results to differ materially from what is projected in the forward-looking statements. You should not place undue reliance on forward-looking statements contained in this AIF. Such forward-looking statements are made as of the date of this AIF. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law. The Company’s forward-looking statements are expressly qualified in their entirety by this cautionary statement.

**All of the forward-looking statements contained in this AIF are expressly qualified by the foregoing cautionary statements.**

### **Use of Market and Industry Data**

Unless otherwise indicated, information contained in this AIF concerning the industry and markets in which the Company operates, including its general expectations and market position, market opportunity and market share is based on information from independent industry organizations, and other third-party sources (including industry publications, surveys and forecasts), and management estimates.

The management estimates in this AIF are derived from publicly available information released by independent industry analysts and third-party sources, as well as data from the Company’s internal research, and are based on assumptions made by the Company based on such data and its knowledge of such industry and markets, which the Company believes to be reasonable. The Company’s internal research has not been verified by any independent source, and it has not independently verified any third-party information. While the Company is not aware of any misstatement regarding any industry or market data included in this AIF, such information is inherently imprecise. In addition, projections, assumptions and estimates of the Company’s future performance and the future performance of the industry in which the Company operates are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described under “Risk Factors”.

## GLOSSARY OF TERMS

The following is a glossary of certain terms used in this AIF:

“**2014 Cole Memorandum**” has the meaning ascribed thereto in “Cannabis Legislation – United States Federal Overview”;

“**2014 Farm Bill**” means section 7606 of the Agricultural Act of 2014;

“**2018 Farm Bill**” means the Agricultural Improvement Act of 2018;

“**6WIC**” means 6<sup>th</sup> Wave Innovations Corp.;

“**AIF**” or “**Annual Information Form**” means this annual information form of the Company in respect of the year ended August 31, 2021;

“**BCBCA**” the *Business Corporations Act* (British Columbia);

“**Board**” or “**Directors**” means the directors of the Company as at the date of this document;

“**CBD**” means cannabidiol, a chemical compound found in cannabis without euphoric-producing properties;

“**CDS**” means the Canadian Depository for Securities Limited;

“**Cole Memorandum**” has the meaning ascribed thereto in “Cannabis Legislation – United States Federal Overview”;

“**Common Shares**” means the common shares in the capital of the Company;

“**Company**” or “**Sixth Wave**” or “**SIXW**” means Sixth Wave Innovations Inc.;

“**COVID-19**” means the novel coronavirus, the global outbreak of which was declared a pandemic by the World Health Organization in March 2020;

“**CSA**” mean U.S. *Controlled Substances Act* (21 U.S.C. § 811);

“**CSE**” means the Canadian Securities Exchange;

“**DEA**” means the United States Drug Enforcement Agency;

“**DOJ**” means the United States Department of Justice;

“**DTC**” means the Depository Trust Company;

“**FDA**” means the United States Food and Drug Administration;

“**FinCEN**” means the Financial Crimes Enforcement Network bureau of the U.S. Treasury Department;

“**FinCEN Memorandum**” has the meaning ascribed thereto in “Risk Factors – Anti-Money Laundering Matters”;

“**Foreign Private Issuer**” has the meaning ascribed thereto in “Description of Capital Structure – Super Voting Shares – “Conversion Limitations”;

“**IFRS**” means International Financial Reporting Standards;

“**IRS**” means the United States Internal Revenue Service;

“**IT**” has the meaning ascribed thereto in “Risk Factors”;

“**MORE Act**” has the meaning ascribed thereto in “Cannabis Legislation – United States Federal Overview”;

“**NI 52-110**” means National Instrument 52-110 *Audit Committees*;

“**Options**” means stock options of the Company;

“**person**” means a company or individual;

“**SEC**” means the United States Securities and Exchange Commission;

“**SEDAR**” means the System for Electronic Document Analysis and Retrieval filing system, available on the Internet at <http://www.sedar.com>;

“**Sessions Memorandum**” has the meaning ascribed thereto in “Cannabis Legislation – United States Federal Overview”;

“**SOPs**” has the meaning ascribed thereto in “Description of Business – General”;

“**Staff Notice 51-352**” means the Canadian Securities Administrators Staff Notice 51-352 (Revised) - *Issuers with U.S. Marijuana-Related Activities*;

“**STATES Act**” has the meaning ascribed thereto in “Cannabis Legislation – United States Federal Overview”;

“**subsidiary**” means with respect to a specified corporation, any corporation of which more than fifty per cent (50%) of the outstanding shares ordinarily entitled to elect a majority of the board of directors thereof (whether or not shares of any other class or classes shall or might be entitled to vote upon the happening of any event or contingency) are at the time owned directly or indirectly by such specified corporation, and shall include any corporation in like relation to a subsidiary;

“**THC**” means delta-9-tetrahydrocannabinol, an intoxicating chemical in cannabis;

“**United States**” or “**U.S.**” means the United States of America;

“**USPTO**” means the United States Patent and Trademark office;

“**U.S. Exchange Act**” means the United States Securities Exchange Act of 1934, as amended;

“**U.S. Securities Act**” means the United States Securities Act of 1933, as amended;

“**Warrants**” means common share purchase warrants of the Company.



## CORPORATE STRUCTURE

### Name, Address and Incorporation

The Company was incorporated pursuant to the BCBCA under the name “BOE Capital Corp.” on June 6, 2007. On July 21, 2010, the Company changed its name from “BOE Capital Corp.” to “Athabasca Uranium Inc.”. On November 17, 2014, the Company changed its name from “Athabasca Uranium Inc.” to “Atom Energy Inc.”. On August 26, 2019, the Company changed its name from “Atom Energy Inc.” to “Sixth Wave Innovations Inc.”.

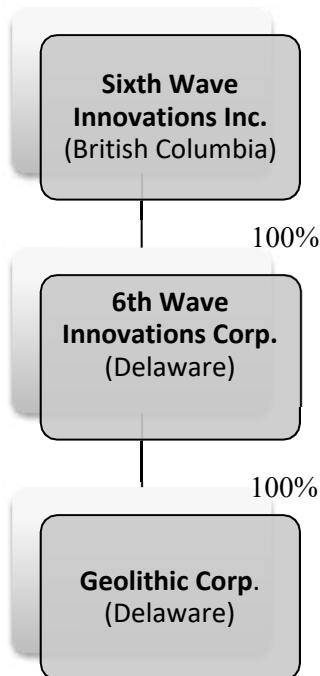
On January 31, 2020, the Company completed the Merger Transaction (defined below), and, as a result, 6WIC became a wholly owned subsidiary of the Company.

The Company’s head office is located at Suite 830 – 1100 Melville Street, Vancouver, British Columbia V6E 4A6.

The Common Shares of the Company are listed and posted for trading on the CSE under the trading symbol “SIXW” and are quoted on the OTCQB under the trading symbol “SIXWF”, and the Frankfurt Stock Exchange under the symbol “AHUH”. The Company is a reporting issuer in Canada in the provinces of British Columbia, Alberta and Ontario.

### Inter-corporate Relationships

The diagrams below describe the intercorporate relationships of the Company as of the date of this AIF:



As at the date of the AIF, the Company has the following subsidiaries:

Name	Jurisdiction	Ownership
6 <sup>th</sup> Wave Innovations Corp.	Delaware, USA	100%
Geolithic Corp.	Delaware, USA	100%

## GENERAL DEVELOPMENT OF THE BUSINESS

### Three Year History

#### *Year Ended August 31, 2019*

On September 11, 2018, the Company announced that it entered into an agreement and plan of merger dated September 7, 2018 (as amended, the “**Merger Agreement**”) with 6WIC, a private corporation existing under the laws of the State of Delaware, 6th Wave Acquisition Inc., a wholly-owned subsidiary of the Company existing under the laws of the State of Delaware (“**Merger Sub**”) and Affinity Nanotechnology Inc. (“**Affinity Nano**”), pursuant to which the Company would acquire 100% of the outstanding shares of 6WIC in exchange for Common Shares and cash consideration (the “**Merger Transaction**”). In connection with the Merger Transaction, the Company would apply to list its Common Shares on the CSE. The Company would make additional changes to its Board of Directors and senior management in connection with the Merger Transaction. The business of the Company would be to continue the rapid development and deployment of IXOS®-Au into the gold mining sector, together with the exploitation of the underlying IXOS® platform for development and deployment in other mining and unrelated sectors.

On October 26, 2018, the Company granted a total of 2,650,000 Options to Directors and consultants. The Options are exercisable at a price of \$0.40 per Common Share and will expire on October 22, 2023. One third of the Options will vest after 6 months, with an additional one third to vest every 6 months thereafter.

On December 28, 2018, the Company closed the first tranche of a non-brokered private placement whereby it issued 5,293,230 Common Shares at \$0.35 per Common Share for gross proceeds of \$1,852,631. The Company also issued 323,429 Common Shares to eligible finders.

On January 8, 2019, the Company closed the second tranche (“**Second Tranche**”) of a non-brokered private placement (the “**Private Placement**”) whereby it issued 2,014,286 Common Shares at \$0.35 per Common Share for gross proceeds of \$705,000. The aggregate gross proceeds raised by the Company in connection with the completion of the previously announced first tranche of the Private Placement, which closed on December 28, 2018, and the Second Tranche is \$2,557,631, resulting in the issuance of a total of 7,307,516 Shares. In connection with the Private Placement, the Company issued 403,429 Common Shares to eligible finders.

On May 27, 2019, the Company announced the execution of a strategic investment with ICC International Cannabis Corp. (CSE: WRLD) (“**ICC**”) for gross proceeds of \$5.0 million, as part of a larger funding package (the “**Funding Package**”) to raise a total of approximately \$13.5 million. Net proceeds from the Funding Package would be used to fund the Merger Transaction of 6WIC and working capital. Further to the Merger Transaction, the Company would acquire 100% of the equity of 6WIC in accordance with the terms outlined in the Company’s press release dated September 11, 2018. The Funding Package would consist of three components—a brokered private placement for subscription receipts, a non-brokered private placement for Common Shares, and an ROFR licensing agreement—and would result in the issue of up to 13.4 million equity securities of the Company at a price of \$0.75 per security, as well as the receipt

of equity of ICC valued at \$3.5 million in exchange for a licensing right of first refusal agreement (the “**ROFR Agreement**”). The remaining \$1.5 million of ICC’s \$5.0 million strategic investment would be part of the non-brokered private placement described below. The ROFR Agreement and strategic investment from ICC have since been terminated.

On July 26, 2019, the Company announced the closing of its previously announced brokered private placement and the receipt of subscription documents totaling \$10 million as part of the larger Funding Package to raise a total of approximately \$13.5 million.

On August 23, 2019, the Company announced that it would change its name to “Sixth Wave Innovations Inc.”, effective August 26, 2019, to create alignment with its proposed acquisition of 6WIC.

### ***Year Ended August 31, 2020***

On October 25, 2019, the Company closed the third tranche of its previously announced non-brokered private placement whereby it issued 3,480,583 Common Shares of the Company at \$0.75 per Common Share for gross proceeds of \$2,610,437.25. The gross proceeds raised by the Company in connection with the completion of the private placement would be used for working capital. The Company paid no finder’s fees in connection with the private placement.

On November 18, 2019, the Company announced that it granted a total of 1,180,000 Options to consultants and Directors of the Company. The Options are exercisable at a price of \$0.75 per Common Share and will expire on November 15, 2024. One third of the Options vest after 6months, with an additional one third to vest every six months thereafter.

On December 3, 2019, the Company announced that, at a previously announced meeting held on November 29, 2019, the holders of its outstanding Subscription Receipts issued on July 26, 2019 (the “**Subscription Receipts**”), passed a special resolution extending the Escrow Release Deadline as defined in the Subscription Receipt Agreement governing the Subscription Receipts, from 4:00 p.m. (Vancouver time) on November 30, 2019 to 4:00 p.m. (Vancouver time) December 31, 2019, or such later date on or before January 31, 2020 as the Company and PI Financial Corp., as the Lead Agent under the Subscription Receipt Agreement, may agree. The Subscription Receipts were issued as part of a financing required under the Merger Agreement.

On December 9, 2019, the Company closed the fourth tranche of its previously announced non-brokered private placement whereby it issued 2,000,000 Common Shares at \$0.75 per Common Share for gross proceeds of \$1,500,000. In total, the Company raised \$2,702,700 as part of the previously announced brokered private placement and \$7,320,434.25 as part of non-brokered private placement for total proceeds of \$10,023,134.25. The gross proceeds raised by the Company in connection with the completion of the fourth tranche of the private placement would be used for working capital. The Company paid no finder’s fees in connection with the fourth tranche of the private placement.

On January 21, 2020, the Company announced it had closed its final tranche of its previously announced Funding Package by way of non-brokered private placement of 5,212,558 Common Shares for gross proceeds of approximately \$3,900,000. The final tranche brought the total amount raised under the Funding Package to \$13,900,000 at a price of \$0.75 per Common Share. As part of this final tranche, the Company issued 1,007,955 Common Shares for gross proceeds of \$755,996.25. In addition, a total of \$3,153,422.25 was received in escrow with 4,204,563 Common Shares to be issued and the associated funds released to the Company upon the closing of the Merger Transaction. The full Funding Package consisted of: (i) a brokered private placement for subscription receipts whereby 3,603,600 Common Shares were issued for gross proceeds of \$2,702,700; (ii) a non-brokered private placement of Common Shares whereby

10,768,574 Common Shares were issued for gross proceeds of \$8,076,433.25; and (iii) non-brokered private placement of Common Shares whereby 4,204,563 Common Shares were issued for gross proceeds of \$3,153,422.25, which are to be held in escrow and released upon the closing of the Merger Transaction. Finders' fees in the amount of \$53,938 were paid and 71,916 Finders' Warrants were issued.

On January 31, 2020, pursuant to the terms of the Merger Agreement, Merger Subco merged with and into 6WIC by way of a "triangular merger" pursuant to the laws of Delaware, and the issued and outstanding securities of the merged subsidiary were exchanged for securities of the Company and cash. As a result, 6WIC became a wholly-owned subsidiary of the Company. 6WIC is a development stage nanotechnology Company focused on developing and commercializing technologies for extraction and detection of target substances at the molecular level.

Pursuant to the Merger Agreement and the Merger Transaction:

1. The Company paid \$1,626,550 and issued 14,291,056 Common Shares at a fair value of \$10,718,292.
2. The Company replaced 749,849 warrants of 6WIC having exercise prices ranging from \$2.64 (USD\$2.00) to \$9.92 (USD\$7.50) and reduced the term of the replaced warrants to the lesser of the unexpired term or three years after closing date with 3,928,043 warrants with an exercise price of \$0.75 per share with expiry dates ranging from six months to three years after the closing date.
3. The Company settled the loans payable to Affinity Nano as follows:
  - a. On closing of the Merger Transaction, \$1,905,284 (USD\$1,444,639) was converted into 2,719,202 Common Shares;
  - b. \$1,443,186 (USD\$1,087,555) was repaid in cash;
  - c. The Company entered into a convertible debenture in the amount of \$1,322,359 (USD\$1,000,000), which bears interest at 10% compounded monthly and payments of USD\$25,000 are to be paid at the end of each month; and
  - d. The Company issued 1,777,778 Warrants with a fair value estimated at \$620,858 as consideration.
4. The Company assumed the deferred salary loans for certain current and former employees of 6WIC and settled the outstanding balance as follows:
  - a. The deferred salary loans were assumed by the Company and upon closing of the Merger Transaction 25% of the outstanding balance was repaid or became payable to the respective parties;
  - b. At January 31, 2020, the Company paid \$426,634 (USD\$322,270); and
  - c. The remaining balances of the respective deferred salary loans will accrue interest at 0.667% per month and are to be repaid over 24 months at various payment amounts.
5. The Company paid a separation payment of \$199,034 (USD\$150,000) and issued a convertible promissory note in the amount of \$330,590 (USD\$250,000) to the CFO of 6WIC.

Following completion of the Merger Transaction, the Common Shares were listed for trading on the CSE and commenced trading on February 11, 2020 under the ticker symbol “SIXW”.

On February 13, 2020, the Company announced that further to a letter agreement executed October 15, 2019, Sumitomo Corporation of Americas (“**Sumitomo**”) will introduce and promote IXOS® to its extensive customer base in the gold mining industry and receive a 5% commission on applicable sales. Sumitomo completed a rigorous analysis and assessment of the Company’s IXOS® molecular imprinted nanotechnology used for gold extraction.

On February 20, 2020, the Company announced the results of pilot scale testing of its Affinity™ Technology for the remediation of THC from CBD distillate with a North American hemp processor. The Company’s development process comprised of over 85 experiments with more than 30 data elements analyzed per experiment. The resultant 2,550 data elements have furnished a broad sample set for the determination of operating parameters for optimized system performance. The results of the in-house testing provided a comparative analysis of the Company’s technology for remediation capabilities when compared directly to distillate that was remediated using the customers traditional methods. The CBD distillate generated by the Company’s Affinity™ Technology contained approximately half the amount of undesirable THC relative to that which was produced otherwise.

Also on February 20, 2020, the Company announced the addition of Natural Ascent Consulting to its development team. Subsequent to August 3, 2020, the Company ceased all formal engagements with Natural Ascent Consulting for such services.

On March 3, 2020, the Company announced that a jointly submitted proposal for the testing of IXOS® gold extraction technology in collaboration with the Centre Technologique des Résidus Industriels (“**CTRI**”), and a major top 10 gold producer (the “**Testing Partner**”) had been approved. The initiative, known as “Green Alternatives for Gold Leaching and Recovery”, which commenced in March of 2020 (the “**CTRI Project**”). The purpose of the CTRI Project is to validate alternative, environmentally-friendly, leaching technologies as well as the Company’s IXOS® technology for the extraction of gold from both cyanide and other alternatives. Testing will be completed on low grade tailings originating from a gold producing site operated by the Testing Partner. The CTRI Project will examine a variety of alternatives for the leaching of gold, including thiourea, thiocyanate, thiosulfate and halogens (such as bromine or iodine). After initial test work, IXOS® gold extraction beads (the “**IXOS® Beads**”) will be tested in direct comparison to activated carbon as a means of extracting gold from various leach solutions. This examination will also include benchmark testing of the IXOS® Beads as a means of extracting gold from a cyanide leach solution.

On March 12, 2020, the Company filed patent application No. PCT/US2020/022427 for the use of molecularly imprinted polymers for extraction of cannabinoids and uses thereof. This patent application covers the Company’s Affinity™ molecularly imprinted polymer technology that is being used in the Company’s Affinity™ cannabinoid extraction systems.

On March 16, 2020, the Company announced it has acquired a controlling interest in Geolithic Corp. (“**Geolithic**”) pursuant to an Option agreement (the “**Geolithic Agreement**”) executed with Trilateral Energy, LLC (“**Trilateral**”). The Company has tested several product designs tailored to lithium extraction in complex brines. These designs have focused on the utilization of the Company’s core molecular imprinting techniques, as well as novel implementations of other nanotechnologies, including new designs for macrocyclic ligands and molecular sieves. The Company has already applied for several patent applications for its technology in relation to lithium that are at various stages of review worldwide. Geolithic was established in January of 2017 as a joint venture between Trilateral and the Company to exploit the latter’s technology for the extraction of lithium from geothermal brines located primarily in the Salton Sea area of California. Pursuant to the original 2017 agreement, Trilateral held 60% of the outstanding common

shares of Geolithic, with the Company holding the remaining 40%. Under the terms of updated Geolithic Agreement, as at August 31, 2020, the Company has now purchased an additional 15% controlling stake in the enterprise, with an Option to obtain a full 100%. However, the Company continues to classify its investment in Geolithic as an associated company based on management's judgement that the Company has significant influence and no control over Geolithic based on rights to board representation and/or other provisions in the respective shareholders' agreement. The Geolithic Agreement was updated subsequent to August 31, 2020 as noted below and the Company now owns 100% of all issued and outstanding shares of Geolithic.

On March 19, 2020, the Company announced that its Common Shares became eligible for electronic clearing and settlement through the Depository Trust Company (the "**DTC**"). Through an electronic method of clearing securities, DTC eligibility simplifies the process of trading and transferring the Common Shares between brokerages in the U.S.

On April 2, 2020, the Company announced the execution of a Memorandum of Understanding (the "**Green Envy MOU**") with Green Envy, LLC ("**Green Envy**") for the purchase of a minimum of three Systems. Due to delays resulting from COVID-19, the Company has experienced delays in connection with the Green Envy MOU. The Green Envy MOU provides Green Envy with a twelve-month exclusivity period to utilize the Affinity™ System (as defined below) for the cannabis market within the states of Michigan and Massachusetts. The production of products derived from hemp is not included in the twelve-month exclusivity period. The Company also signed a hardware loan and services agreement with Green Envy (the "**Green Envy Service Agreement**") whereby the Company will prepare an initial System for delivery, installation and commissioning at a Green Envy facility in Michigan. Under the terms of the Green Envy Service Agreement, the parties will collaborate on the optimization of the Affinity™ System, including the documentation of standard operating procedures for production of full spectrum distillate. The commissioning process of the initial System will include the validation of capacity and selectivity, as well as production rates. The Company is scheduled to conduct pilot scale testing of the Affinity™ System at Green Envy's facility in Michigan in Q4 of 2021.

On April 3, 2020, the Company announced that it had filed Patent Application Number 63000977 – "The Use of Molecularly Imprinted Polymers for the Rapid Detection of Emerging Viral Outbreaks" with the US Patent and Trademark Office (the "**USPTO**"). This application covered the use of molecularly imprinted polymers for the detection of emerging viral strains such as SARS-CoV-2 and marked the Company's entrance in the virus detection sector. Further patent protection was applied for on April 17, 2020, with the filing of Patent Application Number 63010244. This second application covered application devices which would incorporate the proposed viral detection technology in a variety of applications, including the company's proposed Smartmask™. The patent applications cover a planned extension of the Company's MIPs technology to develop a platform, referred to as Accelerated Detection MIPs, or Accelerated Molecular Imprinted Polymers ("**AMIPs™**"), for the rapid detection and separation of viruses, biogenic amines and other pathogens, with planned targets to include the SARS-CoV-2 virus responsible for COVID-19. The first patent application relates to the AMIPs technology, the use of MIPs to selectively bind to the target virus directly, using physical characteristics such as molecular size, shape and surface structures, which the Company believes offers significant advantages over conventional rapid diagnostic technologies which rely on processes which can require highly trained laboratory staff and processing times ranging from hours to days, or that are limited to the detection of antigens or antibodies which can take days or weeks to develop within the body. The second patent application proposes a wide range of practical devices to collect samples from multiple sources including individual patients, air and water supplies, and common everyday contact surfaces where the virus can survive and threaten human exposure between hosts. The goal of the envisioned products will be to deliver a warning indicator (including a visual colorimetric indicator or audible alarm), within minutes of the sampling process.

On April 13, 2020, the Company executed a Letter of Intent for the acquisition of critical assets and intellectual property of Aurora Analytics, LLC of Baltimore, MD (“**Aurora**”) and the migration of all Aurora’s key staff. The Company will acquire specific assets of Aurora, including all laboratory equipment, all IP associated with the detection of virus and biogenic amines, and assume certain liabilities of Aurora, property leases for Aurora’s laboratory and research centre. Consideration for the acquisition will be USD\$145,000, of which USD\$25,000 has been paid to date, plus 500,000 Common Shares, together with the employment of key individuals currently employed by Aurora. As of the date of this AIF, the Company acquisition of the critical assets and intellectual property of Aurora is in abeyance.

On May 15, 2020, the Company announced that it entered into a non-binding memorandum of understanding dated May 14, 2020 with Neocon International Inc. of Halifax, Nova Scotia to design and produce a facemask that incorporates the Company’s patent-pending virus detection technology (“**SmartMask™**”) currently under development.

On May 26, 2020, the Company announced a strategic alignment with Natural Ascent Consulting (“**NAC**”) and the signing of a hardware loan and production agreement (the “**NAC Agreement**”), which will allow NAC to field test and contribute to the commercialization process of the Company’s Affinity System for the remediation of non-compliant hemp and cannabis extracts and standard extraction of cannabinoids from other crude extracts. The contract engages NAC in cannabinoid production using the Affinity™ System, and establishes a Southern California based production hub for the Company in one of the world’s largest cannabis markets. NAC will also use their lab capability with the Company to trial multiple production applications for the Affinity™ System including continued validation of the Affinity™ System’s capability to remediate failed extracts for heavy metals, pesticides, and possibly the chemicals associated with fire retardants that are found in both hemp and cannabis extracts due to their widespread use to combat forest fires. The NAC Agreement has since been terminated and the equipment has been returned to the Company.

On May 27, 2020, the Company announced the formation of its Strategic Advisory Board.

On June 9, 2020, the Company announced the execution of a Collaboration Supply Agreement (the “**PuriTech Supply Agreement**”) signed on June 5, 2020, between the Company and PuriTech, LLC (“**PuriTech**”). Under the terms of the PuriTech Supply Agreement, PuriTech was expected to assist in the manufacturing and design of the Company’s Affinity™ System based on PuriTech’s experience with its’ patented ION-IX system. ION-IX uses a single, multi-port distribution valve to create an optimized process system for continuous, countercurrent ion exchange. PuriTech’s ION-IX system has been used in water treatment, hydrometallurgy, sugar treatment, recovery of chemicals and a wide variety of ion exchange applications where very low waste or the recovery of high-value components is required. The PuriTech Supply Agreement has since expired and the Company has no immediate plans to renew the Agreement as alternate suppliers have been identified and engaged.

