

## MANAGEMENT'S DISCUSSION AND ANALYSIS

*This following Management's Discussion and Analysis provides a review of the financial condition and results of operations for CannTrust Holdings Inc. (the "Company" or "CannTrust") for the three months and year ended December 31, 2018 (the "MD&A"). This MD&A should be read in conjunction with the Company's audited consolidated financial statements and notes thereto ("Financial Statements") for the year ended December 31, 2018. The financial information presented in this MD&A is derived from the Financial Statements. This MD&A contains "forward-looking information" within the meaning of Canadian securities laws and "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995 and other applicable United States safe harbors. All such forward-looking information and statements are made and disclosed in reliance upon the safe harbor provisions of applicable Canadian and United States securities laws. Forward-looking information and statements include all information and statements regarding the Company's intentions, plans, expectations, beliefs, objectives, future performance, and strategy, as well as any other information or statements that relate to future events or circumstances and which do not directly and exclusively relate to historical facts. Forward-looking information and statements often but not always use words such as "believe", "estimate", "expect", "intend", "anticipate", "foresee", "plan", "predict", "project", "aim", "seek", "strive", "potential", "continue", "target", "may", "might", "could", "should", and similar expressions and variations thereof. These information and statements are based on our perception of historic trends, current conditions and expected future developments, as well as other assumptions, both general and specific, that we believe are appropriate in the circumstances. Such information and statements are, however, by their very nature, subject to inherent risks and uncertainties, of which many are beyond the control of the Company, and which give rise to the possibility that actual results could differ materially from our expectations expressed in, or implied by, such forward-looking information or forward-looking statements. These risks and uncertainties include risks identified or incorporated by reference in this MD&A and in other documents that we make public, including our filings with the Canadian Securities Administrators (on SEDAR at [www.sedar.com](http://www.sedar.com)) and the U.S. Securities and Exchange Commission (on EDGAR at [www.sec.gov](http://www.sec.gov)). Unless otherwise stated, the forward-looking information and statements contained in this MD&A are made as of the date hereof and the Company disclaims any intention or obligation to publicly update or revise any forward-looking information or forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law. While we believe that our assumptions on which these forward-looking information and forward-looking statements are based were reasonable as at the date of this MD&A, readers are cautioned not to place undue reliance on these forward-looking information or statements. Furthermore, readers are reminded that forward-looking information and statements are presented for the sole purpose of assisting investors and others in understanding our objectives, strategic priorities and business outlook as well as our anticipated operating environment. Readers are cautioned that such information may not be appropriate for other purposes.*

*In this document and in the Company's consolidated financial statements unless otherwise noted, all financial data is prepared in accordance with International Financial Reporting Standards ("IFRS"). All amounts, unless specifically identified as otherwise, both in the Financial Statements and MD&A, are expressed in Canadian dollars. Unless otherwise stated all dollar amounts in this MD&A are in thousands of Canadian dollars (other than per share amounts and operating statistics).*

*This MD&A refers to certain non-IFRS financial measures. These measures are not recognized measures under IFRS, do not have a standardized meaning prescribed by IFRS and are, therefore, unlikely to be comparable to similar measures presented by other companies. Rather, these measures are provided as additional information to complement IFRS measures by providing further understanding of the Company's results of operations from management's perspective. Accordingly, they should not be considered in isolation nor as a substitute for analysis of financial information reported under IFRS. The Company uses Adjusted EBITDA, a non-IFRS financial measure, as a supplemental measure of operating performance*

*which highlight trends in its core business that may not otherwise be apparent when relying solely on IFRS financial measures. The Company believes that securities analysts, investors and other interested parties frequently use non-IFRS financial measures in the evaluation of issuers. The Company's management also uses this non-IFRS financial measure to facilitate operating performance comparisons from period to period, prepare annual operating budgets and to assess the Company's ability to meet capital expenditure and working capital requirements. See "Selected Information" and "Non-IFRS Financial Measure Reconciliation in this MD&A".*

The discussion and analysis in this MD&A is based on information available to management as of March 27, 2019.

## **Overview**

The Company is a publicly traded corporation incorporated in Canada with its head office located at 3280 Langstaff Road, Vaughan, Ontario L4K4Z8. The Company's common shares are traded on the Toronto Stock Exchange (the "TSX") under the trading symbol "TRST". As of February 25, 2019, the Company's common shares commenced trading on the New York Stock Exchange (the "NYSE") under the trading symbol "CTST". The Company is the parent company of CannTrust Inc., Elmcliffe Investments Inc. ("Elmcliffe"), Elmcliffe Investments [No. 2] Inc. and CTI Holdings Inc. The Company holds 50% of the outstanding shares of Cannabis Coffee & Tea Pod Company Ltd, 50% of the outstanding shares of Greytrust Inc. ("Greytrust"), 50% of the outstanding shares of O Cannabis We Stand On Guard For Thee Corporation, 19% of the outstanding shares of Stenocare A/S ("Stenocare") and 19.8% of the outstanding shares in Cannatrek Ltd ("Cannatrek") (see Business Developments section).

CannTrust is a Licensed Producer and distributor of medical and recreational cannabis pursuant to the provisions of the Cannabis Act (Canada) (the "Cannabis Act") and its regulations which came into force on October 17, 2018. The Company's primary focus is to produce and deliver the highest quality, standardized, cannabis products, strengthen its market share in legal cannabis markets in Canada, and expand its business in legal cannabis markets internationally.

CannTrust received its license from Health Canada in June 2014, and began production of medical cannabis at its hydroponic indoor facility in Vaughan, Ontario (the "Vaughan Facility"). In 2018, the Company repurposed the Vaughan Facility from a grow facility into a state-of-the-art extraction, manufacturing and packaging facility of approximately 60,000 square feet, including an in-house quality control laboratory. The Company owns and operates an approximately 450,000 square foot perpetual harvest facility in the Niagara region (the "Perpetual Harvest Facility"), which is expected to have an annual capacity of approximately 50,000 kilograms. The planned Phase 3 expansion is expected to increase the annual capacity of the Perpetual Harvest Facility to 100,000 kilograms upon its completion.

## **Canadian Medical Operations**

Executing on a patient-focused business model, the Company's medical cannabis operations currently have over 2,400 active physicians prescribing its products and more than 67,000 Canadian patients. The Company's medical cannabis operations are supported by its award-winning patient care center which on-boards, advises and assists patients with renewals and recurring orders through the Company's e-commerce platform. The Company's patient base grew by over 50% during 2018, from approximately 37,000 as at December 31, 2017, to 58,000 as at December 31, 2018. Since December 31, 2018, the Company's patient base has grown by approximately 16% through March 2019. With the implementation of the federal government's excise tax on medical cannabis on October 17, 2018, the Company made the decision to absorb the excise tax, so that the price of medical cannabis offered by CannTrust for its patients would not be affected, which impacted the Company's revenue. To serve the needs of patients, the Company provides same day delivery, patient assistance programs and telemedicine services.

As part of the Company's commitment to contribute to the growing body of evidence-based research regarding the use and efficacy of medical cannabis, the Company participates in, and offers support to, clinical trials with leading research universities worldwide. Current activities include a partnership with the Gold Coast University Hospital in Queensland, Australia This trial is exploring the effects of cannabidiol ("CBD") oil, using CannTrust's proprietary strain of CBD-dominant Cannatonic, in slowing the progression of Amyotrophic Lateral Sclerosis (ALS) and Motor Neuron Disease (MND). The trial will also assess the safety and tolerability of CannTrust's cannabis oil capsules and potential for improvement of patients' quality of life. In addition, a first of its kind trial is in process with Hamilton McMaster University in Ontario, to explore the impact of cannabis oil capsules, including CBD and 1:1, in treating chronic pain.

## **Canadian Recreational Operation**

In 2018, recreational adult use cannabis was legalized in Canada. The Company leveraged its strong position in the medical cannabis market to pursue growth opportunities in the recreational market. On June 21, 2018, the Government of Canada announced that Bill C-45 received Royal Assent. The Cannabis Act and the regulations thereunder, (the "Cannabis Regulations") came into force on October 17, 2018, thereby legalizing the sale of cannabis for adult recreational use, and replacing the Access to Cannabis for Medical Purposes Regulations (ACMPR) and the Controlled Drugs and Substances Act (Canada) (CDSA), as the governing legislation on the production, sale and distribution of medical cannabis. The ACMPR was repealed on the same day.

Management has invested significant time and resources in securing channels into the regulated recreational markets. These efforts have resulted in the Company securing supply related agreements with nine provinces across Canada. Currently, the Cannabis Regulations permit the sale of dried cannabis, cannabis oil, fresh cannabis, cannabis plants, and cannabis seeds. Edible cannabis and cannabis concentrates are currently prohibited but are expected to be permitted for legal sale on or before October 17, 2019, based on proposed amendments to the Cannabis Act not yet in force.

