



# CIELO

Fueling the Sustainable  
Energy Transition

**CIELO WASTE SOLUTIONS CORP.**

Management's Discussion and Analysis

For the three month and year ended April 30, 2022 and 2021

## ADVISORIES

The following Management's Discussion and Analysis ("MD&A") of financial position and results of operations for Cielo Waste Solutions Corp. ("Cielo" or the "Company"), dated August 24, 2022, should be read in conjunction with the cautionary statement regarding forward-looking information below, as well as the audited consolidated financial statements and notes thereto for the years ended April 30, 2022, and 2021. The audited financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS").

All amounts in the following MD&A are stated in Canadian Dollars unless otherwise stated. This MD&A was approved and authorized for issuance by the Board of Directors of the Company on August 24, 2022.

## CAUTIONARY STATEMENT ON FORWARD-LOOKING INFORMATION

This MD&A contains forward-looking statements and forward-looking information (collectively "forward-looking information") within the meaning of applicable Canadian securities laws. Forward-looking information may relate to anticipated events or results and may include information regarding our financial position, business strategy, growth strategies, budgets, operations, financial results, plans and objectives. Particularly, information regarding our expectations of future results, performance, achievements, prospects or opportunities or the markets in which we operate is forward-looking information. In some cases, forward-looking information can be identified by the use of forward-looking terminology such as "anticipate", "plan", "target", "continue", "estimate", "expect", "may", "will", "project", "should", "could", "believe", "predict", "potential", "scheduled", "estimates", "forecast", "projection". In addition, any statements that refer to expectations, intentions, projections or other characterizations of future events or circumstances contain forward-looking information. Statements containing forward-looking information are not historical facts nor assurances of future performance but instead represent management's expectations, estimates and projections regarding future events or circumstances.

Management's expectations, estimates and projections are inherently subject to significant business, economic, competitive and other uncertainties and contingencies regarding future events and as such, are subject to change. All forward-looking information in this MD&A is qualified by these cautionary statements.

This MD&A contains forward-looking information that includes, but is not limited to:

- the Company's strategic intent and corporate goals and objectives;
- the Company's intention to become one of the leading waste-to-fuel companies using an, economically sustainable technology while minimizing environmental impact;
- the Company's belief that it will play a pivotal role in the energy transition process;
- the Company's plans to fabricate the R&D Facility (as defined herein) and to use it for research and development activities that will lead its ability to construct future, full-scale commercial facilities that will convert waste feedstocks to energy fuels;
- the type of testing to occur at the R&D Facility and the types of waste to be used by the Company;
- plan for the Aldersyde Facility (as defined herein), including the cessation of operations in its current state and the use of existing parts in the R&D Facility or future facilities;
- cost and timing for significant events and milestones the Company intends to undertake;
- the suitability of Cielo's energy fuels for various purposes, including diesel engines, aviation or marine jet fuels, and transporting heavy oil;
- the Company's initiative to collect process data through the operation of the R&D facility, optimize the design and allow for scale up to a commercial facility
- the potential future ability to refine distillate into diesel, higher value low-sulphur diesel, kerosene and naphtha
- the Company's belief that continued research will enable it to generate waste derived fuels
- the ability of the Company to, while not a primary focus, achieve the standards for renewable and bio-fuels and that, if so achieved, the resulting fuel product would warrant a premium in comparison to the fuel products derived from traditional upstream development activities;
- the ability of the Company to operate its business without having to achieve standards for renewable and bio-fuels;
- expectations regarding its business, financial condition and results of operations;
- the future state of the legislative and regulatory regimes, both domestic and foreign, in which the Company conducts business and may conduct business in the future;
- expansion in domestic and other markets;

- marketing and business plans and short-term objectives;
- ability to obtain and retain the licenses, permits and other regulatory approvals and personnel it requires to undertake its business, including but not limited to research and development activities;
- the allocation and use of proceeds from the Offering (as defined herein) and other financing activities as disclosed;
- strategic relationships with third parties, including the joint venture arrangements with Renewable U;
- the commercial lease agreement entered into regarding the Company's Fort Saskatchewan property and related terms;
- anticipated trends and challenges in the markets in which it operates; and
- the general economic, financial market, regulatory and political conditions in which the Company operates.