On June 15, 2020, the Company announced that it has partnered with York University and CTRI, for the development of its AMIPs virus detection technology through the submission of a grant application to Natural Sciences and Engineering Research Council of Canada. The grant application is titled: Point-of-need Microfluidic Biosensor for Detecting Airborne Viruses using Molecularly Imprinted Polymers: Towards COVID-19 Virus Monitoring and is for the development of a portable and low-cost technology for rapid on-site air sampling and detection of aerosol and droplet-encapsulated viruses in indoor and outdoor environments. Pursuant to the terms of the proposal, the Company will contribute its proposed AMIPs detection technology to be incorporated into the design of one of the first field-deployable air monitoring systems used for the detection of viruses such as SARS-CoV-2. On August 5, 2020, the Company announced that the Natural Sciences and Engineering Research Council of Canada has approved the proposal submitted by the Company and its partners, York University and the CTRI for the development

of the Company's AMIP virus detection technology. This project was approved for a start date of August 1, 2020.

On June 18, 2020, the Company announced that it has expanded its Strategic Advisory Board with the addition of key individuals to assist in development and advancement of the Company's AMIPs technology.

On June 19, 2020, the Company announced it had been approved to trade on the OTCQB Venture Market under the trading symbol "ATRUF".

On June 24, 2020, the Company announced that the Patent Office of the People's Republic of China has granted the Company a patent for its unique method of metal extraction and purification using molecularly imprinted polymers.

On June 25, 2020, the Company announced that its strategic partner NAC had begun to accept toll processing orders for full spectrum cannabinoid distillates to be produced using the Company's Affinity™ technology. In accordance with the NAC Agreement, the Company delivered an entry level extraction system to be used in the commercialization process of the Company's technology for the remediation of non-compliant hemp and cannabis extracts, as well as standard extraction of cannabinoids from other crude extracts. Building upon experience obtained engineering the Affinity™ technology for the generation of T-Compliant CBD distillate, NAC demonstrated successful extraction of full spectrum cannabinoid distillate from crude extract. The NAC Agreement has since been terminated.

On July 9, 2020, the Company announced that it has executed a non-binding Letter of Intent ("AESI LOI") to pursue a strategic partnership with Advanced Extractions Systems Inc. ("AESI") of Prince Edward Island, Canada for the purpose of designing and manufacturing commercial scale Systems for the separation of cannabinoids for isolates and distillates using the Company's Affinity Technology. Under the terms of the AESI LOI, AESI will accelerate commercialization building upon the existing System which was designed in collaboration with PuriTech. Additionally, AESI will produce Systems for the North American market. AESI will also provide ongoing support to field and service equipment installed in North America and other countries.

On July 28, 2020, the Company announced the commencement of the CTRI Project. The start of the CTRI Project, originally scheduled for March of 2020, had been delayed as a result of COVID-19, but ore shipped in July 2020. In addition, the Company was granted a patent from the Patent Office of Russia for its metal extraction and purification polymer (Russian Patent No. 2719736; MOLECULARLY IMPRINTED POLYMERS BEADS FOR EXTRACTION OF METALS AND USES THEREOF).

On August 24, 2020, the Company announced that it was conducting a non-brokered private placement (the "August 2020 Unit PP") of up to 10,000,000 units at \$0.30 per unit, for total proceeds of \$3,000,000. Each unit consisted of one Common Share and Warrant. Each Warrant gives the holder the right to purchase one Common Share of the Company at an exercise price of \$0.50 per Common Share for a period of 24 months. On August 28, 2020, the Company closed the first the tranche of the August 2020 Unit PP, issuing 614,994 units for gross proceeds of \$184,498. In connection with the first tranche, the Company paid finders' fees and issuance costs of \$58,330 and issued 43,049 Finder's Warrants, each Finder's Warrant providing the holder thereof the right to purchase one Common Share of the Company at an exercise price of \$0.30 per Common Share for a period of 24 months. On September 1, September 21, and November 18, 2020, the Company closed further tranches of the August 2020 Unit PP, issuing 1,611,880 units, 3,833,667 units and 1,325,334 units for gross proceeds of \$483,564, \$1,150,100 and \$397,600 respectively. In connection with the further tranches issued, a total finders' fees of \$49,707 and Finders' Warrants of 165,690 were issued. The Finders' Warrants give the holder thereof the right to purchase one Common Share at an exercise price of \$0.30 per Share for a period of 24 months.



On August 22 and 31, 2020, the Company closed its non-brokered private placement (the “**August 2020 CD PP**”) of convertible debentures by issuing 742 unsecured convertible debentures for gross proceeds totalling \$682,000 and settlement of outstanding balances of \$60,000. Each debenture unit consisted of: (i) \$1,000 principal amount, and (ii) 1,000 Warrants. At the Company’s election, interest on the convertible debentures can be paid in either cash or Common Shares of the Company (at a deemed price per Common Share equal to the conversion price, as such term is hereinafter defined), at a rate of 7.5% if paid in cash or 10% if paid in Common Shares. Interest is payable semi-annually on the last day of June and December of each year, commencing on December 31, 2020. The convertible debentures have a three-year term, with the principal amount being due to be repaid in full by the company on August 31, 2023. At any time during the term, a holder of convertible debentures may elect to convert the outstanding net principal amount, or any portion thereof, into units at a conversion price of \$0.35 per unit. Each unit shall consist of one Common Share and one Warrant, with each Warrant entitling the holder to acquire one Common Share at an exercise price of \$0.55. The Warrants to be issued upon the conversion of the debt will expire on the maturity date of the convertible debentures. In addition, each initial holder of convertible debentures received a one-time commitment fee comprising of commitment warrants. A total of 111,300 commitment warrants were issued. Each commitment warrant entitles its holder to acquire one Common Share at an exercise price of \$0.55 per Common Share for a period of 24 months. The debentures carry a term of three years. During the third year of the term, the Company shall have the Option to extend the term by up to one additional year. If extended, then the company shall pay a cash extension fee to the holders of convertible debentures in the amount of six months of interest (at the rate of 7.5% per annum). The Company has the right, at any time during the term, to repay in full the principal amount and any accrued and unpaid interest on the convertible debentures, provided that the Company gives 10 days of notice prior to doing so. In the event that the Common Shares trade at a closing price of \$0.75 or more on the CSE for 10 consecutive trading days, the outstanding principal amount of each convertible debenture will automatically be converted into units. In connection with the closing of the August 2020 CD PP, 148,000 Finders’ Warrants were issued, with each Finder Warrant entitling the holder thereof to acquire one Common Share at a price of \$0.35 per Common Share for a period of 36 months.

During the year ended August 31, 2020, the Company adopted an award plan (the “**DSU Plan**”), which permits the grant of deferred share units of the Company whereby the maximum number of Common Shares reserved for the issue under the DSU Plan shall not exceed 2,000,000 Common Shares. In addition, the aggregate number of Common Shares issuable pursuant to the DSU Plan combined with the Company’s Stock Option Plan shall not exceed 10% of the outstanding Common Shares.

### ***Year Ended August 31, 2021***

On September 15, 2020, the Company announced that it has executed a non-binding letter of intent (the “**Rio2 LOI**”) for trialing the Company’s patented IXOS® purification polymer for Rio2 Limited (“**Rio2**”). Under the terms of the Rio2 LOI, Rio2 will send representative ore samples from its Fenix Gold Project to the Company for testing and analysis in the Company’s Salt Lake City facility. The Company’s will perform a combination of leaching and recovery tests using its IXOS® technology on these samples consistent with protocols for the expected heap leach mining activity planned for Rio2’s Fenix Gold Project. Upon completion of the testing and pending positive results the companies would work towards executing a definitive agreement to complete an on-site pilot adsorption/desorption/recovery (ADR) plant scaled to operate on a 400t pilot leach pad. If the pilot plant demonstrated successful results the companies would than work towards an implementation phase incorporating the Company’s IXOS® technology in the processing plant to be constructed at the Fenix Gold Project.

On September 17, 2020, the Company announced a collaborative “green” test initiative with Mining and Process Solutions (“**MPS**”) in Australia. The test work initiatives would occur in North America and Australia utilizing the Company’s commercially available IXOS® molecular imprinted polymer and the

MPS GlyCat™ process. The GlyCat™ process was invented to reduce cyanide consumption while maintain gold recovery for gold ores from deposits that contain nuisance copper. The two companies are also working in collaboration with the CTRI and a major top-10 gold producer in Canada. The project aims to develop an environmentally friendly flow sheet for the gold mining industry. It will examine MPS' acidic and alkaline leaching technologies together with the Company's IXOS® technology. Testing is to be undertaken on ores provided by the Canadian mining partner.

On October 16, 2020, the Company announced that it has received an issue notification from the USPTO for patent application No. 15/747,858. The patent application was for the Company's molecularly imprinted polymer beads for the extraction of metals and uses thereof. The aforementioned patent was issued on Oct. 27, 2020, as U.S. patent No. 10,814,306. With the issue of this patent the Company has broadened the Company's already registered patent No. 9,504,988, which is also for the use of the Company's molecularly imprinted polymer beads for the extractions of metals and uses thereof.

On October 16, 2020, the Company announced that it has implemented an employee equity participation plan (the "**EEP Plan**"). The EEP Plan, which is voluntary, permits employees to receive compensation in the form of Common Shares in lieu of a portion, or all, of the employee's cash compensation.

On October 27, 2020, the Company announced that it has received a \$250,000 contribution from the Nova Scotia COVID-19 Response Council for the development of the Company's proposed AMIP's technology pursuant to an agreement dated October 22, 2020, between the Company and the Nova Scotia COVID-19 Response Council (the "**NS COVID-19 Agreement**"). Under the terms of the NS COVID-19 Agreement, the Company will continue to develop its AMIP technology specifically for the purpose of quickly and selectively binding to the SARS-Cov-2 virus. The proposed technology also contemplates the rapid delivery of a visual and/or electronic response upon the detection and verification of the SARS-Cov-2 virus. The Company's intention is to incorporate the AMIP's technology into several rapid-detection products, including rapid virus test kits, SmartMask™, as well as air and water monitoring systems.

On November 23, 2020, the Company announced that is signed an agreement (the "**UofA Agreement**") with the researchers at the University of Alberta to develop the Company's AMIP's technology.

On December 30, 2020, the Company closed a non-brokered private placement (the "**December 2020 CD PP**") of unsecured convertible debentures by issuing 1,523 convertible debentures at a price and principal amount of \$1,000 per convertible debentures for gross proceeds totaling \$1,523,000. Interest on the convertible debentures can be paid in either cash or Common Shares, at the Company's election, at a rate of 7.5 per cent per annum if paid in cash or 10 per cent per annum if paid in Common Shares, payable semi-annually on the last day of June and December of each year, commencing on June 30, 2021. If the Company elects to pay the accrued interest by issuing Common Shares, then such interest payment will be based upon the market value of the Common Shares at the time the Company makes such election. The convertible debentures have a three-year term, with the principal amount being due to be repaid on December 31, 2023. The Company has the right, at any time during the term, to repay in full the principal amount and any accrued and unpaid interest on the convertible debentures, provided that the Company gives 10 days' notice prior to doing so. At any time during the term, a holder of convertible debentures may elect to convert the outstanding net principal amount, or any portion thereof, into units at a conversion price of 27.5 cents per unit. Each unit shall consist of one Common Share and one-half of a Warrant, with each whole Warrant entitling its holder to acquire one Common Share at an exercise price of \$0.55 for a period ending on the maturity date. During the third year of the term, the Company shall have the Option to extend the term by up to one additional year. If extended, then the Company shall pay a cash extension fee to the holders of convertible debentures in the amount of six months of interest. Each initial holder of the convertible debentures received a one-time commitment fee comprising 150 commitment warrants per convertible

debenture. Each commitment warrant entitles its holder to acquire one Common Share at an exercise price of \$0.55 per Common Share for a period of 24 months.

Concurrent with the closing of the December 2020 CD PP, the Company repaid USD\$600,000 out of a total of USD\$871,368 of debt owed to Affinity Nano. The repaid debt carried monthly repayments of USD\$25,000, bore interest at 10 per cent and had a maturity date of July 31, 2021. The remaining amount of repaid debt, being USD\$271,368 or \$350,000, was refinanced and settled by the issuance of 350 convertible debentures.

On December 31, 2020, the Company paid interest on Convertible Bonds by the issuance of 75,479 Common Shares as settlement in full of interest owing on that date, in accordance with the terms of the Convertible Bonds.

On February 9, 2021, the research team completed the first molecular imprint of the virus using the Company's AMIP patent-pending process and technology. The AMIP imprint is the first-generation polymer imprint prototype, amounting to a detailed topographical impression of the virus and associated chemical binding sites required to recapture the virus.

On February 16, 2021, the Company provided an update regarding the development of its Affinity system for cannabis purification. The Company is in the final stages of preparing a beta version of its cannabinoid purification system. This initial unit will be subjected to a series of performance tests at the Company's research facility in Maryland. The laboratory-based test work will document the standard operating procedures for the unit, and demonstrate the operation of all operating cycles in a continuous circuit, including: (i) load phase, (ii) wash, (iii) elution, (iv) cleaning and (v) reconditioning.

On March 9, 2021, the Company released preliminary results evidencing the binding and detection capabilities of its AMIP technology for the rapid detection of SARS-CoV-2, the virus that causes COVID-19.

On March 15, 2021, the Company announced the appointment of Sokhie Puar to its board of directors.

On March 18, 2021, the Company announced that it has extended its research and development relationship with the University of Alberta and the Li Ka Shing Institute of Virology (“LKS”), pursuant to the development of the Company's AMIPs technology for the detection of the virus that causes COVID-19. Based on the success of the collaboration thus far, the Company and University of Alberta executed a no-cost extension of the UofA Agreement (the “**UofA Extension**”). The UofA Extension provides for a continuity of the Company's development work at the University of Alberta and LKS through April 30, 2022, unless otherwise extended by mutual consent. The UofA Extension has no impact on the ownership of associated intellectual property owned solely by the Company for AMIPs.

On March 31, 2021, the Company closed a non-brokered private placement (the “**March 2021 Unit PP**”) of units. Pursuant to the financing, the Company issued 20,000,000 units at a price of \$0.30 per unit for gross proceeds of \$6,000,000. Each unit consists of one Common Share and one Warrant, with each warrant entitling the holder to purchase one additional Common Share at an exercise price of \$0.50 per Share for a period of 24 months. In connection with the March 2021 Unit PP, the Company paid finders' fees in the aggregate amount of \$344,722 and issued a total of 1,099,350 Finders' Warrants to certain arm's-length finders. Each Finder's Warrant entitles the holder thereof to purchase one Common Share at an exercise price of \$0.375 per Common Share for a period of 24 months.

On April 14, 2021, the Company announced that it has successfully demonstrated colorimetric detection of SARS-CoV-2, the virus that causes COVID-19 using the Company's AMIPs technology. The

demonstration was performed by way of a simulated synthetic enzyme-linked immunosorbent assay (“ELISA”) test.

The research results obtained directly compared the prototype AMIPs polymer against infected and non-infected cell cultures to ensure detection was based on the presence of the virus and not binding of any other components of the cellular milieu or non-specific interactions between the polymer and the fluorescent dye. Detection was observed using an Olympus spinning-disk confocal microscope. In lay terms, two AMIP sensors were used in the experiment. One sensor was exposed to an infected cell culture solution and the other sensor was exposed to a non-infected cell culture solution. Both sensors were then washed to remove unbound material. The AMIPs were then exposed to the off-the-shelf fluorescent dye in accordance with the manufacturer’s standard protocols. The dye has chemical functionalities that will react non-specifically with most proteins. The dye solution was then washed off and the sensors were imaged under the microscope at a magnification of 20 times. The results were overwhelmingly clear -- AMIPs showed detection. No fluorescent response was observed from the sensor exposed to non-infected cell culture solution. The results demonstrate that the AMIPs polymer selectively binds the SARS-CoV-2 virus and that there are no non-specific interactions between the AMIP polymer and common cellular components or interferants.

The Company intends to build on this initial validation toward the development of a colorimetric sensor for a potentially wide range of rapid virus detection devices using AMIPs. The spectrum of prospective products includes the Issuer’s SmartMask, in addition to airborne sensors, Breathalyzers, synthetic ELISA-like tests, cartridge/lateral flow tests and others.

The Company also reported that it has successfully completed its final briefing to the Nova Scotia COVID-19 response council. This represents the final deliverable under the awarded contribution agreement.

On April 19, 2021, the Company announced that it has entered into a non-binding letter of intent with Halucenex Life Sciences Inc. (“**Halucenex**”) to explore a collaboration for the separation of compounds such as psilocybin, baeocystin and others using molecularly imprinted polymers. The Company and Halucenex have agreed to negotiate in good faith toward reaching a definitive agreement that will govern the potential collaboration. Under the terms contemplated by the letter of intent, the Company will utilize the basic design and operation of its Affinity cannabinoid purification system with molecularly imprinted polymers specifically designed for these target molecules. While the timeline for completion of a definitive agreement has expired due to exogenous reasons both companies remain committed to moving the relationship forward and expect to resume discussions in Q1 2022.

On April 20, 2021, the Company announced that it has renegotiated the settlement of debt outstanding in the amount of \$333,218 (USD). A total of \$166,609 (USD) has been settled through the issuance of 667,335 Common Shares. A total of \$83,304 (USD) has been repaid. A final amount of \$83,304 (USD) plus interest is to be repaid in September, 2022. As a result of the renegotiation, the company has reduced its current liabilities by a total of \$333,218 (USD).

On April 20, 2021, the Company announced that it has engaged Lion Capital Investment Ltd. (“**Lion**”) for the provision of consulting and marketing services on behalf of the Company. Lion will provide general consulting services and will provide marketing services under the trade name Wallstreet Investor Club. The Company has paid Lion a total of \$150,000 for a 12-month contract, with further payments in the amount of \$250,000 for digital advertising.

On April 20, 2021, the Company amended its Option agreement with TriLateral Energy LLC (“**TLE**”) and acquired 100% of the outstanding common shares of Geolithic. The Option agreement originally called for a series of three payments to be made by the Company to TLE, totalling \$300,000 (USD). The Company made the first payment in the amount of \$75,000 (USD) and a payment in the amount of \$10,000 (USD)

against the second payment. Remaining balances owing, in the amount of \$215,000 (USD), have been settled by way of the issue of 800,000 Common Shares.

On May 18, 2021, the Company announced that it has executed a non-binding letter of intent to test the Company's IXOS® technology on gold bearing tailings samples from the Barry-Hollinger Gold Mine ("BHGM") in Eastern Ontario. Historical records from BHGM indicate production of slightly more than 250,000 tonnes of mill feed from which ~80,000 ounces of gold are reported to have been recovered. Data suggested a recovered grade of about 0.30 ounces per short ton or about 11g/tonne. It is estimated there are approximately 200,000 tons of tailings on the property which have been indicated to contain up to 16,000 ounces of gold.

Under the terms of the letter of intent, BHGM will send representative ore samples to the Company for testing and analysis with the primary goal of determining the efficacy of using the Company's IXOS® technology on BHGM mine tailings. The Company had anticipated performing a combination of leaching and recovery tests in June 2021; however, this has been delayed due to a delay in obtaining the appropriate sample selections. The Company anticipates that the testing will be completed in the fourth quarter of 2021. The tailings test protocol could form the foundation for a business model that seeks to identify and recover gold from tailings at other mine sites in the Ontario mining district and throughout the world.

Upon successful completion and documentation of positive results of the BHGM test program, Sixth Wave and BHGM will evaluate the economics of moving to an implementation phase incorporating the IXOS® Mining Technology into a pilot plant that can provide operations data and specifications for full-scale implementation.

The Company is in the process of testing ore from multiple gold mines and development projects to assess the suitability of IXOS® for the particular ore body.

COVID-19 has resulted in some delays in the development of the Company's IXOS® product due to challenges associated with travel to and from mine sites of potential partners. While this has delayed some testing, the Company continues to progress testing where possible and expects to find a suitable potential partner for pilot scale testing in the coming months.

On May 25, 2021, the Company entered into an agreement with the Alberta Center for Advanced Micro/Nanotechnology Products ("ACAMP") to integrate Radio Frequency ("RF") based technology with the Company's AMIP's virus detection technology, to create smart prototypes such as the company's proposed Smart Mask™. ACAMP is a unique industry-led advanced technology product development center with expertise in scaling innovative ideas from proof-of-concept to manufactured products by providing access to multidisciplinary engineers, technology experts, unique specialized equipment, and industry acumen which could offer support at every stage of development.

The Company is engaging ACAMP for their expertise in RF technology with the goal of pairing the technology with AMIP's. Successful pairing would enable the integration of inexpensive commercially available radio frequency identification ("RFID") tags within the AMIP product line, enabling the wireless transfer of data and results to a smartphone, mobile, or fixed-base RFID reader. This is a core feature of the proposed SmartMask™ enabling real time collection of testing data from any population during the onset of a viral outbreak.

On June 2, 2021, the Company announced that it has released the design for manufacturing specifications to AESI for final engineering design and manufacturing of its Affinity™ product line for cannabis purification. The release of the design for manufacturing specifications is a major milestone and the design incorporates the lessons learned to date using two pilot systems with the intention of increasing the flexibility and reliability of the Affinity™ System and giving the Company the first Good Manufacturing

Process qualified system for production and delivery. The Company expects to receive the final design/build quotation along with a production timeline in the third quarter of 2021 as it continues its preparation for full-scale commercialization.

On June 10, 2021, the Company announced that it has successfully demonstrated the detection of SARS-CoV-2 variants, using two independent techniques: a color-based sensor and independently verified on a Quartz Crystal Microbalance (“QCM”) based AMIP sensor. The sensors use the Company’s AMIPS’ technology. The SARS-CoV-2 variants detected include the UK variant and the South African variant. The samples were run in cell culture supernatant to allow for basic specificity parameters. Both the QCM and fluorescent-based sensors demonstrated significant signal compared to the negative control (cell culture supernatant without virus).

The color-based sensor testing as discussed above uses a pseudo-ELISA test format (pseudo-ELISA - demonstrated functionality similar to an ELISA test), and was achieved using a commercial off-the-shelf fluorescent dye. The test work was performed under the direction of Dr. Michael Joyce at the La Ki Shing Institute of Virology at the University of Alberta.

On June 30, 2021, the Company paid interest on Convertible Bonds by the issuance of 392,668 Common Shares as settlement in full of interest owing on that date, in accordance with the terms of the Convertible Bonds.

On July 2, 2021 the Company announced the appointment of Dr. Garrett Kraft as Vice President of Innovations and the appointment of Mr. Peter Manuel as Interim Chief Financial Officer. The Company further announces the resignation of Dr. John Veltheer as Chief Financial Officer and Board Member along with the resignation of James McKenzie from the Board of Directors.

On July 2, 2021, the Company engaged the services of Native Ads Inc. (“Native Ads”) to provide strategic digital media services at an initial cost of \$300,000 USD over an expected period of twelve months. Native Ads will provide content development, web development, media buying, distribution, as well as campaign reporting and optimization. Neither Native Ads nor any of its Directors and officers own any securities of the Company.

On July 6, 2021 the Company announced the settlement of \$1,804,929 of debt held by founders of the Company, Dr. Jonathan Gluckman, President & CEO and Mr. Sherman McGill, Executive Vice-President, through the issuance of Common Shares. Pursuant to the debt settlement agreement, the Company issued 4,849,674 Common Shares at a deemed price of \$0.30 per Common Share. The Common Shares will be subject to a voluntary hold period such that 1/8th of the Common Shares to be issued will be released from the hold every 3 months (after an initial 4-month statutory hold period) over 24 months. The debt settlement is part of the Company’s efforts to reduce cash outflows and ensure the Company is positioned to allocate resources to accelerating operational progress. Settlement of this debt will result in a large reduction in expenditures over the next 12 months.

On July 20, 2021, the Company announced that it had completed the initial Design for Manufacturing of its Affinity™ System (the “Affinity™ System”) and has given AESI, located in Charlottetown, Prince Edward Island, approval of the design and bill of materials and commissioned delivery of its first System. It is estimated that the Affinity™ System will be ready for wet testing at AESI in late September and ready for shipment to the Company’s proving laboratory in Maryland shortly thereafter.

The Affinity™ System is designed to be manufactured in a modular fashion, allowing for easy, rapid assembly and scale-up of the Affinity™ System as per customers’ needs. Additional modules will be added once the Company identifies any further needed changes in the design prior to delivery to customers.

On July 27, 2021, the Company announced an update regarding the grant sponsored by the Natural Sciences and Engineering Research Council of Canada (“NSERC”) titled: Point-of-need Microfluidic Biosensor for Detecting Airborne Viruses using Molecularly Imprinted Polymers: Towards COVID-19 Virus Monitoring (the “NSERC Project”). The goal of the grant is to develop a portable, low-cost technology for rapid on-site air sampling and detection of aerosol and droplet-encapsulated viruses indoors and outdoors.

The collaboration with York and CTRI has yielded new configurations and potential applications for the AMIP technology. The addition of new fluorescent and electrochemical detection pathways expands the scope of the AMIP technology into a larger array of device formats. Of primary interest is the integration of the technology into formats that are compatible with continuous flow processing as compared to traditional batch testing of samples in diagnostic settings. Continuous flow processing allows for automated monitoring of a system and is a critical technical specification for integration of AMIP technology into larger complex systems. These are key components for developing devices that can be integrated into HVAC systems and wastewater treatment plants.

The research being done at York has demonstrated several of the previously disclosed potential capabilities of AMIP technology. Specifically, the integration of the technology into a variety of sensor arrays and detection mechanisms including electrochemical and fluorescent-based sensors. The work has also demonstrated the ability to detect a variety of pathogens, including viruses and bacteria. Although seemingly of similar origin, viruses and bacteria have drastically different technical challenges such as the different sizes and length scales of viruses vs. bacteria. The ability to develop the platform for different pathogens is a major milestone for SIXW. The imprinting and selective detection of multiple viruses and bacteria validate the claims of platform flexibility.

On August 3, 2021, the Company announced that its molecular detection technology has successfully detected the Delta variant of the SARS-CoV-2 virus that causes COVID-19. Detection was accomplished through a colour-based sensor that uses the Company’s patent-pending AMIPs™ technology.