## **Market Opportunity**

Public health concerns and awareness around the dangers of opioids are driving the development of alternative approaches to pain management. These factors have created a significant market opportunity for cannabis-based products and may drive substantial upstream demand for Licensed Producers. The development of pharmaceuticals based on cannabis could significantly expand the market by ensuring consistent, quantifiable dosing, which will provide physicians with comfort in prescribing it.

The cannabis market opportunity continues to evolve as regulations change and consumer preferences evolve. According to Grand View Research, the global legal medical and recreational market opportunities are estimate to be \$150 billion by 2025. A strong presence in both the medical and recreational cannabis markets will be essential to capturing the full breadth of the opportunity, particularly the expansion of applications and products that can be leveraged across markets in the natural health products, health and wellness, adult-use recreational and pet care segments. The Company believes its foundation in medical cannabis will position the Company for continued leadership in new dosage formats and future pharmaceutical products, while its high-quality, standardized products will underpin strong recreational brands, providing consistent experiences for a variety of uses and consumer lifestyles.

## **Corporate Strategy**

The Company plans to increase its presence in existing markets, and drive growth by entering new regions, as well as broaden consumer awareness and education of the benefits of cannabis globally. The Company plans to expand its operational capacity and capabilities in Canada, with the expansion of its Perpetual Harvest Facility as well as by establishing an outdoor grow strategy to provide low cost production for use in extraction-based products.

The Company's international presence has been established so far through partnerships in Australia and Denmark. In Australia, the Company has a partnership with CannaTrek, one of the first Australian companies to be awarded a cannabis research, cultivation, manufacturing, sales and import license. Through a 19.8% ownership stake, the Company has access to CannaTrek's vertically-integrated model, expanding capacity and supply of low-cost product, which the Company believes will facilitate entry into Asia-Pacific markets. In Denmark, CannTrust has entered into a partnership with Stenocare, a leading cannabis company that holds supply agreements with distributors serving 99% of pharmacies in the country. A 19% ownership

stake in Stenocare enables CannTrust to leverage Danish licensing and strategic distribution agreements with hospitals and pharmacies, with the objective of increasing broader access to European markets. Through the import of CannTrust's cannabis products, Stenocare became the first company to make cannabis oils available to the Danish market.

To expand access to, and distribution of, CannTrust's products, the Company has been active in cultivating partnerships in medical, retail and product channels. The Company have expanded its partnership with Apotex, the largest Canadian-owned generic pharmaceutical company, to develop alternate dosage formats for the Company's medical cannabis products. Through this partnership, and upon completion of clinical trials, CannTrust seeks to apply for registration of proprietary formulations to become available in pharmacies and through benefit plans in as many of the 115 countries where Apotex currently distributes products as possible. With respect to retail distribution, an exclusive partnership has been established with Breakthru Beverage Group ("Breakthru"), the top alcohol distributor in Canada, and its wholly-owned subsidiary, Kindred. Through this partnership, CannTrust seeks to leverage Breakthru's experience with provincial boards and private retailers to gain access to its state-of-the-art route-to-market platform for the adult-use recreational market. This will include access to route planning, sales tools, analytics and insights on consumer behavior and preferences to maximize CannTrust's position in the market as adult-use expands. CannTrust has also established a partnership with National Access Cannabis, providing the Company with exposure to recreational retail sales in Canada. In addition, CannTrust is in active discussions with other beverage, manufacturing, pharmaceutical, mass retail, over-the-counter and other natural health product partners for future business development opportunities.

The Company plans to build on its foundation of high-quality, standardized products to enter new international markets where medical use is legalized, and to build on CannTrust's industry excellence to expand into other markets where the regulatory environment allows. The Company intends to continue to develop both commercial and research partnerships with emerging companies that have a proven understanding of their markets and regulatory environment.

## ***Product & Brands***

### Medical

For medical use, the Company offers dried flower formats, as well as several cannabis drops and encapsulated cannabis oil products. These products come in three varieties: CannTrust CBD Drops, CannTrust 1:1 Drops and CannTrust THC Drops. The Company also produces similar products in capsule form using two-piece capsules that are vegan-based and do not use animal products, such as gelatin, making them more desirable for a variety of customers and patients.

### Recreational

The Company has recently launched four adult use brands: liiv, Synr.g, Xscape and Peak Leaf. The first three are currently available in nine provinces, and the Peak Leaf line of products is available exclusively in British Columbia. Each product line is focused on a distinct lifestyle or usage type, and the branding provides the consumer with reference points for the type of experience they will have with specific strains.

The Company's brands have been specifically designed for the adult-use recreational market, targeting identifiable consumer segments as follows:

Liiv: for the experienced cannabis user. The consumer is an everyday consumer looking to get the most out of their day. This consumer is knowledgeable about cannabis and would ask about specific strains, potency levels or genetics. Liiv has the broadest product offering, including oil and capsules in addition to dried flower. The strains are named uniquely to this brand.

Synr.g: to enhance social occasions with friends, after hockey games, the book club, sitting on the dock or a dinner party. This consumer tends to be a less experienced cannabis user or new to the category. They would not necessarily go out and buy cannabis themselves, but they are open to experiencing it. Synr.g was designed to be approachable with strains that consumers can connect with. The strains are flavour first and aroma forward.

Xscape: simplifying the cannabis experience. This millennial consumer wants cannabis to be part of their lives. They would typically consume cannabis a few times a week either on their own or during social occasions. They want picking a strain to be easy, so they don't have to understand the details of cannabis (i.e., potency, strains etc). Each strain has been particularly curated to provide an experience that matches with the activity the consumer is doing.

Peak Leaf: exclusive to British Columbia, a brand for consumers that are health and wellness focused. They want to find balance through their mind and body, and the best way for them to do this is through nature. The strains are named after unique experiences that connect the consumer with the outdoors or helps them bring the outside in.

The Company is also expanding product development and branding across other applications. In addition, with respect to pet care, CannTrust has entered a joint venture with Grey Wolf, a veterinary health company. Through this partnership, the Company seeks to capitalize on the significant pet care market estimated at over \$5 billion annually in Canada by Packaged Facts.

### ***Industry-Leading Research and Development and Intellectual Property (“IP”)***

The Company has developed industry-leading research and development capabilities, and is growing a portfolio of intellectual property. The Company has engineered highly-differentiated plants that are low-cost and produce high cannabinoid content for extraction-grade cannabidiol (CBD) and delta 9 tetrahydrocannabinol (“THC”).

#### Patents

As of the date of this MD&A, the Company’s patent portfolio consists of one issued patent in each of the United States, Australia and Canada. The Company’s patent portfolio also includes patent applications in varying stages of prosecution in the United States, China, and Europe, as well as pending Patent Cooperation Treaty (PCT) applications.

The Company consider patents to be an important contributor to our future business growth profile and therefore will devote resources to maintaining and augmenting its patent portfolio. The Company’s patent strategy is to pursue the broadest possible patent protection on its proprietary products and technology in selected jurisdictions (Canada, United States, Australia, China, and Europe) and to achieve the maximum duration of patent protection available. In general, the Company’s strategic approach is to build a patent portfolio that provides broad protection of our technology.

#### Trademarks

The Company has registered "CannTrust " and two stylized versions of “CannTrust” with the Canadian Intellectual Property Office. The Company currently has 19 additional trademark applications pending with the Canadian Intellectual Property Office, and 6 of these marks—including “CannCup” and “Quality you CannTrust”—currently stand as allowed. The Company has also filed trademark applications at equivalent offices in certain other jurisdictions internationally. The Company believes that its trademarks and other IP rights are important to its success and its competitive position. In particular, its registered

trademarks and service marks are valuable assets that distinguish its brand and reinforce its customers' positive perception of its products.

### Intellectual Property Protection

The Company's success depends, in part, on its ability to protect its proprietary technology and IP. In addition to its patent portfolio, the Company relies upon trade secrets, know-how and continuing technological innovations to develop its competitive position. The Company seeks to establish and safeguard its IP, in part, through a combination of confidentiality, licensing and other agreements with executives, consultants and third parties. In the case of employees and consultants, such agreements provide that all inventions resulting from work performed for the Company utilizing its property or relating to its business and conceived of or completed by the individual during employment are the Company's exclusive property.

### Research and Development

The Company is a leader in the use of micro- and nano-technology in the cannabis sector. This technology improves plant bioavailability and enhances the amount of active CBD and/or THC that a patient or consumer absorbs. The technology has also lowered manufacturing costs and has allowed the Company to develop a broad spectrum of concentrated, water-soluble, tasteless and odorless consumer products, including food additives, beverages, edibles and sprays. An example of the Company's product innovation is the patented *BrewBudz* line of single-serve, cannabis beverage pods that will have multiple applications for consumer use, demonstrating the Company's ability to leverage its research capabilities to develop innovative products for consumers. Both the Company's research and development and resulting IP position the Company well for expanding consumer markets as a result of the anticipated regulatory changes later in 2019.