These statements and other forward-looking information are based on management's opinions, estimates and assumptions in light of experience and perception of historical trends, current conditions and expected future developments, as well as other factors that management currently believe are appropriate and reasonable in the circumstances. There can be no assurance that the underlying opinions, estimates and assumptions will prove to be correct. Forward-looking information contained in this MD&A is based on the following assumptions and material factors: the Company's ability to build and operate facilities; the Company's ability to retain and obtain requisite regulatory approvals to operate facilities; the Company's ability to retain key personnel; the Company's ability to maintain good relationships with joint arrangement partners, customers and suppliers; the Company's ability to execute on expansion plans; the Company's ability to continue investing in infrastructure to support growth; the Company's ability to obtain and maintain financing on acceptable terms; currency exchange and interest rates; the impact of competition; the changes and trends in the Company's industry or the global economy; and the changes in laws, rules, regulations, and global standards. Forward-looking information is necessarily based on a number of opinions, estimates and assumptions that management considered appropriate and reasonable as of the date such statements are made, are subject to known and unknown risks, uncertainties, assumptions and other factors that may cause the actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information, including but not limited to the risks factors described under the heading entitled "Risk Factors".

If any of these risks or uncertainties materialize, or if the opinions, estimates or assumptions underlying the forward-looking information prove incorrect, actual results or future events might vary materially from those anticipated in the forward-looking information. The opinions, estimates or assumptions referred to above and the risks described in greater detail in "Risk Factors" in the AIF and Annual MD&A and should be considered carefully by readers. These risk factors should not be construed as exhaustive. Although we have attempted to identify important risk factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other risk factors not presently known to us or that we presently believe are not material that could also cause actual results or future events to differ materially from those expressed in such forward-looking information. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Forward-looking information is provided in this MD&A for the purpose of giving information about management's current expectations and plans and allowing investors to get a better understanding of our operating environment. Readers are cautioned that it may not be appropriate to use such forward-looking information for any other purpose.

The forward-looking information contained in this MD&A represents our expectations as of the date of this MD&A (or as the date they are otherwise stated to be made) and are subject to change after such date. Except as specifically required under applicable securities laws in Canada, Cielo assumes no obligation to publicly update or revise any forward-looking information to reflect new information, events or circumstances that may arise after August 24, 2022. All forward-looking information contained in this MD&A is expressly qualified by the foregoing cautionary statements.

## BUSINESS OVERVIEW

- **Formation:** Cielo was incorporated under the Business Corporations Act (British Columbia) on February 2, 2011. Cielo is a publicly traded company with its shares listed to trade on the TSX Venture Exchange (“TSXV”) under the symbol “CMC”, as well as on the OTCQB Venture Market, under the symbol “CWSFF”.
- **Strategic Intent:** The Company’s strategic intent is to become a leading waste-to-fuel company. The Company intends to use economically sustainable technology while minimizing the environmental impact. Cielo has a patented process that can convert waste feedstocks, including organic material and wood derivative waste, to fuel. Having demonstrated its ability to produce diesel and naphtha from waste, Cielo’s business model is to construct additional processing facilities. Cielo’s objective is to generate value by converting waste to fuel, while fueling the sustainable energy transition.
- **Waste to Fuel Process:** Cielo’s current process for converting waste to fuel is referred to as thermal catalytic depolymerization. The feedstock is processed in a liquid slurry, which is heated in a reactor to break down feedstock into smaller molecules. The introduction of catalyst accelerates the reaction and formation of distillate. The distillate produced can be further processed into diesel, naphtha and kerosene via distillation/fractionation. The utilization of a desulfurization process allows the Company to reduce the sulfur content of the diesel to meet highway diesel specifications.
- **R&D Facility:** The Company has completed the design of and has initiated the fabrication for a Research and Development Facility (“R&D Facility”). The Company is currently planning to locate the R&D Facility at its property in Aldersyde, Alberta, pending approval of Alberta Environment and Parks (“AEP”). The existing facility in Aldersyde has served to identify the limiting conditions that have historically prevented the Company from achieving steady-state production. The R&D Facility is intended to serve as a scaled-down version of a commercial facility. The R&D Facility will provide the ability to perform technical assessments at optimal operating conditions to determine economic viability for various feedstocks. The initial focus will be to analyze pen shavings and railway ties. Rubber and plastic analysis may require modifications to the R&D Facility (and consequently additional AEP approval.) The resulting data will facilitate the scale-up of and design of a commercial facility.

The Company believes it will play a pivotal role in the sustainable energy transition process. Cielo believes that continued research utilizing the R&D Facility may enable the Company to meet the standards for renewable bio-fuels. Cielo does not need to meet these standards in order to commercialize its technology and, as such, it is not a primary focus. If Cielo is able to achieve the standards for renewable bio-fuels, the fuel products would likely warrant a premium.