The test work was performed under the direction of Dr. Michael Joyce, a senior research scientist in medical microbiology at the LKS.

On August 5, 2021, the Company announced the finalization of a commercial system design for Affinity™ cannabis purification technology. SIXW is contracted to deliver three units to Oregon-based producer Green Envy Extracts after successful field trials beginning in the fall of 2021.

Bench-scale testing has already indicated that Affinity is capable of superior adsorption kinetics for THC over the CBD extracted from hemp. Final configuration work is aimed toward optimization of standard operating procedures (SOPs) for cannabis extracts.

Ongoing work includes:

1. Validation and/or update to the crude extract preparation Standard Operating Procedure (“SOP”) for possible changes to accommodate this specific type of extract material. The Affinity system allows us to remove the winterization process and replace it with sample preparation that does not require cryogenic refrigeration and is much faster than winterization. This is accomplished in a single process that also dilutes the crude extract so that it flows through the Affinity columns for isolation of the cannabinoids.
2. Selection of final Affinity bead design for product rollout. Sixth Wave has currently completed extensive design, manufacture, testing, and initial scale-up work on four high-performance formulations. Several designs have exceeded initial expectations and functional design specifications. The beads show performance advantages on several key parameters that reduce operating costs, reduce ethanol usage, and

improve capacity. Final evaluation of purity level designs associated with hemp and cannabis crude is ongoing to optimize performance. The work is on schedule for Green Envy delivery and bead production scale-up.

On August 11, 2021, the Company announced a signed amendment to the research agreement and grant sponsored by the NSERC titled: Point-of-need Microfluidic Biosensor for Detecting Airborne Viruses using Molecularly Imprinted Polymers: Towards COVID-19 Virus Monitoring (the “**NSERC Project**”). The goal of the grant is to develop a portable, low-cost technology for rapid on-site air sampling and detection of aerosol and droplet-encapsulated viruses indoors and outdoors. The NSERC Project is a collaboration between the Company and its partners, York University (“**York**”) and the CTRI. The project had a start date of August 1, 2020.

On August 16, 2021, the Company announced the signing of a contract with Rio2 Limited which provides for the continuation of testing of SIXW’s patented IXOS® purification polymer (the “**IXOS® Mining Technology**”) at Rio2’s Fenix Gold Project in Chile using Rio2’s nearby Lince Infrastructure facilities. The contract follows the successful completion of testing done on representative samples of ore from Rio2’s Fenix Gold Project at Sixth Wave’s Salt Lake City, Utah facility undertaken pursuant to the non-binding Letter of Intent (“**LOI**”) entered into between Sixth Wave and Rio2 in September 2020.

On August 19, 2021, the Company announced that it has improved the sensitivity and capability of its nanotechnology to detect the presence of the SARS-CoV-2 at levels below 1,000,000 virus particles/mL.

***Subsequent to the Year Ended August 31, 2021, and to the date of this AIF***

On September 8, 2021, the Company announced results that demonstrate the extraction of gold at high capacity with lower reagent costs. These results were achieved during the successful completion of Phase 1 of the “Green Alternatives for Gold Leaching and Recovery” initiative undertaken with the Centre Technologique des Résidus Industriels (“**CTRI**”) and Australian company Mining and Process Solutions (“**MPS**”). The Company has worked closely with **MPS** and **CTRI** for the past 7 months to test the efficacy of Sixth Wave’s IXOS® molecularly imprinted polymer for gold extraction in conjunction with the MPS *GlyCat*™ process.

On September 15, 2021, the Company provided update on expected production capacities of the Affinity™ System or purification of cannabinoids. Ongoing refinement of bead formulations, which has been undertaken concurrently with the finalization of Standard Operating Procedures and Affinity™ machine production, has resulted in an increase in expected production capacity for the Company’s Affinity™ System.

Increased capacities allow for significantly increased capacity of the Affinity™ System with reduced System size/complexity, overall footprint, and cost of operation. Consistent, and repeatable loading capacity across different column sizes and configurations indicate stability of the process and the potential to scale up the size of Affinity™ Systems to meet any customer demand.

Based on current standard operating procedures, the baseline System is now expected to be capable of processing approximately 14kg of high purity distillate every 10hrs of operation, or in excess of 30kg/day, representing a significant increase over the Affinity™ System’s previously announced 20kg/day production capacity. Customers should expect some variations in performance due to variations in input materials though the Affinity™ System will retain flexibility to optimize for each installation’s unique operation.

On September 22, 2021 the Company announced additional grant funding for its joint research project with York University. The grant will provide continuity by funding the retention of current Ph.D staff interns



prior to another Natural Sciences and Engineering Research Council of Canada (“NSERC”) proposal slated for submission prior to December 2021. “Mitacs” is a national, not-for-profit organization that has designed and delivered research and training programs in Canada for 20 years. Working with 70 universities, 6,000 companies, and both federal and provincial governments, **Mitacs** builds partnerships that support industrial and social innovation in Canada. The funding for the positions is not repayable.

Work to date has focused on designing a prototype of the Company’s AMIP technology to detect pathogens in airborne, water, and wastewater environments. The collaboration is part of Sixth Wave’s multi-pronged R&D approach to revolutionize virus detection by being able to test individual patients (home tests) as well as monitoring entire populations through proactive measures such as pathogen detection in a variety (buildings, ships, aircraft, etc.) of air handling systems (HVAC) and municipal wastewater treatment facilities.

On September 29, 2021 the Company provided an update on upgraded engineering of the Affinity™ System for purification of cannabinoids.

The upgraded design of the Affinity™ System, being undertaken by the Company’s production partner, AESI, located in Charlottetown, Prince Edward Island, incorporates improved Affinity™ bead performance outlined in the Company’s press release dated September 15, 2021.

These advancements in the design of the Affinity™ System follow a robust and rigorous design of experiments aimed at stress testing the Affinity™ System and a complete redesign of the Affinity™ System including the operating hardware. The upgraded systems will allow for increased throughput, with a smaller and simpler design than originally contemplated. The upgraded system will consist of a four-column configuration, as opposed to the twenty-column configuration originally contemplated. This simpler configuration, coupled with the previously reported improvements in bead capacities, should result in a number of improvements to the Affinity™ System and its capabilities:

- Reduction in the number of columns from 20 to 4.
- Simplified flow sheet eliminating classic winterization with filtration.
- Cycle times reduced for complete processing of a column to approximately 15 minutes.
- Significantly reduced ethanol usage and storage requirements, which will, in turn, result in reduced solvent recovery requirements.
- Production of greater than 90% pure cannabinoid distillate on a single pass.
- Total cannabinoid recovery in excess of 95% system-wide with the ability to recapture approximately 4% giving a nearly 99% recovery.

Eliminating conventional distillation product loss of up to 15% from inefficient processing temperatures has the potential to significantly improve economics for Affinity System customers.

Construction of Sixth Wave’s initial pre-production units including the two pilot systems and the first full System (all expected to be completed and put in service before the end of the year) continues at AESI, under the supervision of Mr. John Cowan, SIXW’s Chief Operating Officer. The first of two pilot systems entered wet testing on September 23, 2021. Once stress testing is completed, upgraded, and validated Affinity™ molecularly imprinted polymer (MIP) beads will be loaded into the Affinity™ System. The pilot system, expected to be delivered to Green Envy Extracts, will be a simplified, two-column system, capable of producing up to 15kg of high purity distillate. The four-column system is expected to be capable of producing up to 30kg of distillate per day.

On October 5, 2021 the Company announced the shipment of the Affinity™ System for purification of cannabinoids from its contract manufacturer, AESI. Wet testing has been completed at AESI and the unit has been shipped to the SIXW's laboratory for final configuration prior to delivery to Green Envy.

On October 12, 2021 the Company announced that, as a result of its collaboration with York University, it had filed U.S. Patent Application No. 63/249,369 with the USPTO on September 28, 2021. The patent application Title: MOLECULARLY IMPRINTED POLYMER COATINGS AND SENSORS FOR BIODETECTION, covers the intellectual property generated in collaboration with York University and focuses on the synthesis and processing of MIPs containing detection elements for viruses and bacteria. The patent will be solely in the name of Sixth Wave, who will have exclusive ownership of the IP, subject to a reasonably agreed-upon license fee.

On October 19, 2021, the Company provided an update on the delivery of the Affinity™ System for purification of cannabinoids. The Company has received the first of three Systems at its proving lab in Baltimore, Maryland from its production partner, AESI.

The Affinity™ System will undergo a structured testing protocol to verify operation and final configuration for subsequent delivery to Green Envy Extracts pending Green Envy receiving final site approval from the State of Michigan. Commissioning work will take place at Green Envy, to be followed by a 60-day confirmatory operation period. Sixth Wave will conduct a site visit to refine the installation plan on Oct. 25, 2021.

On October 27, 2021, the Company announced that it had signed a letter of intent and assignment agreement with Sara Magdouli, Ph.D. and Ali Entezari-Zarandi, Ph.D. The parties will collaborate on the development of “green lixivants” as an alternative to conventional chemical reagents for recovery of Gold (Au), Lithium (Li), Rare Earth Elements (REE), and other metals. A lixiviant is a liquid medium used in hydrometallurgy to selectively extract the desired metal from the ore or mineral. It assists in rapid and complete leaching, for example during in situ leaching. The metal can be recovered from it in a concentrated form after leaching. The patent will be solely in the name of Sixth Wave and the company will have exclusive ownership of the IP, subject to a reasonably agreed-upon license fee to the co-inventors. This work has led to the development of various novel reagent formulations capable of dissolving gold from concentrates with promising results in terms of its potential use for treatment of hard-to-leach or refractory golds.

On November 8, 2021 the Company announced that that the Honourable Grant Mitchell would be joining the Company's Board of Directors effective immediately. Mr. Mitchell has been a valuable component of the Company's Strategic Advisory Board and is a welcome addition to the Board. This move comes as the Company continues to expand the independence and expertise represented in the Board.

On November 10, 2021 the Company announced that it had demonstrated the ability to identify the capture of pathogens electrically with one of its AMIPs™ prototypes. The prototype device created at York University integrates SIXW's AMIPs™ technology into an electrical sensor by coating the electrical sensor with AMIP™ polymer. When the AMIPs™ selectively binds with the target pathogen, a corresponding electrical signal is detected by the device.

On November 16, 2021 the Company announced that it has integrated its AMIP™ technology into a multicomponent microfluidic device with fluorescent detection. The prototype device, created by Dr. Pouya Rezai's and Dr. Satinder Brar's groups at York University, coats a thin layer of AMIPs™ polymer onto fluorescent magnetic microparticles. As the ultra-thin AMIP™ polymer shell binds the target pathogen, a change in the fluorescent signal is detected by the device. The integration of the detectors with microfluidics devices and “lab-on-a-chip” designs allow screening for multiple pathogens with a single test/device.

On November 18, 2021 the Company announced that Green Envy (customer) will ramp up its production line in Michigan on or about December 15, 2021. Once production commences, SIXW will use the crude extract to complete performance testing on the Affinity™ System.

On December 1, 2021, the Company provided an update on its AMIP's technology relative to COVID-19 Omicron variant. As discussed above the Company's AMIP's technology has been proven to be capable of detecting all of the variants of interest tested to date. Screening against the Omicron variant will commence as soon as virus samples are available at U of A, the Company's testing partner.

On December 2, 2021, the Company announced the commencement of live virus testing in saliva samples using the Company's AMIP's technology relative to COVID-19. The Company along with researchers at the U of A are currently testing with AMIP's using saliva samples spiked with the live COVID-19 virus by using a protocol similar to an ELISA clinical test.

On December 13, 2021, the Company announced that it is working to commercialize its technology, advancing the prospect of widely available Covid tests that can rapidly, accurately, and inexpensively detect the presence of the virus and its mutations.

On December 14, 2021, the Company announced that it has successfully demonstrated selective binding and detection of live SARS-CoV-2 virus in saliva samples using its patent-pending Accelerated Molecularly Imprinted Polymer ("AMIPs™") technology.

On December 31, 2021, the Company closed a non-brokered private placement of units. Pursuant to the financing, the Company issued 5,160,000 units at a price of \$0.20 per unit for gross proceeds of \$1,032,000. Each unit consists of one Common Share and one Warrant, with each warrant entitling the holder to purchase one additional Common Share at an exercise price of \$0.35 per Share for a period of 24 months. In connection with this private placement, the Company paid finders' fees in the aggregate amount of \$40,390 and issued a total of 201,950 Finders' Warrants to certain arm's-length finders. Each Finder's Warrant entitles the holder thereof to purchase one Common Share at an exercise price of \$0.25 per Common Share for a period of 24 months.

On December 31, 2021, the Company paid interest on Convertible Bonds by the issuance of 383,943 Common Shares as settlement in full of interest owing on that date, in accordance with the terms of the Convertible Bonds.

## DESCRIPTION OF BUSINESS

### General

Sixth Wave Innovations Inc. is a nanotechnology company focused on extraction and detection of target substances at the molecular level. The Company's products have the potential to provide significant advantages in cost and performance. These advantages are derived from application of the Company's patented technologies in the highly specialized field of molecularly imprinted polymers ("MIPs"). The Company uses patented MIPs for imprinting, capturing, and releasing substances at the molecular level. Sixth Wave's plans include the commercialization of IXOS®, a line of extraction polymers for the gold mining industry, Affinity™ for the cannabis industry, and AMIPs™ for virus detection.

## **Production and Services**

### *IXOS®*

IXOS® is a line of extraction polymers formulated for deployment in the gold mining industry for the extraction of gold from cyanide leach solutions. IXOS® nanotech beads are designed to be more selective, more efficient, have higher capacity, and offer environmental benefits compared to current processing methods. The Company has completed extensive testing (in North and South America) in laboratory and field trials with some of the world's largest gold mining companies, with confirmatory testing completed by independent mine sites, independent laboratories, and two major chemical corporations.

The Company has received or applied for patents for its IXOS® product in 14 jurisdictions around the world, including Australia, Brazil, Canada, China, Europe, Ghana, Indonesia, Mexico, Peru, Papua New Guinea, Russian, United States, Uzbekistan and South Africa. The Company intends to either sell the beads outright to the mine along with a support and long-term replacement contract or "lease" the beads to the gold producer at a negotiated monthly cost. The Company's preferred method is to lease the beads and it believes this will provide the highest return for the Company and greater flexibility to the adopting gold mine. The ultimate choice is likely to be mining company dependent as each company will have different appetite for capital versus operational expenditures.

### *Affinity™*

The Company is also developing extraction polymers for the extraction and purification of multiple cannabinoids from cannabis extracts under the name Affinity™. The primary focus of the initial Affinity™ System will be to create highly purified full-spectrum distillates.

The Affinity™ beads are designed to separate and purify cannabinoids from crude cannabis extracts. The Company has completed initial development of the beads in laboratory testing using synthetic crude extracts and laboratory prepared hemp extracts. Bench scale multi-column extraction testing has been completed and the Affinity™ System for purification of cannabinoids has been shipped from its contract manufacturer, AESI. Wet testing has been completed at AESI and the unit has been shipped to the SIXW's laboratory for final configuration prior to delivery to Green Envy. Provisional patent applications for the general extraction of cannabinoids using the Company's core MIPs technology have been submitted in the United States.

Technological innovation in the cannabis market to date has been dominated by inventions in growing techniques and technology, genetics of different plants, and primary extraction of the cannabinoids from the plant material. Purification of the cannabinoids from the raw or crude extracts has relied on rather old technologies including winterization (a process to separate extracts using deep freezing), sequential distillation at different temperatures, and chromatography of various implementations. Issued patents covering these steps are mainly process oriented rather than fundamental inventions of new technology to produce an isolate. The Company patent application relates to a fundamental invention using molecular engineering to derive isolate directly from the complex crude extract, eliminating major steps in the process, rather than simply optimizing or re-arranging the order of those existing steps.

The Company intends to license the use of Affinity™ beads to producers of cannabis products and does not intend to produce cannabis products in-house.

## *AMIPs™*

In response to the global pandemic, the Company is developing AMIPs™, an advanced MIP system, that will provide a single use, rapid virus test for the selective identification of COVID-19. The flagship technology uses a branch of nanotechnology called Molecularly Imprinted Polymers (MIPs). MIPs are synthetic polymers uniquely designed to capture and detect target materials by templating or cloning the target molecule. These targets can be as small as parts-per-billion.

The rapid virus test would be exposed to a sample (nasal swab, saliva, or breath) of the potential carrier. The test is expected to rapidly determine SARS-CoV-2 infection by colorimetric, fluorometric or electrochemical methods. The test would allow for high volume, point-of-use screening in public sector, private industry, hospitals, long-term healthcare facilities, and various forms of public transportation.

### **Specialized Skill and Knowledge**

As of August 31, 2021, the Company employed three Ph.D. chemists and research associates, and had contractual agreements with four additional Ph.D. chemists, who liaised with external service providers for efficient production of both the IXOS® and Affinity™ beads. These chemists and associates have in-depth knowledge of the molecular imprinting and polymerization processes. The knowledge exists in house to design production scale processes, however, again, the Company intends to outsource the actual production to existing chemical manufacturers who specialize in toll manufacturing. The Company engages third party mining engineers and fluid dynamic consultants for the design of the physical IXOS® plants, and has sourced technology for use with the Affinity™ product.

### **Competitive Conditions and the Sixth Wave Competitive Advantage**

The primary competitor for IXOS® is activated carbon, which carries some inherent shortcomings. The Company is in the process of educating the market on the operational advantages associated with IXOS®.

The Company believes that the recent changes to the regulatory landscape associated with the use of cannabis for both medicinal and recreational adult use purposes has created demand for such products. The Company expects that extracts manufactured from the components of cannabinoid oils, and specific cannabinoids will gain significant market share in the future, relative to the simple sale of cannabis. The ability to extract and purify cannabinoids utilizing the Affinity™ beads will position the Company and licensees to take advantage of these opportunities.

#### *Competitive Conditions for IXOS®*

IXOS® has demonstrated capture of up to 99% of gold from cyanide leach solutions in laboratory and mine site testing where the data was analysed by the mine operator, representing a material increase relative to activated carbon, which recovers between 85% and 95% of the gold, as reported by potential mining customers of IXOS®. Additionally, the increased selectivity of IXOS® results in the capture of fewer other competitive base metals. Testing at multiple mine sites has shown more than 90% of the metals captured on IXOS® Beads to be gold, as opposed to 40%-70% for those generated by activated carbon, resulting in efficiencies in the refining process used to generate higher purities of gold.

The prime competitors to IXOS® as an alternative to activated carbon technologies are produced by Dow-Minix and Purolite, both of which are resin-based ion exchange technologies. Ion exchange involves the exchange of ions between and electrolyte solution and a complex. Ion exchanges can have binding preferences for certain ions or classes of ions, depending upon their chemical structure. Both of these

products have had limited acceptance in gold mining markets due to drawbacks associated with quality, elution, and reuse of the beads.

SGS Canada Inc. in Lakefield, Ontario tested IXOS® against activated carbon as well as the leading ion exchange resins - Minix and Purolite A500. SGS reported to the Company that “the selectivity profiles of IXOS® were significantly better and this is important as far as copper is concerned, since copper is the most common and pervasive contaminant in cyanide leach liquors in the gold industry. The results of the test work demonstrated that IXOS® is indeed very selective for gold cyanide, exhibiting excellent rejection of the copper, zinc, nickel, and iron cyanide complexes.” SGS reported further stated that IXOS® has “superior gold extraction properties and will excel in new projects where fast kinetics and known resistance to fouling by organics will confer a clear advantage over activated carbon.”

#### *Competitive Conditions for Affinity™*

In response to rapidly growing market demands, the Company has undertaken extensive research with respect to using its MIPS nanotechnology platform to develop beads for extraction and purification of full spectrum distillate from cannabis extracts. Moreover, initial studies using the Company’s Affinity™ beads has shown promise in isolation of specific cannabinoids including selectively removing THC from CBD rich hemp extracts. This will allow producers the flexibility to formulate a variety of products that meet specific customer requirements. To date, the Company has completed initial development of the bead.

Provisional patent applications for the general extraction of cannabinoids using the Company’s core MIP technology have been submitted to the US Patent and Trademark Office. The Company expects to pursue worldwide patent protections and will file for protections in additional jurisdictions as the business develops.

The global cannabidiol market size was valued at US\$2.8 billion in 2020 and is expected to expand at a compound annual growth rate (CAGR) of 21.2% from 2021 to 2028. Due to its healing properties, the demand for cannabidiol (CBD) for health and wellness purposes is high, which is the major factor driving the market growth. In addition, the rising acceptance and use of products due to government approvals is a major factor expected to boost production for CBD-infused products.

(<https://www.grandviewresearch.com/industry-analysis/cannabidiol-cbd-market>).

As stated previously, the Affinity™ System is focused on production of full spectrum distillates. Full Spectrum CBD and/or THC Distillate is a type of distillate that contains all of the cannabinoids from the hemp or cannabis plant, hence the name “full spectrum”. Currently full spectrum distillate is the most sought out form of distillate on the market because it contains greater quantities of the lesser-known but potentially beneficial cannabinoids, terpenes, and flavonoids which cannot be found in Isolates.

Scientists currently believe that cannabinoids and terpenes interact with each other to produce a unique “entourage effect”. The hypothesis behind the entourage effect is that although the two most well recognized cannabinoids are THC and CBD, there are several others minor cannabinoids that work together to produce the whole effect. To put this into a practical context, a popular study published by the [Journal of Pain and Symptom Management](#) gave cancer patients either CBD, THC, or a combination of CBD with THC. The patients who received both CBD and THC reported experiencing less pain.

Hence, the speculation that cannabinoids work synergistically with each other. Scientists speculate that the effects of the major cannabinoids are slightly altered by whatever minor cannabinoids are present. And so, because “full spectrum distillate” contains all those minor cannabinoids, it is the most sought out type of distillate by consumers looking experience the full benefits of cannabinoids.

## **New Products**

The Company entered into an agreement with the Nova Scotia COVID-19 Response Council (“NSCRC”) for the development of its proposed AMIPs technology for the rapid detection of viruses such as COVID-19. Under the terms of the agreement, Sixth Wave will continue to develop the AMIPs specifically for the purpose of quickly and selectively binding to COVID-19. The proposed technology also contemplates the rapid delivery of a visual or electronic response upon the detection and verification of COVID-19. The Company’s intention is to incorporate the AMIPs technology into several rapid-detection products, including rapid virus test kits, SmartMask™, as well as air and water monitoring systems. The ability to have the AMIPs detection and reporting directly integrated into devices such as personal protective equipment will seamlessly provide the detection and the ability to automatically disseminate results for use in outbreak tracking and contact tracing (as may be implemented by appropriate government agencies). The development of the air monitoring technology is the subject of the Company’s previously approved and announced collaboration with York University and Centre Technologique des Residus Industriels which has received support from the NSERC. This project represents Sixth Wave’s first outside funding in the development of the Company’s proposed AMIPs virus detection technology and expands the Sixth Wave footprint in Nova Scotia. The overall budget for this project is \$770,000, with \$250,000 funded through contributions by the NSCRC.

## **Intangible Assets**

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development (or from the development phase of an internal project) is recognized if, and only if, all of the following have been demonstrated:

- (a) the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- (b) the intention to complete the intangible asset and use or sell it;
- (c) the ability to use or sell the intangible asset;
- (d) how the intangible asset will generate probable future economic benefits;
- (e) the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- (f) the ability to measure reliably the expenditure attributable to the intangible asset during its development.

## **Cycles**

The Company does not expect its business to be subject to significant cyclical or seasonal fluctuations.

## **Economic Dependence**

There are no contracts upon which the Company is substantially dependent.

## **Changes to Contracts**

There are no contracts that management anticipates will effect the current financial year through recognition or termination.

## **Environmental Protection**

The Company does not expect any environmental requirements to cause material financial or operational effects on its business.

The use of the IXOS® bead presents no material unique permitting issues relative to existing technology. The use of the beads has been previously successfully permitted for use at a facility at which the Company's pilot facility operated, without significant issue, and the process does not involve the use of any solvents or result in effluents that are not normally used in mining operations.

The Company does not intend to produce cannabis or cannabis products itself. The Company's licensees for the beads will be expected to have the appropriate licensing in place for the production of cannabis products.

## **Employees**

As at the date of this AIF, the Company has the equivalent of ten (10) full-time employees.

## **Foreign Operations**

The Company's primary laboratory is located in Salt Lake City, Utah, with a secondary contracted research facility in Maryland, and owns land and buildings in Arkansas, all in the United States. Other than risks related to the uncertain regulatory regime for cannabis and cannabis-related operations in the United States described above and in Section 17 – Risk Factors below, the Company does not perceive there to be any significant risks associated with these US-based operations. The Company expects its IXOS® product to be used by customers worldwide and expects to be able to service these customers from its U.S.-based operations without establishing permanent sites in other countries. If the Company is successful in establishing international sales for the IXOS® product, the Company may be exposed to risks associated with currency exchange rate fluctuations, local governmental regulations in the applicable countries and potential political instability depending on the countries in which the Company has customers.

## **CANNABIS LEGISLATION**

### **Regulatory Framework**

In accordance with the Canadian Securities Administrators Staff Notice 51-352 (Revised) - *Issuers with U.S. Marijuana-Related Activities*, below is a discussion of the federal and state-level U.S. regulatory regimes in those jurisdictions where the Company is currently involved in the cannabis industry. The Company, through its subsidiaries, engaged in, or has management, consulting services or other agreements in place to assist in the manufacture, possession, sale or distribution of cannabis in the adult-use or medical cannabis marketplace in Maryland and Michigan. In accordance with Staff Notice 51-352, the Company will evaluate, monitor and reassess this disclosure, and any related risks, on an ongoing basis and the same will be supplemented and amended to investors in public filings, including in the event of government policy changes or the introduction of new or amended guidance, laws or regulations regarding cannabis regulation. Staff Notice 51-352 does not pertain to CBD derived hemp in the United States.