## ***Outlook***

CannTrust expects to continue to make investments in a disciplined and deliberate manner to position the Company to take advantage of future opportunities, both domestically and internationally. The Company continues to invest in people, process, technology and marketing, and is developing innovative products for the expected legalization of the edibles market in Canada later in 2019. These products include vape pens, beverages and confectionaries. CannTrust is also making strategic investments into its capacity to prepare for expected increases in demand for its products. The Company believes it will be a leader in outdoor growing capability, which will leverage its proprietary genetics and has the potential to accelerate the Company's low-cost production advantage.

The completed Phase 2 expansion of the Perpetual Harvest Facility is expected to increase production capacity to 50,000kg on an annualized basis. With this increased production capability, the Company believes revenue will increase significantly in 2019 compared to the 2018 full year results, with revenue growth accelerating throughout the year starting in the second quarter of 2019. The Company is positioned to receive all necessary regulatory approvals to support this planned growth. In addition, having obtained all necessary permits from the Town of Pelham for the construction of its Phase 3 expansion, the Company continues to expect its Perpetual Harvest Facility capacity to reach 100,000kg on an annualized basis in the second half of 2020.

Driving further capacity enhancement for primarily extraction-based products, CannTrust's outdoor growing initiatives are targeted to deliver material future revenue contributions as early as 2020. The Company estimates the production from this initiative to result in an additional 100,000kg to 200,000kg of cannabis in 2020 subject to regulatory approvals.

CannTrust's investments into people, process, technology and marketing are expected to impact near-term profitability as the Company continues to scale. These are calculated investments that the Company expects will result in increasing yields, lower cost per gram and the advance of the Company's brand and strategic initiatives. In the first quarter of 2019, adjusted EBITDA is expected to remain consistent with the fourth quarter of 2018. Profitability is expected to improve following the full realization of the increased operational capacity of the Phase 2 expansion. As the Phase 2 expansion contributes to positive operating leverage, the Company is targeting a return to profitability. CannTrust expects that its gross margin before fair value changes to biological assets should increase throughout 2019 as the Company increases its production levels and gains production efficiencies.

## **Business Developments**

The Company is diversifying its business by developing new and innovative products and dosage forms for controlled and responsible use of medical cannabis. In 2015, the Company together with Club Coffee L.P. founded Cannabis Coffee & Tea Pod Company Ltd. ("CCTPC") to launch BrewBudz™ globally. BrewBudz™ is a patented unit dose pod formulation allowing the administration of cannabis using single-serve brewing pods for use in Keurig, Nespresso and Tassimo type brewers.

In March 2017, through Elmclyffe, the Company acquired the real estate assets and related equipment of a greenhouse in the Town of Fenwick, Ontario within the Niagara Region. In October 2017, CannTrust received its Health Canada Cultivation Licence under the ACMPR for its completed 250,000 square foot Phase 1 redevelopment of the Perpetual Harvest Facility and began production there. The redevelopment of the Perpetual Harvest Facility was Canada's first automated perpetual harvest designed specifically for this scale of cannabis production. The Company received its Health Canada Sales License for the Perpetual Harvest Facility in February 2018. The Phase 2 expansion at the Perpetual Harvest Facility was substantially completed during the first quarter of 2019.

On November 6, 2017, CannTrust received Health Canada approval to export medical marijuana internationally to countries where medical marijuana is legalized and the Company began shipping to Australia. Australia is the first of many markets that the Company seeks to supply. In March 2018, CannTrust expanded internationally through a joint venture in Denmark with Stenocare. Initially Stenocare will sell CannTrust's market leading standardized cannabis products in Denmark while working towards developing a domestic growing facility. CannTrust initially received a 25% equity stake in Stenocare. On July 6, 2018, Stenocare received approval to distribute CannTrust products in Denmark. The Company's cannabis oils are the first oils approved for Denmark's list of admitted cannabis products and are the only "ready-to-use" oil products available in Denmark. With the completion of all phases of the Niagara expansion, the Company believes it have the ability to supply a substantial share of the increased demand arising from international markets.

In June 2018, the Company entered into a shareholder's agreement with Grey Wolf to develop ground breaking cannabis products to support the well-being of pets. Under the terms of the partnership Grey Wolf and CannTrust are equal partners in a newly created joint venture of Grey Wolf. On August 14, 2018, the Company invested \$1,000 in Grey Wolf. In addition, CannTrust will, upon exercise of share purchase warrants held by CannTrust, acquire a more significant position and likely role in Grey Wolf's cannabis-related activities.

On June 5, 2018, the Company closed its short form prospectus offering, on a bought deal basis, including the full exercise of the over-allotment option. A total of 11,155,000 units of the Company ("Units") were sold at a price of \$9.00 per Unit for aggregate gross proceeds of \$100,395. Each Unit was comprised of one common share and a half warrant. Each full warrant is exercisable to acquire one common share of the Company at an exercise price of \$12.00 per share.

During the fiscal year, as part of the legalization of the recreational market for cannabis, the Company entered into agreements with nine Canadian provinces to supply a broad range of adult-use products, consisting of the Company's four recreational cannabis brands liiv, Xscape, Synr.g and Peak Leaf.

On October 5, 2018, the Company acquired a 50% interest in O'Cannabis We Stand On Guard For Thee Corporation ("O'Cannabis"), a telemedicine provider for gross proceeds of \$500. The Company is entitled to appoint two out of four board members of O'Cannabis.

On October 15, 2018, as part of Stenocare's initial public offering ("Stenocare IPO"), the Company purchased 272,727 common shares of Stenocare. Stenocare began trading on the Spotlight Stock Market under the trading symbol STENO on October 26, 2018. Post this Stenocare IPO, the Company holds 19% of the outstanding shares of Stenocare.

On October 17, 2018, the Company finalized an exclusive partnership agreement with Kindred Partners Inc., a wholly-owned Canadian subsidiary of Breakthru, the largest Canadian beverage alcohol broker of premium spirits, wine and beer brands, to represent CannTrust's specialty products to Canadian adult consumers for recreational use. In connection with this partnership Breakthru purchased 902,405 common shares of CannTrust at a purchase price of \$10.23 per share for gross proceeds of \$9,232.

On October 24, 2018, the Company closed on the purchase of a 19.4 acre property on land adjacent to the Perpetual Harvest Facility. On January 22, 2019, the Company obtained all necessary permits from the Town of Pelham to construct the Phase 3 expansion. The Company will begin construction of an additional 390,000 square foot Phase 3 expansion on the 19.4 acres of recently purchased adjacent land. The Company has targeted the completion of the Phase 3 expansion in the third quarter of 2020. After completion of Phase 3, the Company expects the Perpetual Harvest Facility to have a total production capacity of 100,000 kg

per year. The Company expects to have in excess of 800,000 square feet of production capacity after completion of all phases of the Perpetual Harvest Facility expansion. The Company continues to research options for additional growing capacity as the adult-use recreational market evolves. In March 2018, the Company entered into a long term agreement with Envest Corp., to provide low cost heat and power from natural gas co-generation at the Company's Perpetual Harvest Facility. The implementation of a 10 megawatt cogeneration solution will ensure that the Company remains one of the lowest cost producers in the industry.

On October 26, 2018, the Company entered into a strategic partnership with Australian licensed producer, Cannatrek. Cannatrek is one of the first Australian vertically integrated enterprises to be awarded a cannabis research, cultivation, manufacturing, sales and import license by federal and state governments and is pioneering a world class 1.7 million sq. ft. greenhouse facility. The Company believes that this greenhouse project will provide significant supply for the Asia-Pacific region and will allow CannTrust to purchase quality, low-cost cannabis from Cannatrek. As part of the partnership, CannTrust made an investment for a 19.8% stake in Cannatrek, with an option to maintain this shareholding through any future share issuances up to and including Cannatrek completing an initial public offering.

On October 26, 2018, the Company invested \$5 million in National Access Cannabis Corp ("NAC"), a Canadian cannabis retailer. NAC's common shares are listed on the TSX Venture Exchange under the trading symbol META. The Company owns approximately 3% of the outstanding common shares of NAC.