Although the Company had previously contemplated and disclosed that the R&D Facility would produce at a rate of 60 litres per hour, ultimately the production rate will vary. As such, in this MD&A and in future disclosure, the Company intends to refer only to its R&D Facility, without specifying “60 lph”.

- **Aldersyde Facility:** The Company’s facility located in Aldersyde (the “Aldersyde Facility”) has been capable of converting wood derivative waste materials into a distillate. Distillate can be sold as is or further refined into diesel, higher value low-sulphur diesel, kerosene and naphtha. Following improvements to the Aldersyde Facility in recent months, the Company has been able to obtain additional data and is confident the data will benefit the design and fabrication of the R&D Facility and future full-scale facilities. Management believes that Cielo’s current focus on the R&D Facility is the most economical and efficient path to commercialization. Therefore, Cielo has decided to cease operations of the Aldersyde Facility in its current state. Ancillary systems of the existing Aldersyde Facility will be incorporated into the R&D Facility.

## GOING CONCERN

The Company has not yet generated revenue from its planned commercial operations and has accumulated losses of \$72.9 million as at April 30, 2022 and generated a loss of \$14.4 million for the year ended April 30, 2022. The Company has working capital (defined as total current assets less total current liabilities) of \$1.2 million at April 30, 2022

Notwithstanding the completion of a unit financing for gross proceeds of \$9.8 million completed subsequent to period end (see section entitled “Financial Overview – Public Offering of Securities” for additional information), the Company will require additional capital to fund costs relating to research, development and other corporate activities over the next year and beyond, and to fund payments of short-term indebtedness as they become due and otherwise fund the working capital deficiency. The Company will continue to explore alternatives to generate additional financing, which may include raising additional equity and/or debt or entering into strategic partnerships or other agreements; however, there is no assurance that these initiatives will be successful.

The Company has not reached planned commercial operations and its ability to continue as a going concern is dependent on its ability to generate revenue and positive cash flow from operating activities, and its ability to obtain additional financing to fund the cost of research, development and other corporate activities. These matters create material uncertainty which may cast significant doubt about the Company’s ability to continue as a going concern.

## 2022 FINANCIAL OVERVIEW

- Total assets increased by \$8.3 million as of April 30, 2022 compared to April 30, 2021, mainly due to the increase in property, plant and equipment related to the asset purchase in Fort Saskatchewan, Alberta for \$13.0 million; the construction activities at the Aldersyde Facility and the R&D Facility; the addition of an intangible asset of \$2.0 million for the intellectual property (the “IP”) purchase from 1888711 Alberta Inc. (“1888 Inc”), partially offset by the decrease in cash related to asset purchases, continued research and development activities and general and administrative expenditures.
- Total liabilities decreased by \$0.7 million as of April 30, 2022 compared to April 30, 2021 due to the exercise of liability classified warrants; the conversion of convertible debentures; the repayment of deferred revenue amounts related to the prepaid oil sale; and the decrease in accounts payable and accrued liabilities due to lower spending towards the year-end on the Aldersyde Facility compared to the same period in prior year, partially offset by the increases in long-term loans with the Second Mortgage Loan.
- Total non-current liabilities increased by \$15.4 million as of April 30, 2022 compared to April 30, 2021 due to the reclass of deferred fees related to the Renewable U MOU from current to non-current; the increase in lease liabilities related to the Calgary office lease; and the increase in long-term loans with the Second Mortgage Loan, partially offset by the reclassification of the royalty payable to current liabilities; conversion of convertible debentures.
- The net loss for the Company for the fourth quarter of 2022 was \$2.2 million, a decrease of \$31.7 million from \$33.9 million for the quarter ended April 30, 2021. The net loss for the Company in the current year was \$14.4 million, a decrease of \$25.3 million from \$39.7 million for the year ended April 30, 2021. The decrease in net loss is primarily due to decreased financing costs and the fair value change of warrant liability offset by increases in general and administrative expenditures, research and development expenditures and share-based compensation.
- As compared to a working capital deficiency of approximately \$0.6 million at April 30, 2021, the Company had working capital of approximately \$1.2 million as at April 30, 2022, owing primarily to the decrease in current liabilities, as described above.

## **Financing Activities During and Subsequent to the Year Ended April 30, 2022**

### **Private Placement - Convertible Debentures**

On August 3, 2021, the Company completed a non-brokered, convertible debenture financing, and received gross proceeds of \$4.0 million. Pursuant to the financing, the Company issued 4,000 non-interest-bearing, unsecured convertible debentures (the "August 2021 Debentures"), each issued at \$1,000 per August 2021 Debenture, the principal amount of the August 2021 Debentures being convertible into Cielo Shares at \$1.25 per share during the 12-month term of the August 2021 Debentures. Following the issuance of the August 2021 Debentures, on September 7, 2021, the full \$4.0 million of the principal amount was converted into 3,200,000 Cielo Shares at the conversion price of \$1.25 per share.