Any non-compliance, citations or notices of violation which may have an impact on the Company's license, business activities or operations will be promptly disclosed by the Company.

### **United States Federal Overview**

The United States federal government regulates drugs through the federal Controlled Substances Act of 1970 (21 U.S.C. § 811) (the "CSA"), which places controlled substances, including cannabis, in a schedule. Cannabis is classified as a Schedule I controlled substance. The CSA explicitly prohibits the manufacturing, distribution, selling and possession of cannabis and cannabis-derived products as a consequence of its Schedule I classification. Classification of substances under the CSA is determined jointly by the U.S. Drug Enforcement Agency and the U.S. Food and Drug Administration. The United States Department of Justice defines Schedule I drugs and substances as drugs with no currently accepted medical use, a high potential for abuse and a lack of accepted safety for use under medical supervision. The FDA has approved Epidiolex, which contains a purified form of the drug CBD, a non-psychoactive ingredient in the cannabis plant, for the treatment of seizures associated with two epilepsy conditions. The FDA has not approved cannabis or cannabis compounds as a safe and effective drug for any other condition.

Unlike Canada, which has federal legislation uniformly governing the cultivation, distribution, sale and possession of medical cannabis under the Access to Cannabis for Medical Purposes Regulations (Canada) and the regulation of recreational cannabis under the *Cannabis Act* (Canada), investors are cautioned that in the United States, cannabis remains illegal under United States federal law and is largely regulated at the State and local level. As of the date of this AIF, a total of 36 states, and the District of Columbia, have legalized cannabis in some form. The recreational use of cannabis has been legalized in the District of Columbia and 18 states, including Alaska, Arizona, California, Colorado, Connecticut, Illinois, Maine, Massachusetts, Montana, Michigan, Nevada, New Jersey, New Mexico, New York, Oregon, Vermont, Virginia and Washington.

Cannabis is illegal under U.S. federal law, and enforcement of relevant laws governing cannabis-related activities is a significant risk for the Corporation. The U.S. federal government regulates drugs through, among other things, the CSA, 21 U.S.C. § 801 et seq., which places controlled substances, including marijuana, in a schedule. Cannabis is a Schedule I drug. A Schedule I controlled substance is defined as having no currently accepted medical use and a high potential for abuse.

State laws regulating cannabis are in direct conflict with the federal CSA and related federal laws, which makes cannabis use and possession, and associated activity, federally illegal. Although certain states and territories of the U.S. authorize medical, and in some cases, adult-use cannabis production and distribution by licensed entities, under U.S. federal law, the possession, use, cultivation, and transfer of cannabis and any related drug paraphernalia is illegal and any such acts are criminal acts under federal law under any and all circumstances. Although the Company's activities are compliant with applicable state and local laws, strict compliance with state and local laws with respect to cannabis may neither absolve the Company of liability under United States federal law, nor may it provide a defense to any federal proceeding which may be brought against the Company.

Given the illegality of cannabis under U.S. federal law, the Company's access to capital could be negatively affected by public and/or private capital not being available to support continuing operations. At present, management believes that both private and public capital are available to the Company on terms acceptable to the Company but management also believes that this capital availability could change without notice, requiring the Company to operate solely on internally-generated funds. In the event that the Company has insufficient internally-generated funds the Company could fail. Management is not currently aware of any specific U.S. federal or state initiatives that would lessen the Company's capital access.

Violations of any United States federal laws and regulations could result in significant fines, penalties, administrative sanctions, convictions or settlements, arising from either civil or criminal proceedings brought by either the United States federal government or private citizens, including, but not limited to, property or product seizures, disgorgement of profits, cessation of business activities or divestiture. Such fines, penalties, administrative sanctions, convictions or settlements could have a material adverse effect on the Company, including, but not limited to, the Company's reputation, the Company's ability to conduct business, the Company's financial position, operating results, profitability or liquidity, and the market price of the Common Shares.

State and local cannabis laws and regulations in the United States are complex, broad in scope, and subject to evolving interpretations and changes. Compliance with such laws and regulations could require the Company to incur substantial costs or alter certain aspects of the Company's business. A compliance program is essential to manage regulatory risk. All operating policies and procedures implemented in the operation will be compliance-based and derived from the state regulatory structure governing ancillary cannabis businesses and their relationships to state-licensed or permitted cannabis operators, if any. Notwithstanding the Company's efforts, regulatory compliance and the process of obtaining regulatory approvals can be costly and time-consuming.

At times since December 2014, companies strictly complying with state medical cannabis laws have been protected against federal law enforcement by a provision (originally called the Rohrabacher-Farr amendment, now known as the Joyce amendment) in periodic appropriations bills, which have prevented, during the term of each such bill, federal prosecutors from using federal funds to impede the implementation of medical cannabis laws enacted at the state level.<sup>1</sup> Courts have interpreted this statutory language barring the United States Department of Justice (the "DOJ") from prosecuting any person or entity in strict compliance with state medical cannabis laws.<sup>2</sup>

Moreover, even while the Attorney General position was filled by Jeff Sessions, who rescinded the DOJ's previously issued guidance permitting US Attorneys to exercise prosecutorial discretion in not prosecuting state-law compliant cannabis activities, the federal government has brought no criminal enforcement against any state-law compliant cannabis companies at all, not just those involved with medical cannabis. The absence of prosecutions reflects the strong public support of ending prosecutions particularly of state legal conduct, the difficulty of prosecuting a state medical cannabis licensee for activities in the same state's adult use program without "interfering" with the state medical cannabis program, and prosecutors' reluctance to bring cases particularly now that the President of the United States advocates for decriminalization and expungement.

President Biden campaigned on federal reform on cannabis, including decriminalization generally. According to the Biden website, a Biden Administration "will decriminalize cannabis use and automatically expunge prior convictions. And, he will support the legalization of cannabis for medical purposes, leave decisions regarding legalization for recreational use up to the states, and reschedule cannabis as a schedule II drug so researchers can study its positive and negative impacts."<sup>3</sup> The Biden-Sanders Unity Platform, which was released at the time President Biden won the Democratic Party nomination for President, affirmed that his administration would seek to "[d]ecriminalize marijuana use and legalize marijuana for medical purposes at the federal level;" "allow states to make their own decisions about legalizing

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<sup>1</sup> E.g., Consolidated Appropriations Act, 2021, Public Law No. 116-260, Div. B, § 531, <https://www.congress.gov/bill/116th-congress/house-bill/133/text> ("None of the funds made available under this Act to the Department of Justice may be used, with respect to any of the [states with medical marijuana programs], to prevent any of them from implementing their own laws that authorize the use, distribution, possession, or cultivation of medical marijuana.").

<sup>2</sup> United States v. McIntosh, 833 F.3d 1163 (9th Cir. 2016).

<sup>3</sup> Biden-Harris, "The Biden Plan for Strengthening America's Commitment to Justice," <https://joebiden.com/justice/>.

recreational use;” and “automatically expunge all past marijuana convictions for use and possession.”<sup>4</sup> Biden’s pledge to “decriminalize” cannabis may be reasonably interpreted to mean that any Attorney General under his administration will order U.S. Attorneys not to enforce the federal cannabis prohibition against state law compliant entities and others legally transacting business with them. Biden has selected Judge Merrick Garland to serve as the U.S. Attorney General under his administration. Judge Garland has not publicly expressed any negative views toward cannabis legalization or decriminalization. During his confirmation hearing before the U.S. Senate, Judge Garland testified that prosecuting companies in “states that have legalized and that are regulating marijuana, either medically or otherwise,” would not be a “useful use of limited resources.”<sup>5</sup>

In spite of the limited federal legislative protection for the medical cannabis industry, there remains inconsistency between federal and state laws, U.S. federal enforcement practices going forward and the inconsistency between U.S. federal and state laws and regulations present major risks for us.

On January 6, 2021, then- President-Elect Joseph Biden announced the nomination of Merrick Garland as the U.S. Attorney General, who was ultimately confirmed by the Senate and sworn in on March 10, 2021. Although Attorney General Garland did not confirm whether he would reinstate the 2014 Cole Memorandum, he did indicate that he plans to reduce resources towards the enforcement of federal marijuana laws during his confirmation hearing in response to questions from Senator Cory Booker.

Under the current administration, while President Biden campaigned on a platform of federal decriminalization and expungement, and despite the statements issued by his administration on February 2021 reaffirming the pledge, it is unclear what impact, if any, the new administration will have on U.S. federal government enforcement policy. Nonetheless, there is no guarantee that state laws legalizing and regulating the sale and use of cannabis will not be repealed or overturned, or that local governmental authorities will not limit the applicability of state laws within their respective jurisdictions. Unless and until the United States Congress amends the CSA with respect to cannabis (and as to the timing or scope of any such potential amendments there can be no assurance), there is a risk that federal authorities may enforce current U.S. federal law.

Additionally, the Strengthening the Tenth Amendment Through Entrusting States Act (the “**STATES Act**”) was introduced in the U.S. Senate on June 7, 2018 by Senators Cory Gardner (R-CO) and Elizabeth Warren (D-MA). A companion bill was introduced the same day in the U.S. House of Representatives, sponsored by Representatives Earl Blumenauer and David Joyce. The bill provides in relevant part that the provisions of the CSA, as applied to cannabis, “shall not apply to any person acting in compliance with state law relating to the manufacture, production, possession, distribution, dispensation, administration, or delivery of marijuana.” Even though cannabis will remain within Schedule I of the CSA under the STATES Act, the bill makes the CSA unenforceable to the extent it conflicts with state law. In essence, the bill extends the limitations afforded by the protection within the federal budget—which prevents the DOJ and the DEA from using funds to enforce federal law against state-legal medical cannabis commercial activity—to both medical and adult-use cannabis activity in all states where it has been legalized. The STATES Act was reintroduced on April 4, 2019 in both the U.S. House of Representatives and the U.S. Senate. Since the STATES Act is currently draft legislation, there is no guarantee that the STATES Act will become law in its current form.

On December 4, 2020, the House of Representatives passed the *Marijuana Opportunity Reinvestment and Expungement Act of 2019* (the “**MORE Act**”). The MORE Act would provide for the removal of cannabis

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<sup>4</sup> Biden-Sanders Unity Task Force Recommendations: Combating The Climate Crisis And Pursuing Environmental Justice, <https://joebiden.com/wp-content/uploads/2020/08/UNITY-TASK-FORCE-RECOMMENDATIONS.pdf>.

<sup>5</sup> See Attorney General Nominee Merrick Garland Testifies at Confirmation Hearing, <https://www.c-span.org/video/?508877-1/attorney-general-nominee-merrick-garland-testifies-confirmation-hearing>.

from the list of controlled substances in the CSA and other federal legislation. It would end the applicability of Section 280E (defined herein) to cannabis businesses, but would impose a 5% federal excise tax. The MORE Act would still need to be passed by the Senate and signed into law by the president. There is no guarantee the MORE Act will become law in its current form.

Pursuant to Staff Notice 51-352, issuers with U.S. cannabis-related activities are expected to clearly and prominently disclose certain prescribed information in prospectus filings and other required disclosure documents, such as this AIF. In accordance with the Staff Notice 51-352, below is a table of concordance that is intended to assist readers in identifying those parts of this AIF that address the disclosure expectations outlined in Staff Notice 51-352.

<b>Industry Involvement</b>	<b>Specific Disclosure Necessary to Fairly Present all Material Facts, Risks and Uncertainties</b>	<b>AIF Cross Reference</b>
<b>All Issuers with U.S. Marijuana-Related Activities</b>	Describe the nature of the Company’s involvement in the U.S. marijuana industry and include the disclosures indicated for at least one of the direct, indirect and ancillary industry involvement types noted in this table.	<p><i>“General Development of the Business”</i></p> <p><i>“Description of Business”</i></p> <p><i>“Cannabis Legislation – Regulatory Framework”</i></p>
	Prominently state that marijuana is illegal under U.S. federal law and that enforcement of relevant laws is a significant risk.	<p><i>“Cannabis Legislation – United States Federal Overview”</i></p> <p><i>“Risk Factors – Risks Relating to Government Regulation”</i></p>
	Discuss any statements and other available guidance made by federal authorities or prosecutors regarding the risk of enforcement action in any jurisdiction where the Company conducts U.S. marijuana-related activities.	<p><i>“Cannabis Legislation – Regulatory Overview - United States Federal Overview”</i></p> <p><i>“Risk Factors – Risks Relating to Government Regulation”</i></p> <p><i>“Risk Factors – Federal Regulation of Marijuana in the U.S.”</i></p>
	Outline related risks including, among others, the risk that third-party service providers could suspend or withdraw services and the risk that regulatory bodies could impose certain restrictions on the Company’s ability to operate in the U.S.	<p><i>“Risk Factors – Protection and Enforcement of Intellectual Property Rights”</i></p>
	Given the illegality of marijuana under U.S. federal law, discuss the Company’s ability to access both public and private capital and indicate what financing Options are / are not available in order to support continuing operations.	<p><i>“Risk Factors – The Company anticipates requiring substantial additional financing to operate its business and it may face difficulties acquiring additional financing on terms acceptable to the Company or at all”</i></p>

Industry Involvement	Specific Disclosure Necessary to Fairly Present all Material Facts, Risks and Uncertainties	AIF Cross Reference
		<p><i>“Risk Factors – Risk Factors Specifically Related to Regulatory Matters – U.S. State Regulatory Uncertainty”</i></p> <p><i>“Risk Factors – Due to the classification of cannabis as a Schedule I controlled substance under the CSA, banks and other financial institutions which service the cannabis industry are at risk of violating certain financial laws, including anti-money laundering statutes”</i></p>
	<p>Quantify the Company’s balance sheet and operating statement exposure to U.S. marijuana-related activities.</p>	<p><i>The Company estimates that 2.9% of its balance sheet as of May 31, 2021 relates to its marijuana related business. The Company has no marijuana related revenue.</i></p>
	<p>Disclose if legal advice has not been obtained, either in the form of a legal opinion or otherwise, regarding (a) compliance with applicable state regulatory frameworks and (b) potential exposure and implications arising from U.S. federal law.</p>	<p><i>The Company has received legal advice from U.S. attorneys regarding (a) compliance with applicable state regulatory frameworks; and (b) potential exposure and implications arising from U.S. federal law. The Resulting Issuer and its U.S. counsel continue to monitor compliance very carefully.</i></p>
<p><b>U.S. Marijuana Issuers with direct involvement in cultivation or distribution</b></p>	<p>Outline the regulations for U.S. states in which the Company operates and confirm how the Company complies with applicable licensing requirements and the regulatory framework enacted by the applicable U.S. state.</p>	<p><i>Not Applicable.</i></p>
	<p>Discuss the Company’s program for monitoring compliance with U.S. state law on an ongoing basis, outline internal compliance procedures and provide a positive statement indicating that the Company is in compliance with U.S. state law and the related licensing framework. Promptly disclose any non-compliance, citations or notices of violation which may have an impact on</p>	<p><i>Not Applicable.</i></p>

Industry Involvement	Specific Disclosure Necessary to Fairly Present all Material Facts, Risks and Uncertainties	AIF Cross Reference
	the Company's license, business activities or operations.	
<b>U.S. Marijuana Issuers with indirect involvement cultivation or distribution</b>	Outline the regulations for U.S. states in which the Company's investee(s) operate.	<i>Not Applicable.</i>
	Provide reasonable assurance, through either positive or negative statements, that the investee's business is in compliance with applicable licensing requirements and the regulatory framework enacted by the applicable U.S. state. Promptly disclose any non-compliance, citations or notices of violation, of which the Company is aware, that may have an impact on the investee's license, business activities or operations.	<i>Not Applicable.</i>
<b>U.S. Marijuana Issuers with material ancillary involvement</b>	Provide reasonable assurance, through either positive or negative statements, that the applicable customer's or investee's business is in compliance with applicable licensing requirements and the regulatory framework enacted by the applicable U.S. state.	<i>Not Applicable.</i>

In accordance with Staff Notice 51-352, the Company will evaluate, monitor and reassess the foregoing disclosure, and any related risks, on an ongoing basis and any supplements or amendments hereto will be reflected in, and provided to, investors in public filings of the Company, including in the event of government policy changes or the introduction of new or amended guidance, laws or regulations regarding cannabis regulation. Any non-compliance, citations or notices of violation which may have a material impact on any subsidiary's licenses, business activities or operations will be promptly disclosed by the Company.

#### *Joint Ventures and Joint Operations*

In addition to progressing its IXOS®-Au product, the Company has undertaken advanced research in several other sectors. On January 20, 2017, the Company entered into a Minerals Extraction Joint Venture Company Agreement with TriLateral Energy, LLC ("TLE"). TLE and the Company formed Geolithic.

Geolithic is a private company and was formed to advance the development of a solution for liberating lithium from geothermal brines in the Salton Sea in California. Geothermal brines in the Salton Sea, which are being used to generate geothermal electricity in 20 geothermal power plants, contain elevated levels of lithium and other valuable constituents. Geolithic proposes to use the Company proprietary nanotechnology to extract lithium and other value elements from these brines.

As at December 31, 2018, Geolithic was recognised as an equity investment of the Company. The Board and management of Geolithic was comprised of three representatives of TLE and two representatives of the Company. Voting is proportionate to each party's participating interest which was, as at December 31, 2018, 60% to TLE and 40% to the Company.

On April 20, 2021, the Company announced an amendment to the Option Agreement with TriLateral Energy LLC ("TriLateral"), and the acquisition of 100% of the outstanding common shares of Geolithic.

Pursuant to the original 2017 agreement, TriLateral held 60% of the outstanding shares of Geolithic, with Sixth Wave holding 40%. Under the terms of updated Agreement, Sixth Wave has acquired 100% of the issued and outstanding Common Shares of Geolithic.

The Option Agreement originally called for a series of three payments to be made by Sixth Wave to TriLateral, totalling USD\$300,000. To date, the Company has made the 1st Payment in the amount of USD\$75,000 and a payment in the amount of USD\$10,000 against the 2nd Payment. Remaining balances owing, in the amount of USD\$215,000, have been settled by way of the issue of 800,000 Common Shares of the Company.

### **State-Level Overview & Compliance Summary**

While the Company is in compliance with the rules, regulations and license requirements governing each state in which the subsidiaries and contractual parties operate, there are significant risks associated with their business and the business of the subsidiaries and contractual parties. Further, the rules and regulations as outlined below are not a full complement of all the rules that the subsidiaries are required to follow in each applicable state.

Although each state has its own laws and regulations regarding the operation of cannabis businesses, certain of the laws and regulations are consistent across jurisdictions. As a general matter, to operate legally under state law, cannabis operators must obtain a license from the state and in certain states must also obtain local approval. In those states where local approval is required, local authorization is a prerequisite to obtaining state licenses, and local governments are permitted to prohibit or otherwise regulate the types and number of cannabis businesses allowed in their locality. The license application and license renewal processes are unique to each state. However, each state's application process requires a comprehensive criminal history, regulatory history, financial and personal disclosures, coupled with stringent monitoring and continuous reporting requirements designed to ensure only good actors are granted licenses and that licensees continue to operate in compliance with the state regulatory program.

License applicants for each state must submit standard operating procedures describing how the operator will, among other requirements, secure the facility, manage inventory, comply with the state's seed-to-sale tracking requirements, dispense cannabis, and handle waste, as applicable to the license sought. Once the standard operating procedures are determined compliant and approved by the applicable state regulatory agency, the licensee is required to abide by the processes described and seek regulatory agency approval before any changes to such procedures may be made. Licensees are additionally required to train their employees on compliant operations and are only permitted to transact with other legal and licensed businesses.

As a condition of each state's licensure, operators must consent to inspections of the commercial cannabis facility as well as the facility's books and records to monitor and enforce compliance with state law. Many localities have also enacted similar standards for inspections and have already commenced both site-visits and compliance inspections for operators who have received state temporary or annual licensure.

To strengthen the communication and transparency between the Company senior management team regularly monitors the development of applicable U.S. federal and state laws, licensing requirements and regulatory frameworks and continues to engage a U.S. legal counsel to ensure it is operating in compliance with all applicable laws and permits. The Company is not aware of any instances of non-compliance with such laws, licensing requirements and regulatory frameworks in relation to its direct activities or the activities of parties.

The Company has a commitment to training its personnel on the relevant issues to facilitate its overall compliance effort. The Company's training program includes, among other items, the following topics:

- importance of compliance with state and local laws
- inventory control
- quality control
- cash management and control

The Company's compliance team closely monitors and promptly addresses all compliance notifications from the regulators and inspectors in each market, to resolve any issues identified on a timely basis. The Company keeps records of all compliance notifications received from the state regulators or inspectors and how and when the issue was resolved.

The Company will continue to monitor compliance on an ongoing basis in accordance with its compliance program and standard operating procedures. While the Company's operations strive to comply with all applicable state laws, regulations and licensing requirements, some of such activities remain illegal under United States federal law. For the reasons described above and the risks further described in Risk Factors below, there are significant risks associated with the business of the Company. See "Risk Factors".

## **RISK FACTORS**

The following are certain factors relating to the business of the Company. These risks and uncertainties are not the only ones facing the Company. Additional risks and uncertainties not presently known to the Company or currently deemed immaterial by the Company, may also impair the operations of the Company. If any such risks actually occur, shareholders of the Company could lose all or part of their investment and the business, financial condition, liquidity, results of operations and prospects of the Company could be materially adversely affected and the ability of the Company to implement its growth plans could be adversely affected.

The acquisition of any of the securities of the Company is speculative, involving a high degree of risk and should be undertaken only by persons whose financial resources are sufficient to enable them to assume such risks and who have no need for immediate liquidity in their investment. An investment in the securities of the Company should not constitute a major portion of an individual's investment portfolio and should only be made by persons who can afford a total loss of their investment. Shareholders should carefully evaluate the following risk factors associated with the Company's securities, along with the risk factors described elsewhere in this AIF.

### **Going Concern and Need for Additional Funds**

The Company currently does not generate significant revenue from its operations and consequently is reliant on equity or other types of financing for its current short term and long-term working capital



requirements and to fund its research and development programs, commercialize its technologies, and business development activities. On March 31, 2021, the Company closed a non-brokered private placement for gross proceeds of \$6,000,000. The Company's ability to continue as a going concern is dependent upon the ability of the Company to obtain necessary financing or other satisfactory arrangements to fund its operating expenses and interest expense until revenue generating contracts are obtained to allow the Company to be self-sufficient. The Company's ability to continue its research and development activities is dependent on management's ability to secure additional financing in the future, which may be completed by way of traditional equity financings or in a number of alternative ways including, but not limited to, a combination of: a rights offering; new strategic partnerships; joint venture arrangements; project-level or subsidiary-level third-party financings; royalty or streaming financing; the sale of non-core assets; and other capital market alternatives. As of the date of this AIF, the Company does not have sufficient resources to fund its operations for the coming twelve (12) months. Management is pursuing additional financial sources, and while the Company's management has been successful in obtaining financing for the Company in the past, there can be no assurance it will be able to do so in the future or that these sources of funding or initiatives will be available for the Company or that they will be available on terms which are acceptable to the Company.

### **Limited Number of Products and Clients**

The Company is reliant on the development, marketing and use of its extraction and detection of target substances at the molecular level. If it does not achieve sufficient market acceptance, it will be difficult for the Company to achieve consistent profitability. In addition, the Company currently has a limited number of potential clients and its potential revenue could decrease substantially if it were to lose one of these potential clients.

### **COVID-19**

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.

Although it is not possible to reliably estimate the length or severity of these developments and their financial impact to the date of approval of these financial statements, these conditions could have a significant adverse impact on the Company's financial position and results of operations for future periods.

COVID-19 has resulted in some delays in the development of the Company's IXOS® product due to challenges associated with travel to and from mine sites of potential partners. While this has delayed some testing, the Company continues to progress testing where possible and expects to find a suitable potential partner for pilot scale testing in the coming months. Travel restrictions have also had an impact on the development of the Company's Affinity™ platform for the separation of cannabinoids. The Company has had one worker fall ill with COVID-19 and has occasionally delayed travel and testing due to site-specific lockdowns and quarantines. The Company is currently continuing the development of the AMIPs product as outlined above.

The continued spread of COVID-19 nationally and globally could also disrupt the Company's business and research activities, and result in a reduction in potential demand for the Company's products as a result of travel restrictions, work refusals by and mandatory accommodations for employees, changing demand by consumers, mass quarantines, confinements, lock-downs or government-imposed closures in Canada or abroad, which could adversely impact materially the Company's business, operations or financial results.

Since the latter part of February 2020, financial markets have experienced significant volatility in response to the COVID-19 pandemic and equity markets in particular experienced significant declines and then volatility. The continued spread of COVID-19 nationally and globally may impact the Company's ability raise sufficient capital in 2021.

### **Early Stage**

The Company is an early-stage company with no revenues in the past two years. As such, the Company does not have a significant operating history, or financial information, upon which to evaluate the Company's ability to achieve its current business plan and future objectives. Investors should consider the risks and difficulties the Company might encounter, especially given its limited operating history.

The Company develops technology for use in both the mineral resource and cannabis industries, two rapidly transforming industries, and has filed patent applications for a planned extension of the Company's MIPs technology to develop a platform, referred to as accelerated detection MIPs, or AMIPs, for the rapid detection and separation of viruses, biogenic amines and other pathogens, with planned targets to include the SARS-CoV-2 virus responsible for COVID-19. At present, the Company has not yet developed functional prototypes of the AMIPs and collection and delivery devices described in the patent applications for virus detection. There is no guarantee that the Company's technology or services will become or remain attractive to potential and current users as these industries undergo rapid change or that potential customers will utilize the Company's technology or services. In addition, most of the Company's management has no substantial previous experience in the cannabis industry. Accordingly, management may have limited insight into trends that might emerge and could materially affect the Company's business, operations or financial condition.

The Company also faces intense competition from other companies, some of which may have greater financial resources and more industry, engineering and marketing experience than the Company does.