## **2018 Full Year Highlights**

- Record annual revenues of \$45,645, a 132% increase from 2017
- 52% of revenues from extract products
- Approximately 58,000 active medical patients as at December 31, 2018, a 57% increase from 2017
- Sold 7,251 kg of dried Cannabis and dried Cannabis equivalent at an average net price of \$6.29 per gram
- Dry cannabis sales consisted of 58% of revenues from wholesale in international and recreational markets and 42% from Canadian medical sales.
- Extract sales, includes oils and capsules, consisted of 97% of revenues from Canadian medical sales and 3% from wholesale in international and recreational markets
- Cost of sales per gram sold and cash cost per gram sold were \$2.72 and \$2.45, respectively, compared to \$3.44 and \$2.88 in 2017

## **2018 Fourth Quarter Highlights**

- Record quarterly revenues of \$16,166, a 28% increase from the third quarter of 2018
- 16% growth in medical patients
- Sold 3,407 kg of dried Cannabis and dried Cannabis equivalent at an average net price of \$4.75 per gram
- Dry cannabis sales consisted of 67% of revenues from wholesale in international and recreational markets and 33% from Canadian medical sales.
- Extract sales, includes oils and capsules, consisted of 95% of revenues from Canadian medical sales and 5% from wholesale in international and recreational markets
- Cost of sales per gram sold and cash cost per gram sold were \$3.08 and \$2.94, respectively, compared to \$6.04 and \$5.16 in the fourth quarter of 2017

## Results of Operations for the three and twelve months ended December 31, 2018 and 2017

### Selected Information

|                                                                                       | Three months ended |         | Year ended  |           |
|---------------------------------------------------------------------------------------|--------------------|---------|-------------|-----------|
|                                                                                       | December 31        |         | December 31 |           |
|                                                                                       | 2018               | 2017    | 2018        | 2017      |
|                                                                                       | \$                 | \$      | \$          | \$        |
| <b>Financial Data</b>                                                                 |                    |         |             |           |
| Net revenue                                                                           | 16,166             | 6,983   | 45,645      | 20,698    |
| Gross profit before unrealized gain on changes in the fair value of biological assets | 5,677              | 2,406   | 25,955      | 13,018    |
| Gross margin before unrealized gain on changes in the fair value of biological assets | 35%                | 34%     | 57%         | 63%       |
| Net (Loss) Income                                                                     | (25,522)           | 6,253   | (13,554)    | 6,885     |
| Earnings per share (basic)                                                            | (0.26)             | 0.08    | (0.14)      | 0.09      |
| Earnings per share (diluted)                                                          | (0.26)             | 0.08    | (0.14)      | 0.09      |
| Cashflows used in operations                                                          | (7,977)            | 924     | (20,447)    | (502)     |
| Adjusted EBITDA <sup>(1)</sup>                                                        | (8,547)            | (851)   | (7,181)     | 2,778     |
| Operating Statistics:                                                                 |                    |         |             |           |
| <i>Canadian Medical</i>                                                               |                    |         |             |           |
| Dried cannabis sold (grams)                                                           | 377,920            | 296,200 | 1,387,945   | 1,026,870 |
| Average Revenue per gram <sup>(3)</sup>                                               | \$7.10             | \$8.14  | \$8.02      | \$8.31    |
| Total dried cannabis equivalent sold from extracts (grams) <sup>(2)</sup>             | 1,639,025          | 461,469 | 3,984,132   | 1,206,349 |
| Average Revenue per gram of cannabis equivalent from extract sales <sup>(3)</sup>     | \$4.29             | \$9.34  | \$5.76      | \$9.39    |
| <i>Wholesale</i> <sup>(4)</sup>                                                       |                    |         |             |           |
| Dried cannabis sold (grams) <sup>(2)</sup>                                            | 1,286,093          | -       | 1,724,324   | -         |
| Average Revenue per gram <sup>(3)</sup>                                               | \$4.24             | -       | \$4.67      | -         |
| Total dried cannabis equivalent sold from extracts (grams) <sup>(2)</sup>             | 103,899            | -       | 154,659     | -         |
| Average Revenue per gram of cannabis equivalent from extract sales <sup>(3)</sup>     | \$3.86             | -       | \$5.02      | -         |
| Cost of Sales per gram sold <sup>(1)</sup>                                            | \$3.08             | \$6.04  | \$2.72      | \$3.44    |
| Cash Cost per gram sold <sup>(5)</sup>                                                | \$2.94             | \$5.16  | \$2.45      | \$2.88    |

**Notes:**

(1) See description of non-IFRS measure in the "Non-IFRS Financial Measure and Reconciliation" section of this MD&A. The terms Adjusted EBITDA, and Cash Cost per gram do not have any standardized meanings under IFRS and therefore they may not be comparable to similar measures presented by other companies.

(2) Dried equivalent of cannabis for the three and twelve months ended December 31, 2018 is calculated on the basis of 2.48 ml and 3.06 ml respectively of extracts equivalent to 1 g of dried cannabis compared to 4.73 ml of extracts equivalent to 1 g of dried cannabis for the three and twelve months ended December 31, 2017. The decrease in ml of oil equivalent to 1 gram of cannabis compared to the prior period is a result of cannabis with lower cannabinoid content being used in the extraction process.

(3) Average Revenue per gram (net) is calculated by taking the revenue (Canadian Medical or Wholesale) relating to sales of dry cannabis as per the Company's Financial Statements prepared in accordance with IFRS, divided by the grams of dry cannabis sold (Canadian Medical or Wholesale) in the period per the MD&A. Average Revenue per gram of cannabis equivalent from extract sales (net) is calculated by taking the revenue relating to sales of extracts as per the Company's Financial Statements prepared in accordance with IFRS divided by the equivalent grams of dried cannabis used in the extract sold in the period.

(4) Wholesale revenue includes goods and services sold to international markets, the Canadian recreational market and to third party Licensed Producers.

(5) Cost of sales per gram sold is calculated by taking the cost of goods sold as per the Company's Financial Statements prepared in accordance with IFRS, divided by the grams of dry cannabis and cannabis equivalent sold in the period per the MD&A.

**Operational Overview**

|                       | <b>Location</b>          | <b>Use</b>                  | <b>Size</b>     | <b>Capacity</b>                      | <b>Status</b> | <b>License</b>       |
|-----------------------|--------------------------|-----------------------------|-----------------|--------------------------------------|---------------|----------------------|
| Vaughan               | Vaughan, Ontario, Canada | Manufacturing and Packaging | 60,000 sq ft    | n/a                                  | In production | Cultivation and sale |
| Niagara Phase 1 and 2 | Pelham, Ontario, Canada  | Grow                        | 450,000 sq ft   | 50,000 kg/year                       | In production | Cultivation and sale |
| Niagara Phase 3       | Pelham, Ontario, Canada  | Grow                        | 390,000 sq ft   | 50,000 kg/year                       | Permitted     |                      |
| Outdoor               | Canada                   | Grow                        | Up to 200 acres | 100,000 kg/year –<br>200,000 kg/year | Planned       |                      |

**Medical Patients (approximately)**

|                             | <b>Q4 2018</b> | <b>Q3 2018</b> | <b>Q2 2018</b> | <b>Q1 2018</b> | <b>Q4 2017</b> | <b>Q3 2017</b> | <b>Q2 2017</b> | <b>Q1 2017</b> |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Active Patients             | 58,000         | 50,000         | 45,000         | 40,000         | 37,000         | 31,000         | 20,000         | 14,000         |
| Increase in Active Patients | 8,000          | 5,000          | 5,000          | 3,000          | 6,000          | 11,000         | 6,000          | 4,000          |
| Quarterly Growth            | 16%            | 11%            | 13%            | 8%             | 19%            | 55%            | 43%            | 40%            |

As of March 2019, the Company had over 67,000 active patients, an increase of over 15% from the beginning of the year.

## **Review of the Financial Results of Operations for the three and twelve months ended December 31, 2018 and 2017**

### *Revenue*

Revenue for the quarter ended December 31, 2018 was \$16,166 compared to \$6,983 for the comparable 2017 period, an increase of 132%. Revenue for the year ended December 31, 2018 was \$45,645 compared to \$20,698 in the comparable 2017 period, an increase of 121%. The increase in revenue in the quarter and year ended December 31, 2018 was primarily attributable to increased sales volumes due to the growth in the Company's medical patient base from approximately 37,000 at December 31, 2017 to 58,000 as at December 31, 2018, as well as sales derived from the Company's new domestic and international wholesale revenue streams, which includes sales to the provinces related to the legalization of the adult-use recreational market.

The total quantity of medical cannabis sold to patients during the three months ended December 31, 2018 increased to 2,017 kg, a 166% from the comparable 2017 period. For the full year 2018, the Company sold 5,372 kg of medical cannabis, an increase of 141% from the comparable 2017 period. The total quantity of cannabis sold in the wholesale market for the three and twelve months ended December 31, 2018 was 1,390 kg and 1,879 kg, respectively. There were no wholesale sales in the prior year periods.

Canadian Medical average revenue per gram realized for the three and twelve months ended December 31, 2018, decreased from the prior year periods mainly due to the Company absorbing the excise tax following the implementation of the excise tax in October 2018. The impact of absorbing the excise tax on medical products was \$871.

### *Cost of Sales*

Cost of goods sold during the three and twelve months ended December 31, 2018 were \$10,489 and \$19,690, respectively, compared to \$4,577 and \$7,680 in the comparable prior year periods. Cost of goods sold includes pre-harvest production, post-harvest production and processing costs of cannabis, packaging, testing and inventory purchased from third parties. Costs of goods sold during the three and twelve months ended December 31, 2018 increased compared to the comparable 2017 periods due to increases in sales quantities and the associated increase in the scale of production activities.