### **First Mortgage Loan (\$12 million)**

In August 2021, the Company entered into an \$12.0 million mortgage loan (the "First Mortgage Loan") with First Choice Financial Incorporated ("FCF") and KV Capital Inc. ("KV", together with FCF, the "Lenders" and each a "Lender"). The First Mortgage Loan is subject to an annual interest rate of 6% and is secured by charges against Cielo's land and facilities in Fort Saskatchewan and Aldersyde, Alberta. The 12-month term is subject to automatic renewal at the end of the original term for further six-month terms in consideration for a renewal fee equal to 1.5% of the then outstanding balance, subject to the Lenders' rights to terminate the automatic renewal at their discretion. In connection with the First Mortgage Loan, the Company also issued 12.0 million non-transferable share purchase warrants (the "First Mortgage Bonus Warrants"). Each First Mortgage Bonus Warrant entitles the holder to purchase one common share of the Company at an exercise price of \$1.00 for a period of 36 months; however, if the First Mortgage Loan is repaid in whole or in part during its term, a pro rata number of the total First Mortgage Bonus Warrants will have their term reduced to the date that is 90 days from such repayment.

The First Mortgage Loan is subject to interest payments only and Cielo is entitled to repay the First Mortgage Loan at any time before maturity without penalty, in whole or in part. The loan agreement included a special covenant in relation to the Company's market capitalization: (i) if the Company's market capitalization is below \$250.0 million but above \$150.0 million, a \$1.0 million loan repayment is required; (ii) if the Company's market capitalization is below \$150.0 million but above \$100.0 million, an additional \$1.0 million loan repayment is required; and (iii) if the market capitalization is below \$100.0 million an additional \$1.0 million loan repayment is required (the "Market Cap Requirements").

The Company's market capitalization was below \$250.0 million on September 30, 2021, and below \$150.0 million on certain trading days prior to April 30, 2022. As a result, KV requested a total loan repayment of \$2.0 million.

The net proceeds of the First Mortgage Loan were used to purchase the FS Property (see section entitled "2022 Operational Overview – Fort Saskatchewan Land Purchase" for additional information).

### **Second Mortgage Loan (\$11 Million) and Partial Repayment of First Mortgage Loan**

The Company closed an \$11.0 million mortgage loan with FCF (the "Second Mortgage Loan"), effective February 18, 2022. The Second Mortgage Loan carries an annual interest rate of 3%, has a term of 24 months, maturing on February 18, 2024, subject to early repayment terms (as described below), and is secured by Cielo's land and facilities in Fort Saskatchewan and Aldersyde, Alberta.

The early repayment terms are:

- (i) Cielo's right to repay the Second Mortgage Loan early, without penalty, and
- (ii) FCF's right to review Cielo's financial position and business and technological advances on the one-year anniversary of the Closing Date and demand repayment within 90 days if FCF is not satisfied with such review, acting reasonably and in good faith (which was waived by FCF subsequent to the year ended April 30, 2022).

The Company issued 50.0 million non-transferable share purchase warrants (the "Second Mortgage Bonus Warrants"), with each Bonus Warrant entitling FCF to purchase one common share of the Company at an exercise price of \$0.22 for a period of 24 months; however, in the event that the Loan is repaid early in whole or in part, a *pro rata* number of the total Bonus Warrants will have their term reduced to the date that is the later of:

- (iii) 30 days following the date of such repayment; and
- (iv) 12 months from the date of issuance of the Bonus Warrants.

The proceeds for the Second Mortgage Loan were first allocated to the loan based on its estimated fair value of \$8.4 million using an estimated fair value interest rate of 17%. The residual value of \$2.6 million was allocated to the Second Mortgage Bonus Warrants.

The Company utilized \$5.5 million of the net proceeds of the Second Mortgage Loan to repay a portion of the First Mortgage Loan, including the \$2.0 million that had been requested to be repaid by KV as a result of failing to meet the Market Cap Requirements. In consideration for the partial repayment of the First Mortgage Loan, the terms of the First Mortgage Loan have been amended as follows:

- The Market Cap Requirements have been removed in their entirety; and
- For the initial 12-month term, total interest of \$0.72 million was withheld by the Lenders as an interest reserve (the "Interest Reserve") and applied against the initial 12 monthly payments of interest. A proportionate portion of the Interest Reserve, approximately \$0.175 million was returned to Cielo.