### **Investment Risk**

Any investment made in any of the Company's securities (debt or equity) should be considered as being highly speculative and of high risk. Any investor who acquires any of the Company's securities should ensure that these risky securities are suitable for the investor's portfolio objectives and risk tolerances. The Company recommends that any investor interested in acquiring or holding any securities of the Company seek and obtain the advice of a professional and registered independent investment advisor. Any investor who acquires and holds any of the Company's securities may lose all the money that was invested to acquire those securities.

The Company does not plan on paying any dividends on its Common Shares in the foreseeable future. The Common Shares are listed for trading on the CSE; however, there can be no assurance that an active and liquid market for the Common Shares will be maintained, and an investor may find it difficult to resell such shares without causing price changes. There is no active or liquid market for the convertible debentures that the Company has issued to investors. An investor may find it difficult to resell such securities.

There is no assurance the Company will continue to meet the listing requirements of the CSE.

### **Technology and Intellectual Property Risks**

The Company's technology is still at the testing and development stage and there is no guarantee that further testing and development will be successful for any of its currently proposed applications. The long-term success of the Company will be in part directly related to the success of the testing of its technology by its

partners, clients, and customers. Even if testing is successful, partners, clients and customers may be unwilling to change their processes to incorporate the Company's technology into those processes due to uncertainty, budget limitations or other factors beyond the control of the Company.

The Company expects to rely on a combination of patent, copyright and trade secret laws, confidentiality procedures, and contractual provisions to establish, maintain, and protect its technology. The steps the Company takes may not prevent misappropriation of its intellectual property, and the agreements the Company enters may not be enforceable. Despite the Company's efforts to protect its technology, unauthorized parties may copy or otherwise obtain and use the Company's proprietary technology or obtain information the Company regards as proprietary. Policing unauthorized use of its technology, if required, may be difficult, time consuming, and costly. The Company's means of protecting its technology may be inadequate.

Third parties may apply for and obtain patent protection for technology that is similar to the Company's technology. Despite the Company's efforts to protect its proprietary rights, unauthorized parties may attempt to copy aspects of its technology or to obtain and to use information that the Company regards as proprietary. Third parties may also independently develop similar or superior technology without violating the Company's proprietary rights. In addition, the laws of some foreign countries do not protect proprietary rights to the same extent as do the laws of Canada or the U.S. federal trademark and patent protection may not be available for cannabis-related aspects of the intellectual property of the Company due to the current classification of cannabis as a Schedule I controlled substance.

As long as cannabis remains illegal under U.S. federal law as a Schedule I controlled substance pursuant to the Federal CSA the benefit of certain federal laws and protections which may be available to most businesses, such as U.S. federal trademark and patent protection regarding the intellectual property of a business, may not be available to the Company in relation to this industry. As a result, the Company's intellectual property may not be adequately or sufficiently protected against the use or misappropriation by third parties in the cannabis industry. In addition, since the U.S. regulatory framework of the cannabis industry is in a constant state of flux, the Company can provide no assurance that it will ever obtain any protection for cannabis-related aspects of its intellectual property, whether on a U.S. federal, state or local level.

Although the Company believes that its technology does not infringe proprietary rights of others, litigation may be necessary to protect the Company's proprietary technology and third parties may assert infringement claims against Company with respect to their proprietary rights.

Any claims or litigation can be time consuming and expensive regardless of their merit. Infringement claims against the Company could cause the Company to redesign its technology or to enter into royalty or license agreements that may not be available on terms acceptable to the Company, or at all.

### **Risks Related to the Use of AMIP Products**

The technology behind the AMIP products is still in its early stages and the technology may not be effective when fully developed. Even in the event the technology is effective when fully developed, the successful use of the AMIP products depends on the user following the instructions provided. Users may experience difficulty in performing tests using AMIP products, especially if they fail to follow the instructions provided or misuse the products. This may result in the test results returning false positives or false negatives, thereby harming the ability of the Company to achieve the broad degree of adoption necessary for commercial success or cause negative publicity and word-of-mouth as a result of the products not meeting user expectations. Furthermore, the detection provided by AMIP products may become obsolete in the event vaccination levels reach a point whereby detection and testing is no longer necessary. Accordingly, the

Company's operating results and financial condition may be adversely affected, which may delay, prevent or limit the Company's ability to generate revenue and continue business operations.

### **Risks Related to Regulatory Approvals**

A portion of the business of the Company relies on the receipt of regulatory approvals and permits necessary to conduct business operations, especially with respect to IXOS® and AMIP products. The Company will apply for the necessary permits and regulatory approvals but there is no such guarantee that such permits and regulatory approvals will be obtained. Any failure to comply with applicable laws and regulations as a result of the lack of regulatory approvals or permits, even if inadvertent, could result in enforcement actions thereunder including orders issued by regulatory or judicial authorities requiring operations to cease or be curtailed, fines, penalties or other liabilities. The Company may be required to compensate those suffering loss or damage by reason of its operations and may have civil or criminal fines or penalties imposed for violations of such laws or regulations.

### **Risks Related to the Cannabis Industry**

A portion of the business of the Company could be involved in the medical and adult-use cannabis industry in the U.S., Canada and internationally through the development of technology related to the extraction of cannabinoids from cannabis products for use in the cannabis industry. The relatively new development of the medical and adult-use cannabis industry presents risks that are not inherent in other developing or mature industries, particularly due to its prior status as an illegal industry in Canada and current status in the U.S. as an illegal industry under U.S. federal law. Risks include uncertainty regarding the breadth of public acceptance and demand for cannabis products, absence of research regarding positive and negative effects of cannabis use, limited approved medical applications for cannabis products. Risks also include fragmented markets, rapid growth and potential failure of early-stage companies who would be the customers of the Company's Affinity™ product, due to inexperienced managers lacking conventional business and financial discipline or otherwise, an absence of industry and product standards, rapidly evolving legal landscapes with multiple frameworks and potential rapidly shifting public opinion. In the U.S., access to capital and lenders may be limited or not available at all and potential partners or customers of the Company's Affinity™ product in jurisdictions where cannabis remains illegal may be reluctant to transact with a company involved in the cannabis industry.

### **Risks Relating to Government Regulation**

The Company's operations are subject to laws and regulations governing occupational health and safety, labour standards, employment, waste disposal, handling of toxic substances, land and water use, environmental protection and other matters. It is possible that the Company may not be able to comply with existing and future laws and regulations. In addition, future changes in applicable laws, regulations, agreements or changes in their enforcement or regulatory interpretation could result in changes to the terms of agreements or arrangements that the Company has with partners, clients and customers, which could have a material adverse impact on the Company's current operations and future projects. The Company may experience increased costs and delays as a result of the need to comply with applicable laws and regulations.

Any failure to comply with applicable laws and regulations, even if inadvertent, could result in enforcement actions thereunder including orders issued by regulatory or judicial authorities requiring operations to cease or be curtailed, fines, penalties or other liabilities. The Company may be required to compensate those suffering loss or damage by reason of its operations and may have civil or criminal fines or penalties imposed for violations of such laws or regulations.

## **Cannabis Remains Illegal under U.S. Federal Law**

The Company is engaged in research regarding the applicability of its extraction polymer technology to the extraction of cannabinoids from cannabis products for use in the cannabis industry in certain states of the U.S. The Company will not be engaged in the production or sale of cannabis products in Canada or the U.S., but may be considered to have ancillary involvement in the cannabis industry in Canada, the U.S. and other countries, through the provision of extraction technology services, if it is successful in developing its extraction polymer technology for the extraction of cannabinoids. Although certain states and territories of the U.S. authorize medical or adult-use cannabis cultivation, production, distribution and sale by licensed or registered entities, under U.S. federal law marijuana is a Schedule I controlled substance under the Federal CSA and is illegal under U.S. federal law. Even in those states in which the use of marijuana has been legalized, its use remains a violation of federal law. Since U.S. federal law criminalizing the use of marijuana is not pre-empted by state laws that legalize its use, strict enforcement of federal law regarding marijuana would harm the Company's business, prospects, results of operation, and financial condition.

## **Federal Regulation of Marijuana in the U.S.**

Unlike in Canada which has federal legislation uniformly governing the cultivation, distribution, sale and possession of medical cannabis under the *Access to Cannabis for Medical Purposes Regulations* (Canada) and the proposed regulation of recreational cannabis under the *Cannabis Act* (Canada), investors are cautioned that in the U.S., cannabis is largely regulated at the state level. To date, at least 33 states, plus the District of Columbia, have legalized cannabis for comprehensive medical or recreational use, and the others have laws in place which recognize medical benefits for at least some cannabinoids.

Notwithstanding the permissive regulatory environment of cannabis at the state level, State laws regulating cannabis are in direct conflict with the Federal CSA, which makes cannabis use and possession federally illegal. Although certain states authorize medical or recreational cannabis production and distribution by licensed or registered entities, under U.S. federal law, the possession, use, cultivation, and transfer of cannabis and any related drug paraphernalia is illegal and any such acts are criminal acts under federal law. The Supremacy Clause of the U.S. Constitution establishes that the U.S. Constitution and federal laws made pursuant to it are paramount and in case of conflict between federal and state law, the federal law may apply.

Under the Federal CSA, the policies and regulations of the U.S. federal government and its agencies are that cannabis has no medical benefit and a range of activities including cultivation and the personal use of cannabis is prohibited. Even in those states in which the use of cannabis has been legalized, its use, cultivation, sale and distribution remains a violation of federal law. Any person connected to the cannabis industry in the U.S. may be at risk of federal criminal prosecution and civil liability in the U.S. Any investments may be subject to civil or criminal forfeiture and total loss.

As a result of the conflicting views between state legislatures and the federal government regarding cannabis, investments in cannabis businesses in the U.S. are subject to inconsistent legislation and regulation. The response to this inconsistency was addressed in August 2013 when then Deputy Attorney General, James Cole, authored a memorandum (the "**Cole Memorandum**") addressed to all U.S. district attorneys acknowledging that, notwithstanding the designation of cannabis as a controlled substance at the federal level in the U.S., several states had enacted laws relating to cannabis for medical purposes.

The Cole Memorandum outlined the priorities for the DOJ relating to the prosecution of cannabis offenses. In particular, the Cole Memorandum noted that in jurisdictions that have enacted laws legalizing cannabis in some form and that have also implemented strong and effective regulatory and enforcement systems to control the cultivation, distribution, sale and possession of cannabis, conduct in compliance with those laws

and regulations is less likely to be a priority at the federal level. Notably, however, the DOJ never provided specific guidelines for what regulatory and enforcement systems it deemed sufficient under the Cole Memorandum standard. In light of limited investigative and prosecutorial resources, the Cole Memorandum concluded that the DOJ should be focused on addressing only the most significant threats related to cannabis. States where medical cannabis had been legalized were not characterized as a high priority.

However, on January 4, 2018, then Attorney General Jeff Sessions issued a new memorandum that rescinded and superseded the Cole Memorandum effective immediately (the “**Sessions Memorandum**”). The Sessions Memorandum stated, in part, that current law reflects “Congress’ determination that cannabis is a dangerous drug and cannabis activity is a serious crime”, and Mr. Sessions directed all U.S. Attorneys to enforce the laws enacted by Congress and to follow well established principles when pursuing prosecutions related to cannabis activities. The inconsistency between federal and state laws and regulations is a major risk factor.

As a result of the Sessions Memorandum, federal prosecutors will now be free to utilize their prosecutorial discretion to decide whether to prosecute cannabis activities despite the existence of state-level laws that may be inconsistent with federal prohibitions. No direction was given to federal prosecutors in the Sessions Memorandum as to the priority they should ascribe to such cannabis activities, and resultantly it is uncertain how active federal prosecutors will be in relation to such activities.

U.S. federal law is not pre-empted by state law in these circumstances, so the federal government can prosecute criminal violations of federal cannabis laws despite the existence of state laws allowing such activity. The level of prosecutions of state-legal cannabis operations is entirely unknown; nonetheless, the stated position of the current administration is hostile to legal cannabis, and furthermore may be changed at any time by the DOJ, to become even more aggressive. The Sessions Memorandum lays the groundwork for U.S. attorneys to take their cues on enforcement priority from the federal law enforcement guidance set forth in the U.S. Attorney’s Manual (USAM). If the DOJ policy under Attorney General Jeff Sessions was to aggressively pursue financiers or equity owners of cannabis-related business, and U.S. Attorneys followed such DOJ policies through pursuing prosecutions, then the Company could face (i) seizure of its cash and other assets used to support or derived from its cannabis subsidiaries, (ii) the arrest of its employees, directors, officers, managers and investors, and charges of ancillary criminal violations of the Federal CSA for aiding and abetting and conspiring to violate the Federal CSA by virtue of providing financial support to cannabis companies that service or provide goods to state-licensed or permitted cultivators, processors, distributors, and/or retailers of cannabis. It remains to be seen whether the incoming Biden administration will alter the approach to enforcement of federal cannabis laws.

Notably, current federal law (in the form of the Leahy Amendment) prevents the DOJ from expending funds to intervene with states’ rights to legalize cannabis for medical purposes. In the event Congress fails to renew this federal law in its next budget bill, the Leahy Amendment for medical cannabis operators will be void. Should the Leahy Amendment not be renewed upon expiration in subsequent spending bills there can be no assurance that the federal government will not seek to prosecute cases involving medical cannabis businesses that are otherwise compliant with state law. Such potential proceedings could involve significant restrictions being imposed upon the Company or third parties, while diverting the attention of key executives. Such proceedings could have a material adverse effect on the Company’s business, revenues, operating results and financial condition as well as the Company’s reputation, even if such proceedings were concluded successfully in favour of the Company.

Now that the Cole Memorandum has been repealed, an aggressive federal prosecutor could allege that the Company and its Board and, potentially its shareholders, “aided and abetted” violations of federal law by providing finances and services to 6WIC and Affinity Farms Inc. Under these circumstances, it is possible that the federal prosecutor would seek to seize the assets of the Company, and to recover the “illicit profits”

previously distributed to shareholders resulting from any of the foregoing financing or services. In these circumstances, the Company's operations would cease, shareholders may lose their entire investment and directors, officers and/or shareholders may be left to defend any criminal charges against them at their own expense and, if convicted, be sent to federal prison.

On January 12, 2018, the CSA issued a statement that they were considering whether the disclosure-based approach for issuers with U.S. cannabis-related activities remains appropriate in light of the rescission of the Cole Memorandum. On February 8, 2018 the CSA published a staff notice ("**Staff Notice 51-352**") setting out the CSA's disclosure expectations for specific risks facing issuers with cannabis-related activities in the U.S. Staff Notice 51-352 confirms that a disclosure-based approach remains appropriate for issuers with U.S. cannabis-related activities. Staff Notice 51-352 includes additional disclosure expectations that apply to all issuers with U.S. cannabis-related activities, including those with direct and indirect involvement in the cultivation and distribution of cannabis, as well as issuers that provide goods and services to third parties involved in the U.S. cannabis industry.

There can be no assurance as to the position the new administration may take on cannabis and a new administration could decide to enforce the federal laws strongly. Any enforcement of current federal laws could cause significant financial damage to the Company and its shareholders. Further, future presidential administrations may want to treat marijuana differently and potentially enforce the federal laws more aggressively.

Violations of any federal laws and regulations could result in significant fines, penalties, administrative sanctions, convictions or settlements arising from civil proceedings conducted by either the federal government or private citizens, or criminal charges, including, but not limited to, disgorgement of profits, cessation of business activities or divestiture. This could have a material adverse effect on the Company, including its reputation and ability to conduct business, its holding (directly or indirectly) of cannabis licenses in the U.S., the listing of its securities on various stock exchanges, its financial position, operating results, profitability or liquidity or the market price of its publicly traded Common Shares. In addition, it is difficult to estimate the time or resources that would be needed for the investigation of any such matters or its final resolution because, in part, the time and resources that may be needed are dependent on the nature and extent of any information requested by the applicable authorities involved, and such time or resources could be substantial.

### **FDA Regulation of Cannabis and Industrial Hemp**

Cannabis remains a Schedule I controlled substance under U.S. federal law. If the U.S. federal government reclassifies cannabis to a Schedule II controlled substance, it is possible that the FDA would regulate it under the FDCA. The FDA is responsible for ensuring public health and safety through regulation of food, drugs, supplements and cosmetics, among other products, through its enforcement authority pursuant to the FDCA. The FDA's responsibilities include regulating the ingredients as well as the marketing and labeling of drugs sold in interstate commerce. Because cannabis is federally illegal to produce and sell in the U.S., and because it has no federally recognized medical uses, the FDA has historically deferred enforcement related to cannabis to the U.S. Drug Enforcement Agency ("**DEA**"); however, the FDA has enforced the FDCA with regard to dietary supplements and conventional foods containing CBD. The FDA has recently affirmed its authority to regulate CBD derived from both cannabis and industrial hemp, and its intention to develop a framework for regulating the production and sale of CBD derived from industrial hemp. Any regulations imposed by the FDA may hinder the development and growth of the cannabis and industrial hemp industries, which may adversely affect demand for the Company's Affinity™ technology.

## **State-Imposed Restrictions Regarding the Production of Hemp and Sale of CBD**

The Agriculture Improvement Act of 2018 (commonly known as the “**2018 Farm Bill**”) was signed into law on December 20, 2018. The 2018 Farm Bill, among other things, removes “hemp” (including any part of the cannabis plant containing 0.3% THC or less), its extracts, derivatives, and cannabinoids from the Federal CSA definition of “marihuana”, and allows for federally-sanctioned hemp production under the purview of the USDA, in coordination with state departments of agriculture that elect to have primary regulatory authority. States and Tribal governments can adopt their own regulatory plans, even if more restrictive than federal regulations, so long as the plans meet minimum federal standards and are approved by the USDA. Accordingly, the production and sale of hemp and hemp products may be limited or restricted in some states. Hemp production in jurisdictions that do not choose to submit their own plans (and that do not otherwise prohibit hemp production) will be governed by USDA regulation.

The USDA has stated that it will not begin approving state regulatory plans until the federal regulations have been promulgated. The USDA expects the federal regulations to be in place in time for the 2020 growing season. The 2018 Farm Bill also precludes states from prohibiting the transportation or shipment of hemp and hemp products that are produced under USDA-approved 2018 Farm Bill hemp programs.

“Hemp” as defined in the 2018 Farm Bill, “means the plant *Cannabis sativa* L., and any part of that plant, including the seeds thereof and all derivatives, extracts, cannabinoids, isomers, acids, salts, and salts of isomers, whether growing or not with a THC concentration of not more than 0.3% on a dry weight basis.” While the 2018 Farm Bill removes hemp and hemp derived products from the controlled substances list under the Federal CSA, it does not legalize CBD in every circumstance. The 2018 Farm Bill does not require states to amend state-controlled substances laws and consequently, states are permitted to continue to classify hemp and/or CBD as a controlled substance under state law. In addition, CBD and other cannabinoids, if derived from marihuana as defined by the Federal CSA, remain a Schedule I substance under federal law.

To date, the vast majority of states have passed legislation related to industrial hemp, and at least 41 states allow hemp cultivation and production programs. However, state approaches to regulation vary and some states have limited programs or restrictions on certain activity. For example, some states prohibit the sale of CBD products outside of marijuana businesses, while other states prohibit the sale of hemp-derived CBD products altogether. Other states have laws that criminalize all parts of the cannabis plant (including “hemp,” as defined under the 2018 Farm Bill) or significantly limit activity related to the cannabis plant (including “hemp,” as defined under the 2018 Farm Bill). A number of state laws and regulations, including in major markets such as California, New York, and Ohio, currently contain restrictions limiting the types of hemp derived products that may be sold and where such products may be sold. Accordingly, this patchwork of state laws may, for the foreseeable future, materially impact the development of the CBD market and demand for the Company’s cannabinoid separation technology, which may adversely affect the Company’s business and financial condition, and increase legal and compliance costs.

## **Continued Applicability of the 2014 Farm Bill Pending the Implementation of the 2018 Farm Bill**

Section 7606 of the *Agricultural Act of 2014* (the “**2014 Farm Bill**”) will remain in effect until one year after the USDA establishes regulations implementing the federal plans pursuant to the 2018 Farm Bill, at which point the 2014 Farm Bill will be repealed. The 2014 Farm Bill permits cultivation of hemp for research purposes (inclusive of market research) pursuant to state agricultural programs but leaves significant discretion to states as to how to implement such programs. In addition, the DEA, FDA and USDA have taken the position, as set forth in 2016 guidance (the “**Statement of Principles**”), that under the 2014 Farm Bill (i) industrial hemp products may be sold “[f]or purposes of marketing research... but not for the purpose of general commercial activity”, and (ii) such products may only be sold within or



among states with agricultural pilot programs that allow such activity, but not in states where such sales are prohibited. The Statement of Principles is not legally binding and is widely disputed as invalid by many, including members of Congress, on the grounds that it exceeds DEA’s authority and contravenes the intent of the 2014 Farm Bill. Moreover, to date, the Statement of Principles has only been minimally enforced. However, as recently as February 27, 2019, the USDA referenced the Statement of Principles as “additional guidance” that remains applicable to the 2014 Farm Bill.

Because hemp has been removed from the definition of “marijuana” within the Federal CSA, the DEA can no longer assert authority over hemp and hemp products. Additionally, given the passage of the 2018 Farm Bill (which permits the commercial sale of Hemp and Hemp products produced in accordance with the 2018 Farm Bill and precludes states from prohibiting any interstate transportation or shipment of the same), it is also possible that the FDA and USDA will not enforce their position outlined in the Statement of Principles.

### **Regulatory Compliance Requirements and FDA’s Position on CBD and Certain Other Hemp Products**

The 2018 Farm Bill expressly preserves the FDA’s authority to regulate certain products containing cannabis or cannabis derived compounds under the FDCA. Certain provisions of the FDCA preclude a substance from being considered a food and prohibit a substance from being marketed as a dietary supplement or dietary ingredient if such substance has been approved by the FDA as a new drug, or if such substance has been authorized for investigation as a new drug (“**IND**”) for which substantial clinical investigations have been instituted and for which the existence of such investigations has been made public (the “**Preclusion Rule**”). Because CBD was the subject of public drug trials and is the active ingredient in an FDA-approved drug (Epidiolex), the FDA takes the position that it is unlawful under the FDCA to introduce food containing added CBD into interstate commerce, or to market CBD products as, or in, dietary supplements, regardless of whether the substances are hemp-derived. Additionally, the FDA requires a cannabis product (hemp-derived or otherwise) that is marketed with a claim of structure/function therapeutic benefit, or with any other disease claim, and therefore intended for use as a drug, to be approved by the FDA for its intended use before it may be introduced into interstate commerce.

GW Pharmaceuticals’ (“**GW**”) investigational new drug application for Sativex, a cannabis-derived oral spray, was authorized by the FDA in 2006, likely triggering the Preclusion Rule as applied to dietary supplements, and GW initiated clinical trials in late 2007, triggering the Preclusion Rule as applied to food. Although the IND application and clinical investigations for Sativex predate the initial IND authorization for Epidiolex, Sativex has not yet received final FDA approval. However, on June 25, 2018, the FDA announced its official approval of GW’s application for its new drug, Epidiolex. Epidiolex is a CBD based oral solution developed for use in the treatment of seizures associated with two rare and severe forms of epilepsy, Lennox-Gastaut syndrome and Dravet syndrome. Although there are other FDA-approved drugs that contain synthetically produced THC, Epidiolex is the first FDA-approved drug that contains a purified drug substance derived from cannabis. Importantly, although substances that were marketed as a conventional food or dietary supplement before the new drug investigations were authorized or commenced are exempt from the Preclusion Rule, the FDA has concluded that, based on available evidence, this is not the case for CBD. Several states, including California, have followed the FDA’s position. Further, many state food and drug laws mirror, or are substantially similar, to the FDCA, and the laws of many states include additional policies or regulations prohibiting the sale of certain hemp and/or CBD products intended for human or animal consumption.

The FDA’s position (as well as those state policies mirroring the FDA’s position) could materially impact the Company’s business and financial condition, limit the accessibility of certain state markets, cause confusion amongst regulators, and increase legal and compliance costs.

In addition, on December 20, 2018, the same day the 2018 Farm Bill was signed into law, FDA Commissioner Scott Gottlieb, M.D., released a statement on the agency's regulation of products containing cannabis and cannabis-derived compounds. The press release states that, "Congress explicitly preserved the agency's current authority to regulate products containing cannabis or cannabis-derived compounds under the [FDCA] and section 351 of the *Public Health Service Act*. In doing so, Congress recognized the agency's important public health role with respect to all the products it regulates. This allows the FDA to continue enforcing the law to protect patients and the public while also providing potential regulatory pathways for products containing cannabis and cannabis-derived compounds." The FDA also announced that it is exploring pathways to consider whether there are circumstances in which certain cannabis-derived compounds might be permitted in a food or dietary supplement, but reiterated the agency's long-held position that certain provisions of the FDCA preclude CBD and THC from being used in food products and from being marketed as dietary supplements. Importantly, the FDA has authority to issue a regulation allowing the use of a pharmaceutical ingredient, such as CBD, in a food or dietary supplement, even if such pharmaceutical ingredient was not previously marketed as a food or dietary ingredient prior to the initiation of clinical drug trials. On November 26, 2019, the FDA issued a consumer update with respect to CBD that reiterated that it is illegal to market CBD by adding it to a food or labeling it as a dietary supplement and that some CBD products are being marketed with unproven medical claims and are of unknown quality. The FDA cautioned that CBD has the potential to cause harm, including liver injury, negatively affecting the metabolism of other drugs and causing serious side effects, and that use of CBD with alcohol or other central nervous system depressants increases the risk of sedation and drowsiness, which can lead to injuries. In the consumer update, the FDA noted that it continues to believe the drug approval process represents the best way to ensure that safe and effective new medicines, including any drugs derived from cannabis, are available to patients, and that it is evaluating the regulatory frameworks that apply to non-drug uses of cannabis-derived products.