Plants that are in pre-harvest are considered biological assets and are recorded at fair market value less cost to sell at their point of harvest. Costs to sell include trimming, fulfillment, testing, partnership commissions and shipping costs. As the plants continue to grow through the pre-harvest stages, pre-harvest cash costs are capitalized to the value of the cannabis plants. An additional non-cash unrealized gain is recognized in gross profit, reflecting the changes in fair value of the biological assets in excess of the pre-harvest cash costs capitalized to the value of the cannabis plants. At harvest, the biological assets are transferred to inventory at their fair value less cost to sell which becomes the deemed cost of inventory. Biological assets inventory is subsequently expensed in cost of goods sold and 'Fair Value changes in biological assets included in inventory sold'. Together the unrealized gain from changes in the fair value of biological assets, the fair value changes in biological assets included in inventory sold and cost of goods sold are included in gross profit. The unrealized gain from changes in the fair value of biological assets will vary from period to period based upon the number of pre-harvest plants, where the plants are in the grow cycle at the end of the period, the proportion of capitalized cash costs, the strains being grown and the ultimate net selling price that that can be realized.

The fair value changes in biological assets included in inventory sold, net of the unrealized gain/(loss) on changes in fair value of biological assets, in the three and twelve months ended December 31, 2018 was a loss of \$13,960 and a gain of \$10,538, respectively, compared to a gain of \$8,630 and \$10,963, respectively, for the comparable 2017 periods. For the three months ended December 31, 2018, harvested production was 4,816 kg, a 712% increase from the 593 kg in the comparable 2017 period. The increase in the fair value of biological assets recorded during the period was due to the ramp up of production at the Perpetual Harvest Facility, partially offset by the impact of valuation assumptions such as the average revenue per gram and the stage of the plants as of the reporting date. While the total number of plants in production increased significantly year over year, as at December 31, 2018 the average stage of the plants in the grow cycle combined with lower expected revenue per gram as a result of the recreational market resulted in the limited increase in the value of biological assets.

#### *Gross Profit / (Loss)*

Gross profit/(loss) for the three and twelve months ended December 31, 2018 was a loss of \$8,282 and profit of \$36,493, respectively, compared to a gross profit of \$11,036 and \$23,980 in the comparable prior year periods. Gross profit includes the unrealized gains and losses on changes in the fair value of biological assets. The gross loss for the three months ended December 31, 2018 was due to the unrealized loss recognized on changes in the fair value of biological assets during the quarter. The increase in gross profit in 2018 compared to 2017 was principally due to the increase in sales.

Excluding the impact of the change in the fair value of biological assets, gross profit for the three and twelve months ended December 31, 2018 was \$5,677 and \$25,955, respectively, compared to a gross profit of \$2,406 and \$13,018 in the comparable prior year periods. The increase in gross profit excluding the impact of the change in the fair value of biological assets was a result of increased scale of operations. Gross margin percentage excluding the impact of the change in the fair value of biological assets for the three and twelve months ended December 31, 2018 was 35% and 57%, respectively, compared to 34% and 63% in the comparable prior year periods. The gross margin percentage excluding the impact of the change in the fair value of biological assets was lower in the fourth quarter of 2018 compared to the full year mainly due to the Company absorbing the impact of the excise tax on medical sales as well as the increase in recreational sales which have lower revenue per gram.

#### *Operating Expenses*

Operating Expenses for the three and twelve months ended December 31, 2018 were \$15,896 and \$45,310, respectively, compared to \$4,762 and \$14,767, respectively, in the comparable prior year periods. The increase in expenses in 2018 was due to increases in general and administrative expenses, selling and shipping costs and salaries and benefits, as the Company changed and expanded its leadership team, and increased its staff to meet the increased demand for the Company's products. In addition, the Company incurred a substantial increase in marketing and promotion expenses of approximately \$7,000 as a result of the Company's launch of four new recreational brands with the legalization of adult-use recreational cannabis in Canada in October 2018. Professional fees in 2018 increased due to the additional legal and audit work relating to the Company's transition to the TSX and to the NYSE, and business development opportunities.

#### *Amortization Expense*

Amortization related to pre- and post-harvest production are capitalized to biological assets and inventory and then expensed as part of cost of goods sold when the associated inventory is sold. Amortization related to operations is expensed directly to the Consolidated Statement of Net Income and Comprehensive Income. Total amortization expense for the three and twelve months ended December 31, 2018 was \$103

and \$4,117, respectively, compared to \$655 and \$2,217 in the comparable prior year periods. As at December 31, 2018, \$693 of amortization from the year ended 2018 remained in inventory. The increase in amortization expenses in 2018 was due to an increase in amortization on equipment purchases and building enhancements to the Perpetual Harvest Facility.

#### *Share-based compensation*

For the three and twelve months ended December 31, 2018, share-based compensation expense was \$1,568 and \$8,056, respectively, compared to \$850 and \$2,311, for the corresponding 2017 periods. The increase in the 2018 share-based compensation was attributable to an increase in the number of unvested stock options outstanding combined with an increased valuation of stock options granted during the period. There were 4,114,563 stock options outstanding as at December 31, 2018 compared to 3,526,000 stock options which were outstanding as at December 31, 2017.

#### *Finance Activities, Transaction Costs and Other Income*

For the three and twelve months ended December 31, 2018 the Company earned interest income, net of the mortgage interest expense, of \$647 and \$312 respectively, compared to interest expense of \$41 and \$261 in the comparable prior year periods. Other income/loss for the three and twelve months ended December 31, 2018 was a loss of \$4,075 and \$2,034 respectively, compared to other income of \$65 and \$143 for the comparable prior year periods. Other loss for the twelve months ended December 31, 2018 is primarily due to the revaluation of financial assets.

Accretion expense for the three and twelve months ended December 31, 2018 associated with the outstanding mortgage financing was \$63 and \$209 respectively. Accretion expense for the three and twelve months ended December 31, 2017 associated with the Company's convertible debt was \$Nil and \$234 respectively.

No transaction costs were incurred in the twelve months ended December 31, 2018. Transaction costs of \$204 for the twelve months ended December 31, 2017 represent the costs associated with the purchase of the Perpetual Harvest Facility.

The loss on revaluation of the derivative liability, being the change in value attributable to the conversion feature on the Company's convertible debt, for the year ended December 31, 2018 was \$Nil, compared to a \$1,625 loss on revaluation of the derivative liability for the twelve months ended December 31, 2017. The \$3,041 principal amount of the Company's convertible debentures together with accrued and unpaid interest was automatically converted into 2,885,354 Common Shares of the Company upon the August 2017 listing of the Company's common shares on the Canadian Securities Exchange.

The impairment loss was recognized in relation to the intangible assets recognized during the year ended December 31, 2018 for rights to proprietary genetics. Management considers it no longer viable for these genetics to be used in production, and the rights cannot be transferred to another party, the Company recognized an impairment loss of \$988,160 reducing the carrying value to \$Nil.

#### *Income Tax*

The difference between the Company's statutory tax rate and its effective tax rate for each period is due to permanent differences between the tax treatment of capital transactions, transaction costs and non-deductible costs including share based compensation, in addition to reserves and reversal of reserves for

deferred tax assets not recognized. These differences can result in significant increases or decreases in the effective income tax rate when comparing one period to another.

The Company's statutory tax rate is 26.5%. The Company's effective tax rate for the three and twelve months ended December 31, 2018 is (10.6)% and 13.0% respectively. For the three and twelve months ended December 31, 2018 the Company has recognized a deferred tax recovery of \$3,325 and a deferred tax expense of \$1,433 respectively, compared to \$Nil deferred tax expense in the comparable prior year periods.

#### *Net (Loss)/Income*

Net loss for the three and twelve months ended December 31, 2018 was a net loss of \$25,876 and \$13,908, respectively, compared to a net income of \$6,253 and \$6,885, respectively, in the comparable 2017 periods.

#### *Capital Projects*

In March 2017, the Company, through its wholly-owned subsidiary Elmcliffe, completed the acquisition of a 430,000 square foot commercial greenhouse facility in the Niagara region for cash consideration of \$6,500,000. In addition, an unsecured promissory note in the amount of \$1,000,000, payable over five years in five consecutive payments of \$200,000, was issued to the vendor. The redeveloped Perpetual Harvest Facility provides the Company with increased production capacity to meet growing market demand. The 250,000 square foot first phase of the conversion to ACMPR standards which commenced in April 2017 was completed in the fall of 2017. At the time, the redevelopment of the Perpetual Harvest Facility was Canada's first continuous harvest automated greenhouse designed specifically for this quantum scale of cannabis production.

The Company received its Health Canada License under the ACMPR on October 6, 2017 for the Phase 1 redevelopment. On February 12, 2018 the Company obtained its Health Canada sales license under the ACMPR and began operating Phase 1 at full capacity. The 200,000 square foot Phase 2 expansion at the Perpetual Harvest Facility was substantially completed in the first quarter of 2019.

In January 2019, the Company received the necessary permits to develop the 390,000 sq. ft. Phase 3 Niagara expansion, which when completed, is expected to increase the annual production capacity of the Company to 100,000 Kg.

## Liquidity and Capital Resources as at December 31, 2018 and December 31, 2017 and for the years ended December 31, 2018 and 2017

Operating cash flow and equity and debt financings are the Company's primary source of liquidity. At December 31, 2018 cash and short term investments were \$72,047 compared to \$18,163 as at December 31, 2017.

Set out below is a schedule of the Company's Working Capital as at December 31, 2018 and December 31, 2017.

|                                                | <b>December<br/>31, 2018</b> | <b>December<br/>31, 2017</b> |
|------------------------------------------------|------------------------------|------------------------------|
|                                                | <u>\$000s</u>                | <u>\$000s</u>                |
| Current Assets                                 | 128,442                      | 44,228                       |
| Current Liabilities                            | 16,797                       | 6,780                        |
| Working Capital                                | 111,645                      | 37,448                       |
| Ratio of current assets to current liabilities | 7.6                          | 6.5                          |

Working capital is primarily represented by cash, short-term investments, accounts receivable, inventory, biological assets, harmonized sales tax recoverable and prepaids, offset by accounts payable and the current portions of the mortgage and the promissory note issued on the Perpetual Harvest Facility acquisition. The Company's working capital increased by \$74,197 to \$111,645 as at December 31, 2018 compared to \$37,448 at December 31, 2017. The increase in working capital in the twelve months ended December 31, 2018 was primarily due to the net increase in cash from the capital raised in the bought deal and the Kindred equity purchase, mortgage financing and the exercise of warrants and stock options, together with an increase in inventory, biological assets and accounts receivable.

### *Operating Activities*

During the twelve months ended December 31, 2018, the Company's cash flow used in operating activities was \$24,048, compared to cash flow used in operating activities of \$502 in the comparable 2017 period. This increase in cash used in operating activities is due to lower income and higher levels of investment in working capital, due to the increased production and accounts receivable resulting from the legalization of the recreational market.

### *Investing Activities*

Cash used in investing activities during the twelve months ended December 31, 2018 was \$106,074 compared to \$30,787 in the comparable 2017 period. The 2018 investing activities includes \$62,822 of net cash from the equity offering invested on an interim basis in short term investments. In addition, \$33,019 was utilized for the building improvements and equipment associated with the redevelopment of the Perpetual Harvest Facility and for increasing the processing and manufacturing capacity at the Company's Vaughan facility. During the twelve months ended December 31, 2018 cash used in the purchase of investments and financial assets was \$13,880 compared to \$284 in the comparable 2017 period relating to acquiring interests in ventures such as Stenocare, Cannatrek and O'Cannabis. The 2017 investing activities includes \$6,500 used for the acquisition of the Perpetual Harvest Facility, \$23,994 related to leasehold improvements and equipment associated with the Phase 1 redevelopment of the Perpetual Harvest Facility and \$200 invested in short-term investments.

### *Financing Activities*

Cash of \$121,183 was generated from financing activities during the twelve months ended December 31, 2018 compared to \$44,354 in the comparable 2017 period. The 2018 financing activities includes net proceeds of \$103,470 from the June 2018 bought deal and Kindred equity purchase, \$13,280 from the mortgage financing and \$5,184 from the exercise of warrants and stock options. In the 2017 period, the Company raised net proceeds of \$24,769 from the February special warrant and common share financing, \$18,844 in net proceeds from the November private placement and \$1,323 from the exercise of warrants.

### *Liquidity*

The Company monitors its liquidity on a continuous basis to ensure there is sufficient capital to meet business requirements. The Company manages its capital structure and adjusts it to take into account changes in economic conditions and the risk characteristics of the underlying assets. To maintain or adjust its capital structure, the Company may, where necessary, control the amount of working capital, pursue financing, manage the timing of its capital expenditures, or sell assets. The Company is not subject to externally imposed capital requirements.

The Company's capital structure is comprised of a combination of debt and shareholders' equity. Set out below is a schedule of the capital structure of the Company as at December 31, 2018 and December 31, 2017.

|                      | <b>December<br/>31, 2018</b> | <b>December<br/>31, 2017</b> |
|----------------------|------------------------------|------------------------------|
|                      | <i>\$000s</i>                | <i>\$000s</i>                |
| Promissory note      | 800                          | 1,000                        |
| Mortgage             | 13,248                       | -                            |
| Shareholders' equity | 174,026                      | 70,868                       |
| Debt to equity       | 8.1%                         | 1.4%                         |

The Company constantly monitors and manages its cash flows to assess the liquidity necessary to fund operations. As at December 31, 2018, CannTrust maintained \$72,047 of cash and short term investments, compared to \$18,163 at December 31, 2017. Cash and short term investments increased \$53,884 in the year. Working capital provides funds for the Company to meet its operational and capital requirements. As at December 31, 2018, the Company maintained working capital of \$111,645. Management expects the Company to have adequate funds available on hand to meet the Company's obligations over the next 12 months.

### *Financial Instruments, Financial Risk Management and Other Instruments*

The Company does not utilize financial instruments such as hedging instruments to manage financial risks.

The Company's financial instruments consist of cash, accounts receivable, restricted cash, short-term investments, warrants, accounts payable and accrued liabilities, promissory note and mortgage. The Company does not believe that it is exposed to significant currency or credit risk arising from these financial instruments. These financial instruments are measured at fair value or are short term in nature where fair

value approximates their carrying value. Note 20 to the Financial Statements discloses risks related to interest rates, liquidity and credit.

### *Contractual Obligations*

The Company's commitments as at December 31, 2018 consisted of the following (\$000s):

|                   | <b>Total</b> | <b>2019</b> | <b>2020</b> | <b>2021</b> | <b>2022</b> | <b>2023</b> | <b>Beyond</b> |
|-------------------|--------------|-------------|-------------|-------------|-------------|-------------|---------------|
| Lease obligations | 67,233       | 6,600       | 3,437       | 3,408       | 3,408       | 3,382       | 46,998        |

On March 7, 2018, the Company executed a long-term agreement with Envest Corp. to provide cogeneration derived heat and power at its 450,000 square foot Perpetual Harvest Facility. As part of the agreement, CannTrust is committed to \$61,976 in aggregated lease and maintenance payments for a 20-year term to secure the rights to the Cogen equipment. The Company is currently utilizing a temporary Cogen equipment system to provide heat and power while the long-term Cogen solution is being installed. The installation, once completed, will constitute a lease under IFRS 16 and the Cogen equipment will be recorded within property and equipment, with a corresponding lease liability recognized. Embedded service costs pertaining to maintenance will be separated from the lease and expensed as incurred.

### **Statements of Financial Position as at December 31, 2018 and December 31, 2017**

#### **Select Consolidated Statements of Financial Position Data**

|                                 | <b>December<br/>31, 2018</b> | <b>December<br/>31, 2017</b> |
|---------------------------------|------------------------------|------------------------------|
|                                 | <i>\$000s</i>                | <i>\$000s</i>                |
| Cash and short term investments | 72,047                       | 18,163                       |
| Inventory                       | 35,389                       | 10,959                       |
| Biological Assets               | 10,503                       | 9,844                        |
| Property and Equipment          | 62,209                       | 33,964                       |
| Total assets                    | 202,314                      | 78,448                       |
| Current liabilities             | 16,797                       | 6,780                        |
| Non-current liabilities         | 11,491                       | 800                          |

#### *Assets*

The Company's asset base consists primarily of cash and cash equivalents, accounts receivable, inventories, biological assets, harmonized sales tax recoverable, prepaids and property and equipment. The total assets increased by \$123,866 to \$202,314 at December 31, 2018 from \$78,448 at December 31, 2017. The increase in the asset base compared to December 31, 2017 resulted largely from an increase of \$53,884 in cash and short term investments from the proceeds raised in the June 2018 bought deal and Kindred equity purchase, an increase of \$24,430 in inventory and biological assets and an increase of \$28,245 in property and equipment primarily as a result of the renovations to the Perpetual Harvest Facility.

### *Liabilities*

The total current and non-current liabilities increased by \$20,708 to \$28,288 at December 31, 2018 from \$7,580 at December 31, 2017 as a result of mortgage financing relating to the Perpetual Harvest Facility and increased payables relating to the increased operating activities.

### *Shareholders' Equity*

The Company's shareholders' equity increased by \$103,158 to \$174,026 at December 31, 2018 from \$70,868 at December 31, 2017. This increase is mainly attributable to proceeds raised in the June 2018 bought deal, the Kindred equity purchase and the increase in stock options issued, partially offset by the net loss generated during the period.

### **Related Party Transactions for the twelve months ended December 31, 2018**

During the twelve months ended December 31, 2018 the Company entered into transactions and had outstanding balances with various related parties. The transactions with related parties are in the normal course of business.