Failure to comply with the FDCA and applicable state law may result in, among other penalties, injunctions, product withdrawals, recalls, product seizures, fines and criminal prosecutions. Further, the Company's advertising is subject to regulation by both the Federal Trade Commission ("FTC") under the *Federal Trade Commission Act* and the FDA under the FDCA and its regulations, in addition to other potentially applicable law. In recent years, the FTC has initiated numerous investigations of dietary and nutritional supplement products and companies based on allegedly deceptive or misleading claims. At any point, enforcement strategies of a given agency can change as a result of other litigation in the space or changes in political landscapes, and could result in increased enforcement efforts, which could materially impact the Company's business. Additionally, some states also permit advertising and labeling laws to be enforced by their attorney general, who may seek relief for consumers, class action certifications, class-wide damages and product recalls of products sold by the Company. Any actions against the Company by governmental authorities or private litigants could have a material adverse effect on the Company's business, financial condition and results of operations.

### **U.S. State Regulatory Uncertainty**

The rulemaking process for cannabis operators at the state level in any state will be ongoing and result in frequent changes. As a result, a compliance program is essential to manage regulatory risk. All operating policies and procedures implemented in the operation will be compliance-based and derived from the state regulatory structure governing ancillary cannabis businesses and their relationships to state-licensed or permitted cannabis operators, if any. Notwithstanding the Company's efforts, regulatory compliance and the process of obtaining regulatory approvals can be costly and time-consuming.

In addition, local laws and ordinances could restrict the Company's business activity. Although legal under the laws of the states in which the Company's business will operate, local governments have the ability to limit, restrict, and ban cannabis businesses from operating within their jurisdiction. Land use, zoning, local

ordinances, and similar laws could be adopted or changed, and have a material adverse effect on the Company's business.

The Company is aware that multiple states are considering special taxes or fees on businesses in the cannabis industry. It is a potential yet unknown risk at this time that other states are in the process of reviewing such additional fees and taxation. This could have a material adverse effect upon the Company's business, results of operations, financial condition or prospects.

### **Access to Banking Services in the U.S.**

In February 2014, the FinCEN bureau of the U.S. Treasury Department issued guidance with respect to financial institutions providing banking services to cannabis businesses, including burdensome due diligence expectations and reporting requirements. This guidance does not provide any safe harbors or legal defenses from examination or regulatory or criminal enforcement actions by the DOJ, FinCEN or other federal regulators. Thus, most banks and other financial institutions in the U.S. do not appear to be comfortable providing banking services to cannabis-related businesses, or relying on this guidance, which can be amended or revoked at any time by the Trump Administration. Further, due to the rescission of the Cole Memorandum by the Sessions Memorandum in January 2018, the guidance issued by FinCEN is now less certain and the current administration and/or agencies of the federal government could rescind or modify such guidance at any time. In addition to the foregoing, banks in the U.S. generally refuse to process debit card payments and credit card companies generally refuse to process credit card payments for cannabis-related businesses. As a result, the Company may have limited access to banking or other financial services in the U.S., and may have to operate the Company's U.S. business or portions thereof on a cash basis, or rely on obtaining banking services in Canada. The inability or limitation in the Company ability to open or maintain bank accounts in the U.S. or obtain other banking services, may make it difficult for the Company to operate and conduct its business as planned.

### **Anti-Money Laundering Matters**

The Company is subject to a variety of laws and regulations domestically and in the U.S. that involve money laundering, financial recordkeeping and proceeds of crime, including the U.S. *Currency and Foreign Transactions Reporting Act of 1970* (commonly known as the *Bank Secrecy Act*), as amended by Title III of the *Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001* (USA PATRIOT Act), the *Proceeds of Crime (Money Laundering) and Terrorist Financing Act* (Canada), the *Criminal Code* (Canada), as amended and the rules and regulations thereunder, and any related or similar rules, regulations or guidelines, issued, administered or enforced by governmental authorities in the U.S. and Canada.

In its February 2014 memorandum (the "**FinCEN Memorandum**"), FinCEN stated that in some circumstances, it may not be appropriate to prosecute banks that provide services to cannabis-related businesses for violations of federal money laundering laws. It refers to supplementary guidance that former Deputy Attorney General Cole issued to federal prosecutors relating to the prosecution of money laundering offenses predicated on cannabis-related violations of the Federal CSA. It is unclear at this time whether the incoming administration will follow the guidelines of the FinCEN Memorandum. Under U.S. federal law, banks or other financial institutions that provide a cannabis-related business with a checking account, debit or credit card, small business loan, or any other service could be found guilty of money laundering, aiding and abetting, or conspiracy. While this risk would appear to be diminished because Hemp-related activities that are in compliance with the 2014 and/or 2018 Farm Bill are not in violation of the Federal CSA, there is no certainty that such is the case.

If any of the Company's investments, or any proceeds thereof, any dividends or distributions therefrom, or any profits or revenues accruing from such investments in the U.S. or Canada were found to be in violation of money laundering legislation or otherwise, such transactions may be viewed as proceeds of crime under one or more of the statutes noted above or any other applicable legislation. This could restrict or otherwise jeopardize the ability of the Company to declare or pay dividends, effect other distributions or subsequently repatriate such funds back to Canada. Furthermore, while the Company has no current intention to declare or pay dividends on the Company Shares in the foreseeable future, the Company may decide or be required to suspend declaring or paying dividends without advance notice and for an indefinite period of time.

### **Risk of RICO Prosecution or Civil Liability**

The *Racketeer Influenced Corrupt Organizations Act* (“**RICO**”) criminalizes the use of any profits from certain defined “racketeering” activities in interstate commerce. While intended to provide an additional cause of action against organized crime, because cannabis is illegal under U.S. federal law, the production and sale of cannabis qualifies cannabis related businesses as “racketeering” as defined by RICO. As such, all officers, managers, and owners in a cannabis related business could be subject to criminal prosecution under RICO, which carries substantial criminal penalties.

RICO can create civil liability as well: persons harmed in their business or property by actions which would constitute racketeering under RICO often have a civil cause of action against such “racketeers,” and can claim triple their amount of estimated damages in attendant court proceedings. The Company as well as its officers, managers and owners could all be subject to civil claims under RICO.

### **Risk of Civil Asset Forfeiture**

Because the cannabis industry remains illegal under U.S. federal law, any property owned by participants in the cannabis industry, which are either used while conducting such business, or are the proceeds of such business, could be subject to seizure by law enforcement and subsequent civil asset forfeiture. Even if the owner of the property were never charged with a crime, the property in question could still be seized and subject to an administrative proceeding by which, with minimal due process, it could be subject to forfeiture.

### **Unfavorable tax treatment of cannabis businesses**

Under Section 280E (“**Section 280E**”) of the U.S. *Internal Revenue Code of 1986* as amended (the “**U.S. Tax Code**”), “no deduction or credit shall be allowed for any amount paid or incurred during the taxable year in carrying on any trade or business if such trade or business (or the activities which comprise such trade or business) consists of trafficking in controlled substances (within the meaning of Schedule I and II of the Federal CSA) which is prohibited by Federal law or the law of any State in which such trade or business is conducted.” This provision has been applied by the U.S. Internal Revenue Service (the “**IRS**”) to cannabis operations, prohibiting them from deducting expenses directly associated with the sale of cannabis. Although the IRS issued a clarification allowing the deduction of certain expenses, the scope of such items is interpreted very narrowly, and the bulk of operating costs and general administrative costs are not permitted to be deducted. While there are currently several pending cases before various administrative and federal courts challenging these restrictions, there is no guarantee that these courts will issue an interpretation of Section 280E favorable to cannabis businesses. Therefore, a minor non-compliance with applicable statutes and associated regulations related to the cannabis industry could result in the Company's inability to deduct certain expenses and significant tax liabilities.

**EACH SHAREHOLDER SHOULD SEEK TAX ADVICE, BASED ON SUCH SHAREHOLDER'S PARTICULAR CIRCUMSTANCES, FROM AN INDEPENDENT TAX ADVISOR.**

## **Risks Related to the Regulatory Environment in Canada in Relation to the Business of the Company**

### ***Risks Related to the Ability to Trade Securities in Canada:***

For the reasons set forth above, the Company's existing interests in the U.S. cannabis market may become the subject of heightened scrutiny by regulators, stock exchanges, clearing agencies and other authorities in Canada. It has been reported by certain publications in Canada that the Canadian Depository for Securities Limited may implement policies that would see its subsidiary, CDS Clearing and Depository Services Inc. ("CDS"), refuse to settle trades for cannabis issuers that have investments in the U.S. CDS is Canada's central securities depository, clearing and settlement hub settling trades in the Canadian equity, fixed income and money markets. The TMX Group, the owner and operator of CDS, subsequently issued a statement on August 17, 2017 reaffirming that there is no CDS ban on the clearing of securities of issuers with cannabis-related activities in the U.S., despite media reports to the contrary and that the TMX Group was working with regulators to arrive at a solution that will clarify this matter, which would be communicated at a later time.

On February 8, 2018, following discussions with the CSA and recognized Canadian securities exchanges, the TMX Group announced the signing of a Memorandum of Understanding ("TMX MOU") with Aequitas NEO Exchange Inc., the CSE, the Toronto Stock Exchange, and the TSX Venture Exchange (the "TSX-V"). The TMX MOU outlines the parties' understanding of Canada's regulatory framework applicable to the rules, procedures, and regulatory oversight of the exchanges and CDS as it relates to issuers possible cannabis-related activities in the U.S. The TMX MOU confirms, with respect to the clearing of listed securities, that CDS relies on the exchanges to review the conduct of listed issuers. As a result, there would be no CDS ban on the clearing of securities of issuers with possible cannabis related activities in the U.S. However, there can be no guarantee that this approach to regulation will continue in the future. If such a ban were to be implemented, it would have a material adverse effect on the ability of holders of the Common Shares to make and settle trades. In particular, the Common Shares would become highly illiquid within the U.S. as until an alternative was implemented, investors would have no ability to affect a trade of the Common Shares through the facilities of a stock exchange.

Shareholders and potential investors are cautioned that:

- The activities of the Company are subject to evolving regulation that is subject to changes by governmental authorities in Canada and the U.S.; and
- Although the TMX MOU confirms that there is currently no CDS ban on the clearing of securities of issuers with cannabis-related activities in the U.S., there can be no guarantee that this approach to regulation will continue in the future.

### ***Risks Associated from Additional Scrutiny by Canadian Regulators:***

For the reasons set forth above, the Company's business in the U.S. may become the subject of heightened scrutiny by regulators, stock exchanges and other authorities in Canada. As a result, the Company may be subject to significant direct and indirect interaction with public officials. There can be no assurance that this heightened scrutiny will not in turn lead to the imposition of certain restrictions on the Company's ability operate in the U.S.

Increased scrutiny by the Canadian regulators is likely to increase the cost of compliance and may adversely affect the profitability of the business of the Company.

### **Currency Fluctuations**

Due to the Company's present operations in the U.S., and its intention to continue future operations outside Canada, the Company is expected to be exposed to significant currency fluctuations. Recent events in the global financial markets have been coupled with increased volatility in the currency markets. All or substantially all of the Company's revenue will be earned in U.S. dollars, but a portion of its operating expenses are incurred in Canadian dollars. The Company does not have currency hedging arrangements in place and there is no expectation that the Company will put any currency hedging arrangements in place in the future. Fluctuations in the exchange rate between the U.S. dollar and the Canadian dollar, may have a material adverse effect on the Company's business, financial position, or results of operations.

### **Environmental Risk**

Although all testing to date has shown that the IXOS® and Affinity™ technology is benign in the environment, the IXOS® and Affinity™ technology has not yet been approved for use by regulatory agencies (in jurisdictions where such approval may be required) and it has not been tested in all conditions for which there might be unanticipated reactions. If there are regulatory issues or unknown environmental impacts, the business plan of the Company could be negatively affected.

### **Attracting and Retaining Quality Employees**

The Company's business is dependent upon attracting and retaining quality employees with the skills required particularly with respect to teaching. The inability of the Company to hire, train and retain employees may adversely affect operations and could have an adverse effect on sales. The Company's ability to meet its labour needs while controlling the costs associated with hiring and training new employees is subject to external factors such as unemployment levels, prevailing wage rates, government legislation and changing demographics. Changes that adversely impact the Company's ability to attract and retain quality employees could adversely affect its business.

### **Competition**

The Company will compete with companies and firms that have substantially greater financial and technical resources than the Company in respect of the development of technologies and the recruitment and retention of qualified employees and other service providers. The Company's IXOS®, Affinity™ and AMIPs products are intended to compete with a long-established technology with substantial existing market participants. There can be no assurance that the Company will be successful in convincing mining companies to adopt the Company's technology. The cannabinoid extraction industry is very early stage, with unknown demand for the Company's technology, and with limited ability to identify potentially competing technologies that may be under development by other companies.

### **Foreign Country Risks**

The Company's product development and sales activities related to the mineral resource sector are frequently tied to mine sites, which may be located in countries with social, political and economic policies that differ from Canada's or those of the U.S. Governmental policies may be adopted to discourage foreign investment; nationalization of certain industries may occur; and other unforeseen limitations, restrictions or requirements may be implemented. There can be no assurance that the Company's assets will not be subject to nationalization, expropriation, requisition or confiscation, whether legitimate or not, by any authority or body. There can also be no assurance that adverse developments such as terrorism, military repression, civil unrest, crime, extreme fluctuations in currency exchange rates or high inflation will not occur.

### **Dependence on Management**

The Company will be very dependent upon the personal efforts and commitment of its management. To the extent that management's services are unavailable for any reason, a disruption to the operations of the Company could result and other persons would be required to manage and operate the Company.

### **Price Volatility of Common Shares**

The market price of the Common Shares may be subject to wide fluctuations in response to many factors, including variations in the operating results of the Company and its subsidiaries, divergence in financial results from analysts' expectations, changes in earnings estimates by stock market analysts, changes in the business prospects for the Company and its subsidiaries, general economic conditions, legislative changes, and other events and factors outside of the Company's control.

In recent years, the securities markets in the U.S. and Canada have experienced a high level of price and volume volatility, and the market prices of securities of many companies have experienced wide fluctuations in price which have not necessarily been related to the operating performance, underlying asset values or prospects of such companies. There can be no assurance that fluctuations in price of the Common Shares will not occur. The market price of the Common Shares could be subject to significant fluctuations in response to variations in quarterly and annual operating results, the results of any public announcements the Company makes, general economic and political conditions, and other factors. Increased levels of volatility and resulting market turmoil may adversely impact the price of the Common Shares.

The COVID-19 outbreak, and the response of governmental authorities to try to limit it, are having a significant impact on the securities markets in the U.S. and Canada. Since the COVID-19 outbreak commenced, the securities markets in the U.S. and Canada have experienced a high level of price and volume volatility and wide fluctuations in the market prices of securities of many companies, which have not necessarily been related to the operating performance, underlying asset values or prospects of such companies. The speed with which the COVID-19 situation is developing and the uncertainty of its magnitude, outcome and duration may adversely impact the price of the Common Shares.

### **Limited Market for Securities**

The Company's Common Shares are listed on the CSE. There can be no assurance that an active and liquid market for the Common Shares will be maintained and an investor may find it difficult to resell any securities of the Company.

### **Dilution**

The Company may issue additional securities in the future, which may dilute a shareholder's holdings in the Company and the Company's revenue per share. The Board has discretion to determine the price and the terms of further issuances. Moreover, additional Common Shares will be issued by the Company on the exercise of Options under the Company's Option plan and upon the exercise of the outstanding Warrants. The Company may also issue Common Shares to finance future acquisitions. The Company cannot predict the size of future issuances of Common Shares or the effect that future issuances and sales of Common Shares will have on the market price of the Common Shares. Issuances of a substantial number of additional Common Shares, or the perception that such issuances could occur, may adversely affect prevailing market prices for the Common Shares.

## **Conflicts of Interest**

The Company's directors and officers may serve as directors and officers, or may be associated with other reporting companies or have significant shareholdings in other public companies. To the extent that such other companies may participate in business or asset acquisitions, dispositions, or ventures in which the Company may participate, the directors and officers of the Company may have a conflict of interest in negotiating and concluding terms respecting the transaction. If a conflict of interest arises, the Company will follow the provisions of the BCBCA in dealing with conflicts of interest. These provisions state, where a director/officer has such a conflict, that the director/officer must at a meeting of the board, disclose his or her interest and refrain from voting on the matter unless otherwise permitted by BCBCA. In accordance with the laws of the Province of British Columbia, the directors and officers of the Company are required to act honestly, in good faith and in the best interests of the Company.

## **Dividends**

The Company has not declared or paid any dividends on its Common Shares and does not currently have a policy on the payment of dividends. For the foreseeable future, the Company anticipates that it will retain future earnings and other cash resources for the operation and developments of its business. The payment of any future dividends will depend upon earnings and the Company's financial condition, current and anticipated cash needs and such other factors as the directors of the Company consider appropriate.

## **Costs and Compliance Risks**

As a public company, there are costs associated with legal, accounting and other expenses related to regulatory compliance. Securities legislation and the rules and policies of the CSE require listed companies to, among other things, adopt corporate governance and related practices, and to continuously prepare and disclose material information, all of which add to a company's legal and financial compliance costs. The Company may also elect to devote greater resources than it otherwise would have on communication and other activities typically considered important by publicly traded companies.

The Company also expects these rules and regulations may make it more difficult and more expensive for it to obtain director and officer liability insurance, and it may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. As a result, it may be more difficult for the Company to attract and retain qualified individuals to serve on its board of directors or as executive officers.

Further, there are fees associated with acquiring, and renewing, licenses. However, the specific amount of such fees has yet to be determined and may vary based on several factors. There are no assurances that, when the applicable time comes, the Company will have the capital necessary to acquire (or continue to renew) the licenses necessary to carry out its business plan. Given the necessity of such licenses, failure to possess the necessary licenses (regardless of the reason) would have a material impact on the financial condition of the Company.

## **Internal Controls**

Effective internal controls are necessary for the Company to provide reliable financial reports and to help prevent fraud. Although the Company will undertake a number of procedures and will implement a number of safeguards, in each case, in order to help ensure the reliability of its financial reports, including those imposed on the Company under Canadian securities law, the Company cannot be certain that such measures will ensure that the Company will maintain adequate control over financial processes and reporting. Failure to implement required new or improved controls, or difficulties encountered in their implementation, could



harm the Company's results of operations or cause it to fail to meet its reporting obligations, which could result in the issuance of cease trade orders by securities regulators and limit trading in the Company's securities. If the Company or its auditors discover a material weakness, the disclosure of that fact, even if quickly remedied, could reduce the market's confidence in the Company's consolidated financial statements and materially adversely affect the trading price of the Company's securities.

### **Insurance**

The Company's business activities involve numerous risks, including unexpected or unusual operating conditions and other environmental occurrences and political and social instability. It is not always possible to obtain insurance against all such risks and the Company may decide not to insure against certain risks as a result of high premiums or other reasons. Should such liabilities arise, they could negatively affect the Company's profitability and financial position and the value of the Common Shares. The Company does not maintain insurance against environmental risks.

Further, because the Company's technology development activities include the cannabis industry as a potential application, it may have a difficult time obtaining the various insurances that are desired to operate this portion of its business, which may expose it to additional risk and financial liabilities. Insurance that is otherwise readily available, such as workers compensation, general liability, and directors and officers insurance, may be more difficult for the Company to find, and more expensive, if the Company is considered to be engaged in the cannabis industry. There are no guarantees that the Company will be able to find such insurances in the future, or that the cost will be affordable to the Company. If the Company is forced to go without such insurances, that may prevent or inhibit it from entering into certain business sectors, or cause it to make more cautious business decisions, which may inhibit its growth, and may expose it to additional risk and financial liabilities.

### **Lithium Demand**

The Company owns 100% of Geolithic Corp., and has granted Geolithic an exclusive license to use the Company's MIP technology for the extraction of lithium. The Company's ability to derive revenues from the application of its technology to the extraction of lithium will depend on the successful development of technology for this application and Geolithic's ability to achieve revenues through the direct extraction and sale of lithium, through the provision of extraction services to lithium producers or through the further sublicensing of the technology for use by lithium producers.

Lithium is considered an industrial mineral and the sales prices for the different lithium compounds are not public. Lithium is not a traded commodity like base and precious metals. Sales agreements are negotiated on an individual and private basis with each different end-user. There are a limited number of producers of lithium compounds and it is possible that these existing producers will try to prevent new-comers from entering the chain of supply by increasing their production capacity and lowering sales prices. Factors such as foreign currency fluctuation, supply and demand, industrial disruption and actual lithium market sale prices could have an adverse impact on Geolithic's operating costs and on the Company's ability to fund its activities.

### **Unfavorable Publicity or Consumer Perception**

The legal cannabis industry in the U.S. is at an early stage of its development. Cannabis has been, and is expected to continue to be, a controlled substance for the foreseeable future. Consumer perceptions regarding legality, morality, consumption, safety, efficacy and quality of cannabis are mixed and evolving. Consumer perception can be significantly influenced by scientific research or findings, regulatory investigations, litigation, media attention and other publicity regarding the consumption of cannabis

products. There can be no assurance that future scientific research, findings, regulatory proceedings, litigation, media attention or other research findings or publicity will be favorable to the cannabis market or any particular product, or consistent with earlier publicity. Future research reports, findings, regulatory proceedings, litigation, media attention or other publicity that are perceived as less favorable than, or that question, earlier research reports, findings or publicity could have a material adverse effect on the demand for cannabis and on the business, results of operations, financial condition and cash flows of the Company and its subsidiaries. Further, adverse publicity, reports or other media attention regarding cannabis in general, or associating the consumption of cannabis with illness or other negative effects or events, could have such a material adverse effect.

Public opinion and support for medical and adult use cannabis use has traditionally been inconsistent and varies from jurisdiction to jurisdiction. While public opinion and support appears to be rising for legalizing medical and adult use cannabis, it remains a controversial issue subject to differing opinions surrounding the level of legalization (for example, medical cannabis as opposed to legalization in general).

The ability to gain and increase market acceptance of Company's products may require the Company or its subsidiaries to establish and maintain its brand name and reputation. In order to do so, substantial expenditures on product development, strategic relationships and marketing initiatives may be required. There can be no assurance that these initiatives will be successful and their failure may have an adverse effect on the Company or its subsidiaries.

Further, a shift in public opinion may also result in a significant influence over the regulation of the cannabis industry in Canada, the U.S. or elsewhere. A negative shift in the perception of the public with respect to medical cannabis in the U.S. or any other applicable jurisdiction could affect future legislation or regulation. Among other things, such a shift could cause state jurisdictions to abandon initiatives or proposals to legalize medical cannabis, thereby limiting the number of new state jurisdictions into which the Company could expand. Any inability to fully implement the Company's expansion strategy may have a material adverse effect on its business, financial condition and results of operations.

#### **Negative Cash Flow for the Foreseeable Future**

The Company has no history of earnings or cash flow from operations. The Company does not expect to generate material revenue or achieve self-sustaining operations for several years, if at all. To the extent that the Company has negative cash flow in future periods, the Company may need to allocate a portion of its cash reserves to fund such negative cash flow.

#### **The Company's actual financial position and results of operations may differ materially from the expectations of the Company's management.**

The Company's actual financial position and results of operations may differ materially from management's expectations. The Company may experience some changes in its operating plans and certain delays in the timing of its plans. As a result, the Company's revenue, net income and cash flow could differ materially from the Company's projected revenue, net income and cash flow. The process for estimating the Company's revenue, net income and cash flow requires the use of judgment in determining the appropriate assumptions and estimates. These estimates and assumptions may be revised as additional information becomes available and as additional analyses are performed. In addition, the assumptions used in planning may not prove to be accurate, and other factors may affect the Company's financial condition or results of operations.

**The Company expects to incur significant ongoing costs and obligations related to its investment in infrastructure, growth, regulatory compliance and operations.**

The Company expects to incur significant ongoing costs and obligations related to its investment in infrastructure and growth and for regulatory compliance, which could have a material adverse impact on the Company's results of operations, financial condition and cash flows. In addition, future changes in regulations, more vigorous enforcement thereof or other unanticipated events could require extensive changes to the Company's operations, increased compliance costs or give rise to material liabilities, which could have a material adverse effect on the business, results of operations and financial condition of the Company. The Company's efforts to grow its business may be costlier than expected, and the Company may not be able to increase its revenue enough to offset its higher operating expenses. We may incur significant losses in the future for a number of reasons, including the other risks described in this AIF, and unforeseen expenses, difficulties, complications and delays, and other unknown events. If we are unable to achieve and sustain profitability, the market price of the Common Shares may significantly decrease.

**There are factors which may prevent the Company from the realization of growth targets.**

The Company is currently in the early development stage. There is a risk that additional resources will not be achieved on time, on budget, or at all, as they can be adversely affected by a variety of factors, including some that are discussed elsewhere in these "Risk Factors" and the following:

- delays in obtaining, or conditions imposed by various governmental agencies regarding regulatory, environmental, construction approvals and commercial cannabis licensing;
- evolving legal landscape of a newly implemented cannabis regulatory scheme;
- legal uncertainty caused by a lack of uniformity between state and U.S. federal authorities and policies coupled with the uncertainty of future U.S. federal legislation regarding the classification of marijuana as a controlled substance;
- the potential federal enforcement of relevant federal laws prohibiting the production and sale of marijuana;
- future increases to the costs of maintaining regulatory compliance;
- facility design errors;
- environmental pollution; non-performance by third party contractors; increases in materials or labour costs; construction performance falling below expected levels of output or efficiency;
- breakdown, aging or failure of equipment or processes;
- contractor or operator errors;
- operational inefficiencies;
- labour disputes, disruptions or declines in productivity; inability to attract sufficient numbers of qualified workers; disruption in the supply of energy and utilities;
- major incidents and/or catastrophic events such as fires, earthquakes, floods, explosions or storms; and
- securing adequate financing.