Related party transactions for the twelve months ended December 31, 2018 are summarized as follows:

Compensation to key management and directors of the Company totalling \$2,008 (December 2017 - \$1,224) was paid to key management personnel. There were 1,920,000 stock options valued at \$6,421 issued to key management and directors during the period. There were 699,999 (December 31, 2017 – 25,000) stock options valued at \$1,243 (December 31, 2017 – \$88) exercised by related parties during the period. There were 1,180,001 (December 31, 2017 – Nil) stock options valued at \$4,440 (December 31, 2017 – Nil) forfeited by related parties during the period.

The Company incurred \$320 of management fees to Forum Financial Corporation (“Forum”), of which \$27 was unpaid and included in accounts payable at December 31, 2018. A director and officer of the Company are also officers and a director of Forum.

The Company incurred legal fees of \$839 (December 31, 2017 - \$549) relating to corporate services provided by a firm at which a director of the Company is a partner.

The Company transacted with its associate Stenocare, whereby The Company sold cannabis extracts to Stenocare in the amount of \$170.

The Company transacted with its joint venture O’Cannabis, whereby the Company incurred \$46 of expenses for services provided by O’Cannabis.

## Share Data

The following table sets forth the Outstanding Share Data for the Company as at March 27, 2019:

|               | Authorized                | Issued      |
|---------------|---------------------------|-------------|
| Common Shares | Unlimited                 | 105,639,048 |
| Warrants      |                           | 9,167,776   |
| Stock Options | 10% of outstanding shares | 3,892,834   |

## Risks and Uncertainties

The Company is subject to a number of broad risks and uncertainties including general economic conditions. In addition to these broad risks and uncertainties, the Company has specific risks that it faces, the most significant of which are included in the Company's recently filed Annual Information Form dated March 28, 2019 which can be found on *SEDAR* at [www.sedar.com](http://www.sedar.com) - See "*Risk Factors*". **The risks and uncertainties discussed herein highlight the more important factors that could significantly affect the Company's operations and profitability. They do not represent an exhaustive list of all the potential issues that could affect the financial results of the Company. Additional risks and uncertainties not presently known to the Company or that the Company believes to be immaterial may also adversely affect the Company's business, operations and profitability.**

There were no significant changes to these risk and uncertainties as of the date of this MD&A.

## Accounting Estimates

Certain of the Company's accounting policies set out in Note 3 to the Company's Financial Statements require that management make decisions with respect to the formulation of estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. The Company's significant accounting estimates are contained in Note 4 of the Company's Financial Statements. The following is a discussion of the accounting estimates that are critical in determining the Company's financial results.

### *Valuation of Biological Assets and Inventories*

Biological assets, consisting of plants, are measured at fair value less costs to sell up to the point of harvest.

Determination of the fair values of the biological assets requires the Company to make assumptions about how market participants assign fair values to these assets. These assumptions primarily relate to the level of effort required to bring the plants up to the point of harvest, sales price, risk, and expected remaining future yields for the plants. As the valuation of biological assets becomes the basis for the cost of finished goods inventories after harvest, this is also a significant estimate for the valuation of inventories.

The significant assumptions used in determining the fair value of medical cannabis plants are as follows:

- stage of plant growth (days until harvest);
- wastage of plants based on their various stages of growth;
- expected yield by plant;
- expected weighted average selling price per gram of harvested cannabis (based on estimated grams to be sold for the medical and recreational market);
- percentage of costs incurred to date compared to the expected costs to be incurred are used to estimate fair value of an in-process plant; and
- expected number of days to sell the yield from biological assets

### *Estimated Useful lives of Property and Amortization of Plant and Equipment and Intangible Assets*

Depreciation and amortization of property and equipment and finite-life intangible assets is dependent upon estimates of useful lives, which are determined through the exercise of judgment. The assessment of any impairment of these assets is dependent upon estimates of recoverable amounts that consider factors such as economic and market conditions and the useful lives of assets.

### *Share-based Compensation and Warrants*

In calculating the share-based compensation expense and the value of warrants, key estimates such as the value of the Common Shares, the rate of forfeiture of options granted, the expected life of the option, the volatility of the value of the Common Shares and the risk-free interest rate are used as inputs to the Black Scholes model.

### *Taxes*

Deferred tax assets will be recognized for all unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Significant management judgement is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of future taxable profits together with tax planning strategies. The Company has determined that the realization of deferred tax assets is not probable on the basis of future taxable income.

### *Financial Assets*

In calculating the fair value of the financial assets, key estimates such as the value of the common shares, the expected life of the option, the volatility of the value of the common shares and the risk-free interest rate are used as inputs to the Black Scholes model.

## **Accounting Standards Adopted in the Period**

### *Change in Accounting Policy*

During the current period, the Company made a voluntary change in accounting policy to capitalize the direct and indirect costs incurred before harvest attributable to the biological asset transformation. The Company believes the new policy is preferable as it matches the recognition of these costs as an expense in the same period in which the revenue is generated. The impact of this voluntary change in accounting policy on the financial statements is primarily to reduce cost of goods sold for the pre-harvest costs and increasing the amount capitalized to biological assets and inventory. The previous accounting policy was to expense these costs to cost of goods sold during the period in which the direct and indirect costs were incurred – See note 5 to the Financial Statements.

### *IFRS 2 'Share-based Payments'*

IFRS 2 'Share-based Payment' was issued by the IASB in June 2016. These amendments provide clarification on how to account for certain types of share-based transactions. The amendments are effective for the annual period beginning on or after January 1, 2018. The adoption of this amendment did not have a material impact on the Company's Financial Statements.

### *IFRS 9 'Financial Instruments: Classification and Measurement'*

IFRS 9 'Financial Instruments: Classification and Measurement' was issued by the IASB in July 2014 and introduces new requirements for the classification and measurement of financial instruments, a single forward-looking expected loss impairment model and a substantially reformed approach to hedge accounting. IFRS 9 is effective for annual periods beginning on or after January 1, 2018. The adoption of this amendment did not have a material impact on the Company's Financial Statements.

### *IFRS 15 'Revenue from Contracts with Customers'*

IFRS 15 'Revenue from Contracts with Customers' was issued by the IASB in June 2014. The objective of IFRS 15 is to provide a single, comprehensive revenue recognition model for all contracts with customers. The underlying principle is that an entity will recognize revenue to depict the transfer of goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services. It also contains new disclosure requirements. Under IFRS 15, revenue from the sale of medical cannabis would be recognized at a point in time when control over the goods have been transferred to the customer. The Company transfers control and satisfies its performance obligation upon delivery and acceptance by the customer, which is consistent with the Company's current revenue recognition policy under IAS 18. IFRS 15 is effective for the Company on January 1, 2018. The adoption of this amendment did not have a material impact on the Company's Financial Statements. The disclosure of disaggregated revenue as required by IFRS 15 is disclosed in Note 22 of the Company's Financial Statements.

## **Future Accounting Pronouncements**

### *IFRS 16 'Leases'*

IFRS 16 'Leases' was issued by the IASB in January 2016 and specifies the requirements to recognize, measure, present and disclose leases. IFRS 16 is effective for annual periods beginning on or after January 1, 2019. The company has completed an assessment of the impact on its consolidated financial statements. Based on this assessment, the Company expects to recognize right of use assets and lease liabilities for its operating leases of property and equipment of approximately \$1,500 to \$2,000.

### *IFRS 23 'Uncertainty over Income Tax Treatments'*

IFRIC 23 'Uncertainty over Income Tax Treatments' was issued by the IASB in June 2017 and specifies the interpretation to be applied to the determination of taxable profit, tax bases, unused tax losses, unused tax credits and tax rates, when there is uncertainty over income tax treatments under IAS 12. IFRIC 23 is effective for annual periods beginning on or after January 1, 2019. The Company does not expect a material impact from the application of this standard on the Financial Statements of the Company.

### **Selected Quarterly financial information**

The following table summarizes selected financial information for the last eight quarters.

|                          | <b>Fiscal year ending 2018</b> |           |           |           |              |
|--------------------------|--------------------------------|-----------|-----------|-----------|--------------|
|                          | <b>Q4</b>                      | <b>Q3</b> | <b>Q2</b> | <b>Q1</b> | <b>Total</b> |
| Gross Revenue            | 18,911                         | 12,589    | 9,050     | 7,840     | 48,390       |
| Net Revenue              | 16,166                         | 12,589    | 9,050     | 7,840     | 45,645       |
| Gross profit             | (8,282)                        | 12,541    | 10,975    | 21,260    | 36,494       |
| Net income (loss)        | (25,522)                       | 421       | 105       | 11,442    | (13,554)     |
| Earning (loss) per share | (0.26)                         | -         | -         | 0.12      | (0.14)       |

  

|                          | <b>Fiscal year ending 2017</b> |           |           |           |              |
|--------------------------|--------------------------------|-----------|-----------|-----------|--------------|
|                          | <b>Q4</b>                      | <b>Q3</b> | <b>Q2</b> | <b>Q1</b> | <b>Total</b> |
| Gross Revenue            | 6,983                          | 6,140     | 4,541     | 3,033     | 20,697       |
| Net Revenue              | 6,983                          | 6,140     | 4,541     | 3,033     | 20,697       |
| Gross profit             | 11,036                         | 5,357     | 3,798     | 3,790     | 23,981       |
| Net income (loss)        | 6,253                          | 655       | 755       | (778)     | 6,885        |
| Earning (loss) per share | 0.08                           | 0.01      | 0.01      | (0.01)    | 0.09         |

### **Non-IFRS Financial Measure and Reconciliation**

*Adjusted Earnings before Interest, Taxes, Depreciation and Amortization ("EBITDA"). The term Adjusted EBITDA does not have any standardized meaning under IFRS. Therefore, it may not be comparable to similar measures presented by other companies.*

Management uses Adjusted EBITDA to evaluate the performance of the Company's business as it reflects its ongoing profitability. The Company believes that certain investors and analysts use Adjusted EBITDA to measure a company's ability to service debt and to meet other payment obligations or as a common measurement to value companies in the biopharmaceutical industry. Adjusted EBITDA has no direct comparable IFRS financial measure. Such information is intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS.

The Company measures Adjusted EBITDA as net income (loss) less unrealized gain on changes in fair value of biological assets and other income plus fair value changes in biological assets included in inventory sold, income taxes, interest expense, accretion expense, transaction costs, loss on revaluation of derivative liability, share based compensation and depreciation and amortization. The Company believes that this definition is suited to measure the Company's ability to service debt and to meet other payment obligations.

The following table provides a reconciliation of earnings as determined under IFRS to Adjusted EBITDA:

| Calculation of Adjusted EBITDA                                       | Three Months Ended |         | Year Ended  |          |
|----------------------------------------------------------------------|--------------------|---------|-------------|----------|
|                                                                      | December 31        |         | December 31 |          |
|                                                                      | 2018               | 2017    | 2018        | 2017     |
|                                                                      | \$000s             | \$000s  | \$000s      | \$000s   |
| Net income                                                           | (25,522)           | 6,253   | (13,554)    | 6,885    |
| Fair value changes in biological assets included in inventory sold   | 84                 | 993     | 17,302      | 8,929    |
| Unrealized loss (gain) on changes in fair value of biological assets | 13,876             | (9,623) | (27,840)    | (19,892) |
| Share based compensation <sup>(1)</sup>                              | 1,568              | 850     | 8,056       | 2,311    |
| Transaction costs <sup>(2)</sup>                                     | -                  | -       | -           | 204      |
| Other loss (income) <sup>(3)</sup>                                   | 4,075              | (65)    | 2,034       | (143)    |
| Loss of equity accounted investments <sup>(4)</sup>                  | 190                | 45      | 385         | 147      |
| Loss on revaluation of derivative liability <sup>(5)</sup>           | -                  | -       | -           | 1,625    |
| Interest (income) expense, net                                       | (647)              | 41      | (312)       | 261      |
| Accretion expense                                                    | 63                 | -       | 209         | 234      |
| Income Taxes                                                         | (3,325)            | -       | 1,433       | -        |
| Depreciation and amortization                                        | 103                | 655     | 4,118       | 2,217    |
| Impairment loss on assets                                            | 988                | -       | 988         | -        |
| Adjusted EBITDA                                                      | (8,547)            | (851)   | (7,181)     | 2,778    |

(1) Share based compensation represents non-cash expense recognized in relation to the Company's stock option plan.

(2) Transaction costs represents costs incurred to carry out a transaction that was not part of normal course operating activities.

(3) Other loss (income) primarily represents the revaluation of the Company's shares in NAC.

(4) Loss of equity accounted investments represents the Company's share of the net loss incurred by the Company's equity accounted investments including Cannatrek, GWAH, CCTP and Stenocare.

(5) Loss on revaluation of derivative liability represents the revaluation of the Company's outstanding derivative liabilities.

### *Cash Cost per gram sold*

*The term Cash Cost per gram sold does not have any standardized meaning under IFRS. Therefore, it may not be comparable to similar measures presented by other companies.*

Management uses Cash Cost per gram sold to evaluate the performance of the Company's business as it reflects its operational productivity in economic terms. The Company believes that certain investors and analysts use Cash Costs per gram sold to measure a company's production capabilities. Cash Cost per gram sold has no direct comparable IFRS financial measure. Such information is intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS.

The Company measures Cash Cost per gram sold as cost of goods sold less depreciation and amortization contained within cost of goods sold divided by the number grams of dried cannabis and cannabis equivalent sold during the period. The Company believes that this definition is suited to measure the Company's operational productivity in economic terms.

|                                                              | <b>Three months ended</b> |             | <b>Year ended</b>  |             |
|--------------------------------------------------------------|---------------------------|-------------|--------------------|-------------|
|                                                              | <b>December 31</b>        |             | <b>December 31</b> |             |
|                                                              | <b>2018</b>               | <b>2017</b> | <b>2018</b>        | <b>2017</b> |
|                                                              | \$                        | \$          | \$                 | \$          |
| Cost of goods sold                                           | 10,489                    | 4,577       | 19,690             | 7,680       |
| Depreciation and amortization included in cost of goods sold | (468)                     | (668)       | (1,949)            | (1,253)     |
|                                                              | 10,021                    | 3,909       | 17,741             | 6,427       |
| Dried Cannabis and Cannabis Equivalent Sold (grams)          | 3,406,937                 | 757,669     | 7,251,060          | 2,233,219   |
| Cash Cost per gram sold                                      | 2.94                      | 5.16        | 2.45               | 2.88        |

### **Disclosure Controls and Internal Controls over Financial Reporting**

In accordance with National Instrument 52-109 – Certification of Disclosure in Issuers' Annual and Interim Filings, and as required by the applicable rules of the SEC, management is responsible for establishing and maintaining disclosure controls and procedures ("DC&P"), as defined in Rules 13a-15(e) and 15d-15(e) under the United States Securities Exchange Act of 1934, as amended (the "Exchange Act") and internal control over financial reporting ("ICFR"), as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Management has designed ICFR based on the 2013 Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

The Company's disclosure controls and procedures are designed to provide reasonable assurance that material information relating to the Company is made known to senior management, including the Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO") and information required to be disclosed by the Company is recorded, processed, summarized and reported within the time periods specified in securities legislation. ICFR is designed by management, under the supervision of the CEO and CFO, to provide reasonable assurance regarding the reliability of the Company's financial reporting and the preparation of its financial statements in accordance with IFRS.

As of December 31, 2018, the Company had limited accounting personnel with expertise to assist in the effective preparation of financial statements and related note disclosures. In particular, the Company did not have sufficient resources with appropriate knowledge of IFRS to allow for an independent review in

complex areas of financial reporting with respect to non-routine transactions, resulting in a reasonable likelihood that a material misstatement to the consolidated financial statements may not be prevented or detected on a timely basis. As a result of the non-routine transaction assessment, management concluded that the DC&P and ICFR were not effective as of December 31, 2018, and has since implemented new mitigating controls and procedures. This assessment was not related to internal control deficiencies identified for routine operating activities. The Company has devoted significant resources and time to design and implement its current ICFR program and continues to engage third party resources specialized in ICFR implementations to enhance its current controls and the associated processes and systems. Additionally, the Company has provided significant human resources to these efforts, including hiring new employees to assist in ICFR activities and training of key process owners. In particular, since December 31, 2018, we have hired a new Chief Financial Officer and a new Vice President of Finance, both of whom have expertise in internal controls and governance, to enhance the existing team. Management has consistently embraced the importance of maintaining a robust ICFR program and is committed to enhancing the current system through continuous improvement and review.

#### *Changes in Internal Control Over Financial Reporting*

In the ordinary course of business, the Company's management reviews its ICFR system and make changes to its applications and processes to improve such controls and increase efficiency, while ensuring that the Company maintains an adequate internal control environment. Other than as discussed above, during Q4 2018, there were no changes in ICFR that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

#### *Limitations of Controls and Procedures*

The Company's management, including the Chief Executive Officer and Chief Financial Officer, believes that any DC&P or ICFR, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, they cannot provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been prevented or detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by unauthorized override of the control. The design of any control system is also based in part upon certain assumptions about the likelihood of future events and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Accordingly, because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

#### **Additional Information**

Additional information relating to the Company, including the Company's audited year-end financial results and unaudited quarterly financial results, can be accessed on SEDAR ([www.sedar.com](http://www.sedar.com)) and in the United States on EDGAR ([www.sec.gov/edgar](http://www.sec.gov/edgar)). For further information shareholders may also contact the Company by email via [investor@cantrust.ca](mailto:investor@cantrust.ca).