**The size of the Company's target market is difficult to quantify and investors will be reliant on their own estimates on the accuracy of market data.**

Because the cannabis industry is in a nascent stage with uncertain boundaries, there is a lack of information about comparable companies available for potential investors to review in deciding about whether to invest in the Company and, few, if any, established companies whose business model the Company can follow or upon whose success the Company can build. Accordingly, investors will have to rely on their own estimates in deciding about whether to invest in the Company. There can be no assurance that the Company's

estimates are accurate or that the market size is sufficiently large for its business to grow as projected, which may negatively impact its financial results. The Company regularly purchases and follows market research.

**The Company could be liable for fraudulent or illegal activity by its employees, contractors and consultants resulting in significant financial losses to claims against the Company.**

The Company is exposed to the risk that its employees, independent contractors and consultants may engage in fraudulent or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or disclosure of unauthorized activities to the Company that violates: (i) government regulations; (ii) manufacturing standards; (iii) federal and provincial healthcare fraud and abuse laws and regulations; or (iv) laws that require the true, complete, and accurate reporting of financial information or data. It is not always possible for the Company to identify and deter misconduct by its employees and other third parties, and the precautions taken by the Company to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting the Company from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against the Company, and it is not successful in defending itself or asserting its rights, those actions could have a significant impact on the business, including the imposition of civil, criminal and administrative penalties, damages, monetary fines, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of the Company's operations, any of which could have a material adverse effect on the Company's business, financial condition and results of operations.

**The Company may be subject to product recalls for product defects self-imposed or imposed by regulators.**

Manufacturers and distributors of products are sometimes subject to the recall or return of their products for a variety of reasons, including product defects, such as contamination, unintended harmful side effects or interactions with other substances, packaging safety and inadequate or inaccurate labelling disclosure. If any of the Company's products are recalled due to an alleged product defect or for any other reason, the Company could be required to incur the unexpected expense of the recall and any legal proceedings that might arise in connection with the recall. The Company may lose a significant amount of sales and may not be able to replace those sales at an acceptable margin or at all. In addition, a product recall may require significant management attention. Although the Company has detailed procedures in place for testing its products, there can be no assurance that any quality, potency or contamination problems will be detected in time to avoid unforeseen product recalls, regulatory action or lawsuits. Additionally, if one of the Company's significant brands were subject to recall, the image of that brand and the Company could be harmed. A recall for any of the foregoing reasons could lead to decreased demand for the Company's products and could have a material adverse effect on the results of operations and financial condition of the Company. Additionally, product recalls may lead to increased scrutiny of the Company's operations by Health Canada or other regulatory agencies, requiring further management attention and potential legal fees and other expenses.

**Protection and Enforcement of Intellectual Property Rights**

The Company regards the protection of its copyrights, service marks, trademarks, trade dress and trade secrets as critical to its future success and relies on a combination of copyright, trademark, service mark and trade secret laws and contractual restrictions to establish and protect its proprietary rights in products and services. The Company has entered into confidentiality and invention assignment agreements with its officers and contractors, and nondisclosure agreements with parties with which it conducts business in order to limit access to and disclosure of its proprietary information. There can be no assurance that these contractual arrangements or the other steps taken by the Company to protect its intellectual property will

prove sufficient to prevent misappropriation of the Company's technology or to deter independent third party development of similar technologies.

To date, the Company has not been notified that its technologies infringe the proprietary rights of third parties, but there can be no assurance that third parties will not claim infringement by the Company with respect to past, current or future technologies. The Company expects that participants in its markets will be increasingly subject to infringement claims as the number of services and competitors in the Company's industry segment grows. Any such claim, whether meritorious or not, could be time consuming, result in costly litigation, cause service upgrade delays or require the Company to enter into royalty or licensing agreements. Such royalty or licensing agreements might not be available on terms acceptable to the Company or at all. As a result, any such claim could have a material adverse effect upon the Company's business, results of operations and financial condition.

### **The Company will be reliant on information technology systems and may be subject to damaging cyberattacks.**

The Company has entered into agreements with third parties for hardware, software, telecommunications and other information technology ("IT") services in connection with its operations. The Company's operations depend, in part, on how well it and its suppliers protect networks, equipment, IT systems and software against damage from a number of threats, including, but not limited to, cable cuts, damage to physical plants, natural disasters, intentional damage and destruction, fire, power loss, hacking, computer viruses, vandalism and theft. The Company's operations also depend on the timely maintenance, upgrade and replacement of networks, equipment, IT systems and software, as well as pre-emptive expenses to mitigate the risks of failures. Any of these and other events could result in information system failures, delays and/or increase in capital expenses. The failure of information systems or a component of information systems could, depending on the nature of any such failure, adversely impact the Company's reputation and results of operations. The Company has not experienced any material losses to date relating to cyber-attacks or other information security breaches, but there can be no assurance that the Company will not incur such losses in the future. The Company's risk and exposure to these matters cannot be fully mitigated because of, among other things, the evolving nature of these threats. As a result, cyber security and the continued development and enhancement of controls, processes and practices designed to protect systems, computers, software, data and networks from attack, damage or unauthorized access is a priority. As cyber threats continue to evolve, the Company may be required to expend additional resources to continue to modify or enhance protective measures or to investigate and remediate any security vulnerabilities.

### **Litigation Risks**

The Company may become party to litigation from time to time in the ordinary course of business which could adversely affect its business. Should any litigation in which the Company becomes involved be determined against the Company such a decision could adversely affect the Company's ability to continue operating and the market price for the Common Shares. Even if the Company is involved in litigation and wins, litigation can redirect significant company resources.

Commercial success of the Company will depend in part on not infringing upon the patents and proprietary rights of other parties and enforcing its own patents and proprietary rights against others. The research and development programs will be in highly competitive fields in which numerous third parties have issued patents and pending patent applications with claims closely related to the subject matter of the Company's programs. The Company is not currently aware of any litigation or other proceedings or claims by third parties that its technologies or methods infringe on their intellectual property.

While it is the practice of the Company to undertake pre-filing searches and analyses of developing technologies, they cannot guarantee that they have identified ever patent or patent application that maybe relevant to the research, development, or commercialization of its products. Moreover, the Company can provide no assurance that third parties will not assert valid, erroneous, or frivolous patent infringement claims.

### **Sufficiency of Capital**

Should the Company's costs and expenses prove to be greater than currently anticipated, or should the Company change its current business plan in a manner that will increase or accelerate its anticipated costs and expenses, the depletion of its working capital would be accelerated. To the extent it becomes necessary to raise additional cash in the future as its current cash and working capital resources are depleted, the Company will seek to raise it through the public or private sale of assets, debt or equity securities, the procurement of advances on contracts or licenses, funding from joint-venture or strategic partners, debt financing or short-term loans, or a combination of the foregoing. The Company may also seek to satisfy indebtedness without any cash outlay through the private issuance of debt or equity securities. The Company cannot guarantee that it will be able to secure the additional cash or working capital it may require to continue our operations. Failure by the Company to obtain additional cash or working capital on a timely basis and in sufficient amounts to fund its operations or to make other satisfactory arrangements may cause the Company to delay or indefinitely postpone certain of its activities, including potential acquisitions, or to reduce or delay capital expenditures, sell material assets, seek additional capital (if available) or seek compromise arrangements with its creditors. The foregoing could materially and adversely impact the business, operations, financial condition and results of operations of the Company.

### **Risks Associated with Future Acquisitions**

If appropriate opportunities present themselves, the Company intends to acquire businesses, technologies, services or products that the Company believes are strategic. The Company currently has no understandings, commitments, or agreements with respect to any other material acquisition and no other material acquisition is currently being pursued. There can be no assurance that the Company will be able to identify, negotiate or finance future acquisitions successfully, or to integrate such acquisitions with its current business. The process of integrating an acquired business, technology, service, or product into the Company may result in unforeseen operating difficulties and expenditures and may absorb significant management attention that would otherwise be available for ongoing development of the Company's business. Future acquisitions could result in potentially dilutive issuances of equity securities, the incurrence of debt, contingent liabilities and/or amortization expenses related to goodwill and other intangible assets, which could materially adversely affect the Company's business, results of operations and financial condition. Any such future acquisitions of other businesses, technologies, services or products might require the Company to obtain additional equity or debt financing, which might not be available on terms favourable to the Company, or at all, and such financing, if available, might be dilutive.

### **Global Economy Risk**

The ongoing economic slowdown and downturn of global capital markets has generally made the raising of capital by equity or debt financing more difficult. Access to financing has been negatively impacted by the ongoing global economic risks. As such, the Company is subject to liquidity risks in meeting our development and future operating cost requirements in instances where cash positions are unable to be maintained or appropriate financing is unavailable. These factors may impact the Company's ability to raise equity or obtain loans and other credit facilities in the future and on terms favourable to the Company. If uncertain market conditions persist, the Company's ability to raise capital could be jeopardized, which

could have an adverse impact on the Company's operations and the trading price of the Common Shares on the stock exchange.

### **Loss of Foreign Private Issuer Status**

The Company is a Foreign Private Issuer as defined in Rule 405 under the *U.S. Securities Act of 1933*, as amended (the "**U.S. Securities Act**") and Rule 3b-4 under the *U.S. Securities Exchange Act of 1934*, as amended (the "**U.S. Exchange Act**"). If, as of the last business day of the Company's second fiscal quarter for any year, more than 50% of the Company's outstanding voting securities (as determined under Rule 405 of the U.S. Securities Act) are directly or indirectly held of record by residents of the U.S., the Company will no longer meet the definition of a Foreign Private Issuer, which may have adverse consequences on the Company's ability to raise capital in private placements or Canadian prospectus offerings. In addition, the loss of the Company's Foreign Private Issuer status may likely result in increased reporting requirements and increased audit, legal and administration costs. These increased costs may significantly affect the Company's business, financial condition and results of operations. The term "Foreign Private Issuer" is defined as any non-U.S. corporation, other than a foreign government, except any issuer meeting the following conditions:

- a) more than 50 percent of the outstanding voting securities of such issuer are, directly or indirectly, held of record by residents of the U.S.; and
- b) any one of the following:
  - (i) the majority of the executive officers or directors are U.S. citizens or residents, or
  - (ii) more than 50 percent of the assets of the issuer are located in the U.S., or
  - (iii) the business of the issuer is administered principally in the U.S.

A "holder of record" is defined by Rule 12g5-1 under the U.S. Exchange Act. Generally speaking, the holder identified on the record of security holders is considered as the record holder.

In December 2016, the U.S. Securities and Exchange Commission (the "**SEC**") issued a Compliance and Disclosure Interpretation to clarify that issuers with multiple classes of voting stock carrying different voting rights may, for the purposes of calculating compliance with this threshold, examine either (i) the combined voting power of its share classes, or (ii) the number of voting securities, in each case held of record by U.S. residents. Based on this interpretation, each issued and outstanding Common Share is counted as one voting security for the purposes of determining the 50 percent U.S. resident threshold and the Company is a "Foreign Private Issuer".

Should the SEC's guidance and interpretation change, it is likely the Company will lose its Foreign Private Issuer status.

### **The Company's contracts may not be legally enforceable in the U.S.**

Because the Company's contracts involve cannabis and other activities that are not legal under U.S. federal law and in some jurisdictions, the Company may face difficulties in enforcing its contracts in U.S. federal and certain state courts.

### **The Company may lack access to U.S. bankruptcy protections.**

Because cannabis is a Schedule I substance under the Federal CSA, many courts have denied cannabis businesses federal bankruptcy protections, making it difficult for lenders to be made whole on their investments in the cannabis industry in the event of a bankruptcy. If the Company were to experience a

bankruptcy, there is no guarantee that U.S. federal bankruptcy protections would be available to the Company, which would have a material adverse effect.

**Canadian investors in the Common Shares and the Company’s directors, officers and employees may be subject to travel and entry bans into the U.S.**

News media have reported that U.S. immigration authorities have increased scrutiny of Canadian citizens who are crossing the U.S.–Canada border with respect to persons involved in cannabis businesses in the U.S. There have been a number of Canadians barred from entering the U.S. as a result of an investment in or act related to U.S. cannabis businesses. In some cases, entry has been barred for extended periods of time.

The majority of persons travelling across the Canadian and U.S. border do so without incident. Some persons are simply denied entry one time. The U.S. Department of State and the Department of Homeland Security have indicated that the U.S. has not changed the admission requirements in response to the pending legalization of recreational cannabis in Canada. Admissibility to the U.S. may be denied to any person working or ‘having involvement in’ the marijuana industry according to U.S. Customs and Border Protection. Additionally, legal experts have indicated that if the admission criteria are applied broadly, this may result in a determination that the act of investing in or working or collaborating with a U.S. cannabis company is considered trafficking in a Schedule I controlled substance or aiding, abetting, assisting, conspiring or colluding in the trafficking of a Schedule I controlled substance. Inadmissibility in the U.S. implies a lifetime ban for entry as such designation is not lifted unless an individual applies for and obtains a waiver.

Company directors, officers or employees traveling from Canada to the U.S. for the benefit of the Company may encounter enhanced scrutiny by U.S. immigration authorities that may result in the employee not being permitted to enter the U.S. for a specified period of time. If this happens to Company directors, officers or employees, then this may reduce our ability to manage our business effectively in the U.S. The Company has retained counsel and has policies in place to deal with any immigration-related issues as they may arise

**The lack of product for commercialization**

If the Company cannot successfully develop, manufacture and distribute its products, or if the Company experiences difficulties in the development process, such as capacity constraints, quality control problems or other disruptions, the Company may not be able to develop market-ready commercial products at acceptable costs, which would adversely affect the Company’s ability to effectively enter the market. A failure by the Company to achieve a low-cost structure through economies of scale or improvements in cultivation and manufacturing processes would have a material adverse effect on the Company’s commercialization plans and the Company’s business, prospects, results of operations and financial condition.

**Development of New Products**

The Company’s success will depend, in part, on its ability to develop, introduce and market new and innovative products. If there is a shift in consumer demand, the Company must meet such demand through new and innovative products or else its business will fail. The Company’s ability to develop, market and produce new products is subject to it having substantial capital. There is no assurance that the Company will be able to develop new and innovative products or have the capital necessary to develop such products.



## **DIVIDENDS AND DISTRIBUTIONS**

The Company has not paid dividends or made distributions during the past three financial years and through the date of this AIF. The Company has no present intention of paying dividends in the near future. It will pay dividends when, as and if declared by the Board. The Company expects to pay dividends only out of retained earnings in the event that it does not require its retained earnings for operations and reserves. There are no restrictions in the Company's articles of incorporation or bylaws that prevent it from declaring dividends. The Company has no shares with preferential dividend and distribution rights authorized or outstanding.

## **DESCRIPTION OF CAPITAL STRUCTURE**

The Company's authorized share capital consists of an unlimited number of common shares in the capital of the Company without par value and an unlimited number of preferred shares without par value (the "**Preferred Shares**"). As of the date of this AIF, there are 122,851,931 Common Shares and zero Preferred Shares issued and outstanding.

### **General**

The holders of Common Shares are entitled to receive notice of and to attend and vote at all meetings of the shareholders of the Company and each Common Share confers the right to one vote in person or by proxy at all meetings of the shareholders of the Company. The holders of the Common Shares are entitled to receive such dividends in any financial year as the board of directors of the Company may by resolution determine. In the event of the liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary, the holders of the Common Shares are entitled to receive the remaining property and assets of the Company. The Common Shares do not carry any pre-emptive rights, conversion or exchange rights, or redemption, retraction, purchase for cancellation or surrender rights. The Articles of the Company do not have any sinking or purchase fund provisions and do not have provisions permitting or restricting the issuance of additional securities and any other material restrictions. The Articles of the Company also do not have any provisions requiring a securityholder to contribute additional capital.

The Articles of the Company authorize it to issue an unlimited number of Preferred Shares in one or more series and empower the board of director to:

- a) determine the maximum number of Preferred Shares of any of those series of Preferred Shares that the Company is authorized to issue; and
- b) fix or alter the dividend rights; dividend rate; conversion rights; voting rights; terms of redemption; redemption price or prices; and liquidation preferences of each unissued series of Preferred Shares, the number of shares constituting any such series, and the designation thereof.

Upon issuance, the holders of any series of Preferred Shares will have such preferences over the holders of the Common Shares, including preferences upon liquidation and/or as to dividends and such voting, conversion, redemption and other rights as the board of directors determines in creating such series.

## MARKET FOR SECURITIES

### Trading Price and Volume

The following table summarizes the range and volume of trading data of the Common Shares for the last 12 months since the date of the AIF:

Month	CSE Price Range		Total Volume
	High (\$)	Low (\$)	
January 2021	0.40	0.27	4,112,943
February 2021	0.53	0.29	6,237,818
March 2021	0.50	0.37	3,171,156
April 2021	0.48	0.38	2,506,284
May 2021	0.39	0.27	1,598,827
June 2021	0.33	0.27	2,909,127
July 2021	0.35	0.27	2,359,278
August 2021	0.40	0.30	3,636,672
September 2021	0.37	0.29	3,295,837
October 2021	0.30	0.24	3,081,712
November 2021	0.32	0.22	2,128,849
December 2021	0.26	0.21	2,541,422
January 1 – 13, 2022	0.235	0.20	388,036

### Prior Sales

During the financial year ended August 31, 2021, the following securities of the Company, which are not listed or quoted on a marketplace, were issued.

Date of Grant	Class of security	Number of securities issued	Price per security/ Exercise price per security (CAD\$)
October 16, 2020	Options <sup>(1)</sup>	1,150,000	\$0.35
March 15, 2021	Options <sup>(2)</sup>	500,000	\$0.46
July 2, 2021	Options <sup>(3)</sup>	525,000	\$0.30
September 1, 2020	Warrants <sup>(4)</sup>	1,611,880	\$0.50

<b>Date of Grant</b>	<b>Class of security</b>	<b>Number of securities issued</b>	<b>Price per security/ Exercise price per security (CAD\$)</b>
September 21, 2020	Warrants <sup>(5)</sup>	3,833,667	\$0.50
September 21, 2020	Warrants <sup>(6)</sup>	146,790	\$0.30
November 18, 2020	Warrants <sup>(7)</sup>	1,325,334	\$0.50
November 18, 2020	Warrants <sup>(8)</sup>	18,900	\$0.30
December 18, 2020	Warrants <sup>(9)</sup>	141,272	\$0.35
December 18, 2020	Warrants <sup>(10)</sup>	92,250	\$0.55
December 21, 2020	Warrants <sup>(11)</sup>	26,250	\$0.55
December 22, 2020	Warrants <sup>(12)</sup>	57,450	\$0.55
December 30, 2020	Warrants <sup>(13)</sup>	52,500	\$0.55
March 31, 2021	Warrants <sup>(14)</sup>	20,000,000	\$0.50
March 31, 2021	Warrants <sup>(15)</sup>	1,099,350	\$0.375

**Notes:**

- (1) Granted to consultants and directors of the Company and will expire on October 16, 2025 with vesting of the Options as follows: 383,333 on April 16, 2021, October 16, 2021 and April 16, 2021.
- (2) Granted to directors of the Company and will expire on March 15, 2026 with vesting of the Options as follows: 166, 667 on August 15, 2021, March 15, 2022 and August 15, 2022.
- (3) Granted to consultants and directors of the Company and will expire on July 02, 2026 with vesting of the Options as follows: 175,000 on January 2, 2022, July 2, 2022 and January 2, 2023.
- (4) In connection with the Company's non-brokered private placement, the Company issued Warrants which have an exercise price of \$0.50 for a period for 24 months from the date of issuance.
- (5) Company issued Warrants which have an exercise price of \$0.50 for a period for 24 months from the date of issuance.
- (6) In connection with the Company's non-brokered private placement, the Company issued Finder's Warrants with an exercise price of \$0.30 for a period of 24 months.
- (7) In connection with the Company's non-brokered private placement, the Company issued Warrants which have an exercise price of \$0.50 for a period for 24 months from the date of issuance.
- (8) In connection with the Company's non-brokered private placement, the Company issued Finder's Warrants with an exercise price of \$0.30 for a period of 24 months.
- (9) In connection with the Company's issuance of Convertible Debentures, the Company issued Finder's Warrants which have an exercise price of \$0.35 for a period for 36 months from the date of issuance.
- (10) In connection with the Company's issuance of Convertible Debentures, the Company issued Warrants which have an exercise price of \$0.55 for a period for 24 months from the date of issuance.
- (11) In connection with the Company's issuance of Convertible Debentures, the Company issued Warrants which have an exercise price of \$0.55 for a period for 24 months from the date of issuance.

- (12) In connection with the Company's issuance of Convertible Debentures, the Company issued Warrants which have an exercise price of \$0.55 for a period for 24 months from the date of issuance.
- (13) In connection with the Company's issuance of Convertible Debentures, the Company issued Warrants which have an exercise price of \$0.55 for a period for 24 months from the date of issuance.
- (14) In connection with the Company's non-brokered private placement, the Company issued Warrants which have an exercise price of \$0.50 for a period for 24 months from the date of issuance.
- (15) In connection with the Company's non-brokered private placement, the Company issued Finder's Warrants with an exercise price of \$0.375 for a period of 24 months.

### ESCROWED SECURITIES

The table below summarizes the escrowed securities of the Company as at the date of this AIF:

Designation of class	Number of securities held in escrow	Percentage of class
Common Shares	7,640,691	6.2%

In connection with the Company's Initial Public Offering and pursuant to National Instrument 46-201 *Escrow for Initial Public Offerings*, 17,859,809 Common Shares, 1,860,000 Options, and 6,043,224 Warrant were subject to escrow under an agreement dated February 5, 2020 among the Atom Energy Inc., 6<sup>th</sup> Wave Acquisition Inc., Somerston Technologies Limited, and Computershare Trust Company of Canada. These securities are to be released according to the following schedule:

Release Date	Portion of Escrowed Securities Released
On listing date	10% of escrow securities
6 months after listing date	15% of escrow securities
12 months after listing date	15% of escrow securities
18 months after listing date	15% of escrow securities
24 months after listing date	15% of escrow securities
30 months after listing date	15% of escrow securities
36 months after listing date	15% of escrow securities

### DIRECTORS AND OFFICERS

#### **Name, Occupation and Security Holding**

The following table sets forth information regarding the Company's directors and executive officers. The term of office for the Directors expires at the Company's next annual general meeting of shareholders. Unless the director's office is earlier vacated in accordance with the provisions of the *Business Corporations Act* (British Columbia), each director elected will hold office until the conclusion of the next annual general meeting of the Company, or if no director is then elected, until a successor is elected.

Name and Municipality of Residence <sup>(1)</sup>	Position Held	Principal Occupation for Last Five Years <sup>(2)</sup>	Director / Officer Since	Number of Securities of the Company Held Directly or Indirectly as of the date of this AIF (% of class) <sup>(3)</sup>		
				Common Shares	(% of class)	(% of class on a fully diluted basis) <sup>(5)</sup>
Dr. Jonathan <sup>(4)</sup> Gluckman Nova Scotia, Canada	Chief Executive Officer and Director	Chief Executive Officer	January 31, 2020	4,373,283	3.6%	2.6%
Peter Manuel Nova Scotia, Canada	Interim Chief Financial Officer and Director	Vice President & Chief Financial Officer, Ucore Rare Metals, Inc.	January 31, 2020	1,858,645	1.5%	1.1%
John Cowan North Carolina, USA	Chief Operating Officer	Chief Operating Officer  Mechanical Engineer	April 1, 2020	210,000	0.2%	0.1%
David Fransen <sup>(4)</sup> Ontario, Canada	Director	Business Consultant	November 26, 2020	Nil	Nil	Nil
Sokhie Puar <sup>(4)</sup> British Columbia, Canada	Director	Business Consultant	March 15, 2021	1,071,000	0.9%	0.6%
Honorable Grant Mitchell British Columbia, Canada	Director	Business Consultant	November 8, 2021	Nil	Nil	Nil

**Notes:**

- (1) Information as to municipality of residence, principal occupation, securities beneficially owned or over which a director or officer exercises control or direction has been furnished by the respective individuals as of the date of this AIF.
- (2) See “Management and Key Personnel” for additional information regarding the principal occupations of the Company’s directors and officers.
- (3) Percentage is based on 122,851,931 Common Shares issued and outstanding as of the date hereof.
- (4) The members of the Company’s Audit Committee are Dr. Jonathan Gluckman, Sokhie Puar and David Fransen.
- (5) Percentage is based on 122,851,931 Common Shares issued and outstanding on a fully diluted basis; the exercise of 38,930,056 Warrants into Common Shares; the exercise of 6,740,000 Options,

and the exercise of 1,600,000 Deferred Share Units issued and outstanding as of the date hereof into Common Shares.

The Company's directors and officers as a group, beneficially own, directly and indirectly, or exercise control or direction over, 7,458,655 Common Shares, representing 6.4% of the issued and outstanding Common Shares as of the date of this AIF.

## **Biographies**

The following are brief biographies of the above individuals:

### *Dr. Jonathan Gluckman – President and Chief Executive Officer, Director*

Dr. Gluckman brings a 29-year track record of innovative, technology-driven achievements to his role as President and CEO of Sixth Wave. Dr. Gluckman started his entrepreneurial career as the Founder and CEO of Integrated Dynamics, a government engineering services company in 1996. Dr. Gluckman's career has focused on the development and subsequent transition of advanced technologies into commercial applications. As the Chairman and CEO of Sixth Wave since 2013, Dr. Gluckman has concentrated his efforts to commercialize the IXOS® molecularly imprinted polymers for the metals processing industry and has diversified the Company's offerings in that field to include detection of viruses, pathogenic amines, cannabinoid purification, explosives detection, and others. Dr. Gluckman holds a Ph.D. from the University of Cincinnati, has earned accolades from the United States Navy for his work in sensor fusion and advanced aircraft cockpit technology, has been widely published in peer reviewed articles, and has received several patents in the design and application of nanotechnology for detection, purification, and isolation at the molecular level.

### *Peter Manuel – Director*

Peter Manuel has been a Director of the Company since its listing on the CSE in February of 2020. He has been Vice President and Chief Financial Officer of Ucore Rare Metals Inc., a publicly traded mineral exploration and development company, for the past 11 years. Prior to that he was in public practice as a Chartered Accountant for 17 years providing consulting services to companies in a range of sectors, with a focus on the financial services and resource sectors. Mr. Manuel's career included 10 years in England and The Republic of Ireland providing assurance, strategic planning, corporate finance and other consulting services to a portfolio of both public and private entities including licensed banks, proprietary trading operations, and international corporate treasuries. Mr. Manuel holds a Bachelor of Commerce degree from Dalhousie University.

### *Dr. David Fransen – Director*

Dr. Fransen's career spans 40 years in various roles including senior executive positions in government, academia and the diplomatic corps. Dr. Fransen has provided strategic leadership across a wide range of economic policy and program sectors as a senior official at the Privy Council Office and Health Canada, as an assistant deputy minister at Industry Canada, as the first executive director of the University of Waterloo's Institute for Quantum Computing and as Canada's consul general in Los Angeles. Dr. Fransen is also a former special adviser to the president of the National Research Council, former chair of the Waterloo Innovation Summit, and a member of the boards of the Waterloo Economic Development Corp., the Institute for Quantum Computing, Quantum-Safe Canada, and NeuroVigil. Dr. Fransen led in the creation, and then served as a founding member of the board of governors, of the Council of Canadian Academies. Dr. Fransen also served as a member of the board of directors of Canadian Commercial Corp., the Standards Council of Canada, and as secretary of the Minister of Industry Canada's Expert Panel on

Commercialization. Dr. Fransen holds a PhD from the University of Toronto, a bachelor of arts and master of arts from the University of Waterloo, and a bachelor of theology from Canadian Mennonite University. Dr. Fransen is also a fellow of the Public Policy Forum.

*Sokhie Puar – Director*

Mr. Puar, with over 30 years in the public markets, has worked in various capacities in both public and private companies. He has worked with companies in the mining, oil and gas, technology, education and clean energy sectors since 2001. Most recently, Mr. Puar held the positions of CEO, Chairman and Director of Candelaria Mining Corp. from February 2012 to September 2017. During his tenure, Candelaria Mining Corp. raised in excess of \$28 million and acquired several mining projects in Mexico. From May of 2015 to present Mr. Puar has held the position of CEO and Director of Else Nutrition Holdings Inc. and currently remains as a Director. Since going public in June of 2019 Else Nutrition has raised over \$41 million. Mr. Puar also sits on the board of Adcore Inc., a technology company in the digital advertising space.

Mr. Puar holds a diploma in Mechanical Engineering Technology and a diploma in Business Administration from the British Columbia Institute of Technology. Mr. Puar sits and has sat on the board of many public and private companies including the board of Governors of Southpointe Academy, an independent school located in Tsawwassen, B.C., where he Chaired the Governance Committee, and currently sits on multiple committees.

*Grant Mitchell – Director*

Mr. Mitchell was appointed to the Senate of Canada in 2005 on the advice of Prime Minister Paul Martin and represented Alberta until his retirement in 2020. Prior to his appointment to the Senate, Mr. Mitchell spent twelve years serving in the Alberta Legislature as MLA, including four years as Opposition Leader from 1994 to 1998. More recently Mr. Mitchell has been intimately involved with both business and legislative policy around the environment, social, and governance (ESG), carbon tax/credits, and other similar initiatives.

*John Cowan – Chief Operating Officer*

Mr. Cowan is a Mechanical Engineer with extensive experience in the planning, design, construction, and management of industrial manufacturing facilities in the United States. He has consecutively managed multiple precision manufacturing facilities, with more than three decades of world-class manufacturing experience. He is a specialist in the disciplines of Operations, Engineering Business Development and Quality Control, and is certified in international best in class manufacturing standards such as Lean Manufacturing, Six Sigma and AITF & ISO Quality Management Systems.

Mr. Cowan's background includes the design and management of large Engine Block & Head Plants, a Medical Manufacturing & Distribution facility, as well as a green-field Engine Assembly Plant. He has spearheaded the configuration and ongoing operation of high-precision production lines on behalf of Fortune 500 companies such as Eaton Corporation, Harley Davidson and Caterpillar. Mr. Cowan holds a BS Honors Degree in Mechanical Engineering from Northumbria University.

## **CEASE TRADE ORDERS, BANKRUPTCIES, PENALTIES OR SANCTIONS**

Other than set out below, no director or executive officer of the Company is, as at the date of this AIF, or has been within 10 years before the date of this AIF, a director, chief executive officer or chief financial officer of any company (including the Company), that:

- (a) was subject to a cease trade order, an order similar to a cease trade order, or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer, or
- (b) was subject to a cease trade order, an order similar to a cease trade order, or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

No director or executive officer of the Company, nor a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company:

- (a) is, as at the date of this AIF, or has been within 10 years before the date of this AIF, a director or executive officer of any company (including the Company) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or
- (b) has, within 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the proposed director.

No director or executive officer of the Company has been subject to:

- (a) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or
- (b) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable security holder in deciding whether to vote for a proposed director.

Sokhie Puar is a director of Vanadiumcorp Resource Inc. (“**Vanadiumcorp**”). On March 9, 2021, Vanadiumcorp received a cease trade order issued by the British Columbia Securities Commission (“**BCSC**”) for failure to file audited financial statements and management’s discussion and analysis with the prescribed deadline. Vanadiumcorp has filed the relevant financial statements and management’s discussion and analysis and applied to the BCSC for a revocation of the cease trade order. On December 24, 2021 the cease trade order was rescinded.

## **CONFLICTS OF INTEREST**

The Company’s directors and officers may serve as directors or officers, or may be associated with, other reporting companies, or have significant shareholdings in other public companies. To the extent that such other companies may participate in business or asset acquisitions, dispositions, or ventures in which the Company may participate, the directors and officers of the Company may have a conflict of interest in



negotiating and concluding terms respecting the transaction. If a conflict of interest arises, the Company will follow the provisions of the BCBCA dealing with conflict of interest. These provisions state that where a director has such a conflict, that director must, at a meeting of the Company's directors, disclose his or her interest and refrain from voting on the matter unless otherwise permitted by the BCBCA. In accordance with the laws of the Province of British Columbia, the directors and officers of the Company are required to act honestly, in good faith, and the best interest of the Company.

To the best of the Company's knowledge, and other than disclosed herein, there are no known existing or potential conflicts of interest among the Company, its promoters, directors and officers or other members of management of the Company or of any proposed promoter, director, officer or other member of management as a result of their outside business interests except that certain of the directors and officers serve as directors and officers of other companies, and therefore it is possible that a conflict may arise between their duties to the Company and their duties as a director or officer of such other companies. If a conflict of interest arises at a meeting of the Board, any director in a conflict will disclose his interest and abstain from voting on such matter.

## **PROMOTORS**

A "Promoter" is defined in the *Securities Act* (British Columbia) as a "person who (a) alone or in concert with other persons directly or indirectly takes the initiative of founding, organizing or substantially reorganizing the business of the issuer; or (b) in connection with the founding, organization or substantial reorganization of the business of the Company, directly or indirectly receives, in consideration of services or property or both, 10% or more of a class of the Company's own securities or 10% or more of the proceeds from the sale of a class of the Company's own securities of a particular issue.

James McKenzie and Peter Manuel have acted as promoters with respect to the Merger Transaction and the listing of the Company. Mr. McKenzie is no longer an insider of the Company. Mr. Manuel beneficially owns, directly or indirectly, or has direction or control over, 1,858,645 Common Shares, 350,000 Options, 1,500 Warrants, and Convertible Debentures with a face value of \$10,000 which can be converted into 28,571 Common Shares of the Company. Neither Mr. McKenzie nor Mr. Manuel has received or will receive anything of value from the Company or any subsidiary of the Company pursuant to the Merger Transaction. The Company and its subsidiaries have not acquired, and have no plans to acquire, any assets from any promoter.

## **LEGAL PROCEEDINGS AND REGULATORY ACTIONS**

### **Legal Proceedings**

The Company is not, and was not during the most recently completed financial year, engaged in any legal proceedings and none of its property is or was during that period the subject of any legal proceedings. The Company does not know of any such legal proceedings which are contemplated.

### **Regulatory Actions**

During the most recently completed financial year and during the current financial year, the Company is not and has not been the subject of any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority, any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor, or entered into any settlement agreements before a court relating to securities legislation or with a securities regulatory authority.

## **INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS**

Other than as described elsewhere in this AIF, none of our directors, executive officers or shareholders, owning or exercising control or direction over more 10% of the Common Shares, or any associate or affiliate of the foregoing, has had any material interest, direct or indirect, in any transaction within the three most recently completed financial years or during the current financial year prior to the date of this AIF that has materially affected us or is reasonably expected to materially affect the Company.

Pursuant to the Merger Transaction, Mr. Gluckman received 1,197,912 Common Shares and Warrants to purchase 407,086 Common Shares as consideration for his equity interests in 6WIC. Pursuant to the Merger Transaction, Mr. McGill received 1,197,912 Common Shares and Warrants to purchase 400,600 Common Shares as consideration for his equity interests in 6WIC, and received repayment of USD\$121,117 of indebtedness owed to him by 6WIC.

Mr. Gluckman received 2,972,497 Common Shares of the Company pursuant to a Debt Settlement Agreement on July 8, 2021.

## **TRANSFER AGENTS AND REGISTRARS**

The Company's Registrar and Transfer Agent is Computershare Investor Services Inc., located at 510 Burrard Street, 3<sup>rd</sup> Floor, Vancouver, British Columbia V6C 3B9.

## **MATERIAL CONTRACTS**

Except for contracts entered into in the ordinary course of business, as of the date of this AIF, the only material contracts which the Company entered into within the most recently completed financial year, subsequent to the most recently completed financial year to the date of this AIF, or prior to the most recently completed financial year but which are still in effect are set out below:

- Merger Agreement dated January 31, 2020 between 6WIC and the Company;
- Agreement dated October 22, 2020 between Nova Scotia COVID-19 Response Council and the Company relating to the development of the Company's AMIP technologically specifically for the purpose of quickly and selecting binding to the COVID-19 virus;
- Research Agreement dated November 19, 2020 between the University of Alberta and the Company to assist with the development of the Company's AMIP technology; and
- Service Agreement extended on October 12, 2021 between the University of Alberta, Li Ka Shing Institute of Virology and the Company, pursuant to the development of the Company's AMIPs technology for the detection of the virus that causes COVID-19.

## **INTERESTS OF EXPERTS**

### **Names of Experts**

The following are persons or companies whose profession or business gives authority to a statement made in this AIF as having prepared or certified a part of that document or report described in this AIF:

- Davidson & Company LLP, Chartered Professional Accountants, is the external auditor of the Company and reported on the Company's audited consolidated financial statements for the years ended August 31, 2020 and 2021, which are filed on SEDAR.

To the knowledge of management, as of the date hereof, no expert, nor any associate or affiliate of such person has any beneficial interest, direct or indirect, in the securities or property of the Company or of an associate or affiliate of any of them, and no such person is or is expected to be elected, appointed or employed as a director, officer or employee of the Company or of an associate or affiliate thereof.

### **Interests of Experts**

Davidson & Company LLP, Chartered Professional Accountants, auditors of the Company, have confirmed that they are independent of the Company within the meaning of the 'CPABC Code of Professional Conduct' of the Chartered Professional Accountants of British Columbia.

## **AUDIT COMMITTEE**

The Audit Committee assists the Board in fulfilling its responsibilities for oversight of financial and accounting matters. The Audit Committee is responsible for monitoring the Company's systems and procedures for financial reporting and internal control, reviewing certain public disclosure documents, including the Company's annual audited financial statements and unaudited quarterly financial statements, and monitoring the performance and independence of the Company's external auditors. The Audit Committee is responsible for reviewing with management the Company's risk management policies, the timeliness and accuracy of the Company's regulatory filings and all related party transactions as well as the development of policies and procedures related to such transactions.

The Audit Committee also pre-approves all non-audit services to be provided to the Company or any subsidiary entities by its external auditors or by the external auditors of such subsidiary entities.

### **Audit Committee Charter**

The Audit Committee operates under a written charter, which is attached hereto as Appendix A and which sets forth the purpose, composition, authority and responsibility of the Audit Committee.

### **Composition of the Audit Committee**

The Audit Committee of the Company is comprised of Dr. Jonathan Gluckman, David Fransen, and Sokhie Puar. All members of the audit committee are considered to be financially literate within the meaning of NI 52-110.

### **Relevant Education and Experience**

Each member of the Audit Committee has had extensive experience reviewing financial statements. Each member of the Audit Committee has an understanding of the Company's business and an appreciation for the relevant accounting principles for that business. In particular, the Company believes that each of the members of the Audit Committee possesses: (a) an understanding of the accounting principles used by the Company to prepare its financial statements; (b) the ability to assess the general application of such accounting principles in connection with the accounting for estimates, accruals and reserves; (c) experience preparing, auditing, analyzing or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Company's financial statements, or experience actively

supervising one or more individuals engaged in such activities; and (d) an understanding of internal controls and procedures for financial reporting.

For relevant education and experience of Dr. Jonathan Gluckman, David Fransen, and Sokhie Puar, refer to “*Directors and Officers – Biographies*” above.

### **Reliance on Certain Exemptions**

At no time since the commencement of the Company’s most recently completed financial year has the Company relied on the exemptions in section 2.4 (*De Minimis Non-audit Services*), section 3.2 (*Initial Public Offerings*), section 3.4 (*Events Outside Control of Member*), section 3.5 (*Death, Disability or Resignation of Audit Committee Member*), or Part 8 (*Exemptions*) of NI 52-110.

### **Reliance on the Exemption in Subsection 3.3(2) or Section 3.6**

At no time since the commencement of the Company’s most recently completed financial year has the Company relied on the exemption in subsection 3.3(2) (*Controlled Companies*) or section 3.6 (*Temporary Exemption for Limited and Exceptional Circumstances*) of NI 52-110.

### **Reliance on Section 3.8**

At no time since the commencement of the Company’s most recently completed financial year has the Company relied on section 3.8 (*Acquisition of Financial Literacy*) of NI 52-110.

### **Audit Committee Oversight**

At no time since the commencement of the Company’s most recently completed financial year was a recommendation of the Audit Committee to nominate or compensate an external auditor not adopted by the Board.

### **Pre-Approval Policies and Procedures**

The Audit Committee has adopted specific policies and procedures for the engagement of non-audit services as described in the Audit Committee Charter.

### **External Auditor Service Fees (By Category)**

The aggregate fees paid by the Company to its Auditor in the financial years ended August 31, 2020 and 2021 were as follows:

<b>Financial Period Ending</b>	<b>Audit Fees<sup>(1)</sup></b>	<b>Audit Related Fees<sup>(2)</sup></b>	<b>Tax Fees<sup>(3)</sup></b>	<b>All Other Fees</b>
August 31, 2020	\$92,500	\$13,500	\$6,250	\$Nil
August 31, 2021	\$92,500	\$13,500	\$6,250	\$Nil

**Notes:**

- (1) “Audit Fees” include, where applicable, fees necessary to perform the annual audit and the quarterly reviews of the Company’s consolidated financial statements. Audit Fees include fees for the review of tax provisions and for accounting consultations on matters reflected in the financial statements. Audit Fees also include audit or other attest services required by legislation or regulation, such as comfort letters, consents, reviews of securities filings and statutory audits.
- (2) “Audit-Related Fees” include, where applicable, services that are traditionally performed by the auditor. These audit-related services include employee benefit audits, due diligence assistance, accounting consultations on proposed transactions, internal control reviews and audit or attest services not required by legislation or regulation.
- (3) “Tax Fees” include, where applicable, fees for all tax services other than those included in “Audit Fees” and “Audit-Related Fees”. This category includes fees for tax compliance, tax planning and tax advice. Tax planning and tax advice includes assistance with tax audits and appeals, tax advice related to mergers and acquisitions, and requests for rulings or technical advice from tax authorities.
- (4) “All Other Fees” include, where applicable, all other non-audit services.

**ADDITIONAL INFORMATION**

Additional information relating to the Company may be found on SEDAR at [www.sedar.com](http://www.sedar.com). Additional information, including directors’ and officers’ remuneration and indebtedness, the Company’s principal shareholders, and securities authorized for issuance under equity compensation plans, if applicable, is contained in the Company’s most recently filed management information circular available on SEDAR at [www.sedar.com](http://www.sedar.com). Additional financial information is provided in our consolidated financial statements and management’s discussion and analysis for the financial year ended August 31, 2021.

## APPENDIX A – AUDIT COMMITTEE CHARTER

### SIXTH WAVE INNOVATIONS INC.

#### AUDIT COMMITTEE CHARTER

##### Purpose

The Audit Committee (the “**Committee**”) of Atom Energy Inc. (the “**Company**”) is appointed by the Board of Directors of the Company (the “**Board**”) to assist the Board in fulfilling its oversight responsibilities of the Company. In so doing, the Committee provides an avenue of communication among the independent auditors, management, and the Board.

The Committee’s primary duties and responsibilities are to gain reasonable assurance of the following:

- that the Company complies with the applicable laws, regulations, rules, policies and other requirements of governments, regulatory agencies and stock exchanges relating to financial reporting and disclosure;
- that management of the Company has assessed areas of potential significant financial risk to the Company and taken appropriate measures;
- the independence and satisfactory performance of duties by the Company’s independent auditors;
- that the accounting principles, significant judgments and disclosures that underlie or are incorporated in the Company’s financial statements are the most appropriate in the prevailing circumstances;
- that the Company’s quarterly and annual financial statements present fairly the Company’s financial position and performance in accordance with generally accepted accounting principles (“**IFRS**”); and
- that appropriate information concerning the financial position and performance of the Company is disseminated to the public in a timely manner.

##### Composition

The Committee shall be comprised of three or more directors as determined by the Board, a majority of whom must be independent<sup>6</sup> and free from any relationship that would interfere with the exercise of his or her independent judgment. All members of the Committee shall be financially literate<sup>7</sup>. The Committee members shall be appointed by the Board.

##### Chair

The Board will appoint the Chair of the Committee annually, to be selected from the members of the Committee. If, in any year, the Board does not make an appointment of the Chair, the incumbent Chair will continue in office until that Chair’s successor is appointed.

##### Removal and Vacancies

Any member of the Committee may be removed and replaced at any time by the Board and will automatically cease to be a member of the Committee as soon as such member ceases to be a director. The Board may fill vacancies in the Committee by election from among the members of the Board. If and whenever a vacancy exists on the Committee, the remaining members may exercise all its powers so long as a quorum remains in office.

##### Meetings and Operating Procedures

- The Committee shall meet at least four times annually, or more frequently as circumstances dictate.

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<sup>6</sup> For the definition of “**independent**”, please see the Glossary of Terms.

<sup>7</sup> For the definition of “**financially literate**”, please see the Glossary of Terms.

- A quorum shall be a majority of the members of the Committee.
- In the absence of the Chair of the Committee, the members shall appoint an acting Chair.
- A copy of the minutes of each meeting of the Committee shall be provided to each member of the Committee and to each director of the Company in a timely fashion.
- Notice of the time and place of each meeting of the Committee will be given by the member calling the meeting to the other members by telephone, electronic mail or facsimile transmission not less than forty-eight (48) hours before the time of the meeting, and, subject to the requirements of applicable law, need not specify the purpose of or the business to be transacted at the meeting. Meetings of the Committee may be held at any time without notice if all members have waived or are deemed to have waived notice of the meeting.
- The Chair of the Committee shall use his or her best efforts to prepare and/or approve an agenda in advance of each meeting.
- The Committee, in consultation with management and the independent auditors, shall develop and participate in a process for review of important financial topics that have the potential to impact the Company's financial policies and disclosures.
- The Committee shall communicate its expectations to management and the independent auditors with respect to the nature, timing and extent of its information needs. The Committee expects that written materials will be received from management and, to the extent needed, the independent auditors in advance of meeting dates.
- The Committee should meet privately in executive session at least quarterly with management and as a committee, and at least annually with the independent auditors, to discuss any matters that the Committee or each of these groups believes should be discussed.
- The Committee shall annually review, discuss and assess its own performance. In addition, the Committee shall periodically review its role and responsibilities.
- The Committee expects that, in discharging their responsibilities to the shareholders, the independent auditors shall be accountable to the Board through the Committee. The independent auditors shall report all material issues or potentially material issues to the Committee.

### **Reliance on Experts**

The Committee shall have the authority to engage independent counsel and other advisors as it determines necessary to carry out its duties and to set and pay the compensation for any advisors engaged by it. In so doing, each member of the Committee shall be entitled to rely in good faith upon:

- (a) the financial statements of the Company represented to him or her by an officer of the Company or in a written report of the independent auditors to present fairly the financial position of the Company in accordance with IFRS; and
- (b) any report of a lawyer, accountant, engineer, appraiser or other person whose profession lends credibility to a statement made by any such person.

The Committee shall also have the authority to communicate directly with the independent auditors.

### **Remuneration of Committee Members**

No member of the Committee may earn fees from the Company other than directors' fees (which fees may include cash, options or other in-kind consideration ordinarily available to directors). For greater certainty, no member of the Committee shall accept any consulting, advisory or other compensatory fee from the Company.

### **Limitations on Committee's Duties**

In contributing to the Committee's discharging of its duties under this Charter, each member of the Committee shall

be obliged only to exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances. Nothing in this Charter is intended, or may be construed, to impose on any member of the Committee a standard of care or diligence that is in any way more onerous or extensive than the standard to which all Board members are subject.

## **Responsibilities and Duties**

### Review Procedures

- Review and reassess the adequacy of this Charter at least annually, submit any changes to the Board for approval and ensure that it is in compliance with applicable securities laws.
- Review the Company's annual audited financial statements and quarterly unaudited financial statements and the accompanying Management Discussion and Analysis prior to filing or distribution, and, in respect of the annual financial statements, report its findings for approval to the Board. Review should include discussion with management and, in respect of the annual financial statements, independent auditors of significant issues regarding accounting principles, practices and judgments.
- Review news releases and reports to shareholders, prior to distribution, that are to be issued by the Company with respect to the Company's annual and quarterly financial statements and, if appropriate, recommend approval of same to the Board.
- Ensure that adequate procedures are in place for the review of the Company's public disclosure of financial information extracted or derived from the Company's financial statements, other than the disclosure stated above, and periodically assess the adequacy of those procedures.
- In consultation with management and the independent auditors, consider the integrity of the Company's financial reporting processes and controls. Discuss significant financial risk exposures and the steps management has taken to monitor, control, and report such exposures.
- Review and approve the Company's hiring policy regarding the partners, employees and former partners and employees of the present and former external auditor of the Company.
- Review with management and the independent auditors the management certifications of the financial statements and accompanying Management Discussion & Analysis as required under applicable securities laws.
- Review with management and the independent auditors the appropriateness of the Company's accounting policies, disclosures, reserves, key estimates and judgments, including changes or alternatives thereto and to obtain reasonable assurance that they are in compliance with IFRS and fairly present in all material respects the Company's financial condition and results, and report thereon to the Board.
- Review the following with management with the objective of obtaining reasonable assurance that financial risk is being effectively managed and controlled:
  - management's tolerance for financial risks;
  - management's assessment of significant financial risks facing the Company; and
  - the Company's policies, plans, processes and any proposed changes to those policies for controlling significant financial risks.
- On at least an annual basis, review with the Company's counsel any legal matters that could have a significant impact on the Company's financial statements, the Company's compliance with applicable laws and regulations, or inquiries received from regulators or governmental agencies.

### Independent Auditors

- The independent auditors are ultimately accountable to the Committee and the Board and shall report directly to the Committee. The Committee shall review the independence and performance of the auditors and annually recommend to the Board the appointment and compensation of the independent auditors or approve



any discharge of auditors when circumstances warrant.

- Assume direct responsibility for overseeing the work of the independent auditors engaged to prepare or issue an audit report or perform other audit, review or attest services for the Company, including the resolution of disagreements between management and the independent auditors regarding financial reporting.
- Evaluate and recommend to the Board the independent auditors to be nominated to prepare or issue an audit report or perform other audit, review or attest services for the Company, and the compensation of the independent auditors.
- Pre-approve all non-audit services to be provided to the Company or its subsidiary entities by its independent auditors. Authority to pre-approve non-audit services may be delegated to one or more independent members, provided that the pre-approval is presented to the full Committee at its first scheduled meeting following such pre-approval.
- On an annual basis, the Committee should review and discuss with the independent auditors all significant relationships they have with the Company that could impair the auditors' independence.
- Review the independent auditors' audit plan, and discuss scope, staffing, locations, reliance upon management and internal audit and general audit approach.
- Prior to releasing the year-end earnings, discuss the results of the audit with the independent auditors. Discuss certain matters required to be communicated to audit committees.
- Consider the independent auditors' judgments about the quality and appropriateness of the Company's accounting principles as applied in its financial reporting.
- Review the results of independent audits and any change in accounting practices or policies and their impact on the financial statements.
- Where there are unsettled issues raised by the independent auditors that do not have a material effect on the annual audited financial statements, require that there be a written response identifying a course of action that would lead to the resolution of such issues.

*Other*

- Establish procedures for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls, or auditing matters, and the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.
- Ensure that the Company's annual information form, if one is prepared and filed, contains the required prescribed disclosure regarding the Committee, and, if management solicits proxies from the Company's securityholders for the purpose of electing directors to the Board, ensure that the prescribed disclosure is included in the Company's information circular.

**Access to Records**

The Committee will be permitted access to all records and corporate information that it determines to be required in order to perform its duties.