In addition, as a result of the partial repayment to the First Mortgage Loan, the term of 5.5 million of the 12.0 million First Mortgage Bonus Warrants was reduced such that the 5.5 million of the First Mortgage Bonus Warrants expired subsequent to the year ended April 30, 2022, on May 19, 2022.

#### **Extension of First Mortgage Loan**

On March 18, 2022, the Company completed an extension of the term of the First Mortgage Loan from 12 months to 24 months, maturing on September 1, 2023 (the "Loan Extension"). In consideration for the Loan Extension, Cielo agreed to use the proceeds of the exercise of any and all bonus warrants held by FCF (whether issued in respect of the First Mortgage Loan or any other loans owed to FCF thereafter) to pay down the balance of the First Mortgage Loan.

In connection with the change in principal interest in the loan, removal of the loan covenants and the extension of the term, this resulted in the derecognition of the original First Mortgage Loan at a value of \$6.0 million and the recognition of the amended First Mortgage Loan with a value of \$5.6 million and associated deferred financing costs of \$0.07 million, resulting in a gain on loan modification of \$0.3 million.

#### **Public Offering of Securities**

On July 8, 2022, the Company completed a public offering (the "**Offering**") of units (the "**Units**") in British Columbia, Alberta and Ontario, issuing 139.6 million units (the "**Units**") at a price of \$0.07 per Unit, including 18.2 million Units issued pursuant to the full exercise of an over-allotment option, for gross proceeds of approximately \$9.8 million.

Each Unit is comprised of one common share and one common share purchase warrant (each a "Warrant", collectively the "Warrants") of the Company. Each Warrant entitles the holder thereof to acquire one common share of Cielo at an exercise price of \$0.09 for a period of 60 months. The Warrants commenced trading on the TSX Venture Exchange ("TSXV") under the symbol "CMC.WT" on July 12, 2022.

The Offering was conducted on a commercially reasonable "best efforts" basis by Echelon Wealth Partners Inc. (the "Agent"). As compensation, the Company paid to the Agent a cash fee of approximately \$0.5 million, an advisory fee of \$0.04 million (the "Advisory Fee") and issued to the Agent an aggregate of 7.3 million broker warrants (the "Broker Warrants"). Each Broker Warrant entitles the holder thereof to purchase one Unit at an exercise price of \$0.07 per Unit until July 8, 2027.

#### **Second Partial Repayment of First Mortgage Loan**

Subsequent to the year end, on or about August 8, 2022, the Company agreed, subject to the approval of the TSX Venture Exchange (the "Exchange"), to repay \$2.0 million of the First Mortgage Loan, which is secured by the Company's property in Fort Saskatchewan, Alberta in exchange for the issuance of an aggregate 26,984,126 common shares (the "Repayment Shares") at a price of \$0.07 per share for up to \$1.5 million of the First Mortgage Loan and \$0.09 per share for the remaining

\$0.5 million of the First Mortgage Loan. Upon the partial repayment, 2.0 million First Mortgage Bonus Warrants will have their term reduced to the date that is 90 days following issuance of the Repayment Shares. The terms of the Loan provided for a 12-month interest reserve, which will be depleted in August 2022 such that Cielo will be required to begin making additional monthly interest payments in September 2022. In addition to the reduction of Cielo's debt generally, the Shares for Debt Transaction will allow for a reduction of these interest payments.

## **2022 OPERATIONAL OVERVIEW**

### **Operational Activities Prior, During and Subsequent to the Year Ended April 30, 2022**

#### **Fort Saskatchewan Land Purchase**

On May 26, 2021, the Company entered into an agreement to purchase 60 acres of land and a building in Fort Saskatchewan, Alberta for \$13.0 million. The Company closed the acquisition of the land and building on August 23, 2021. The land was intended for development of both the R&D Facility and the first Cielo wholly owned full-scale facility.

For additional details on the First Mortgage Loan, see section entitled "2022 Financial Overview – First Mortgage Loan).

#### **Aldersyde Facility Update**

##### **Year Ended April 30, 2022**

At the start of the current fiscal year from May 2021 through to approximately September 2021, the Aldersyde Facility operated intermittently as the Company attempted to address the plugging and process issues to maintain increased continuous production rates.

In August 2021, there was a change in leadership and internal technical support, including the addition of significant operational and process engineering experience, strong process technical skills, and the engagement of an external engineering consulting firm.

From August to December 2021, a detailed design evaluation was completed to assess process limitations. Reengineering facility components to address what were believed to be temporary constraints, that were preventing steady state production, were initiated.

With a new internal technical team in place, production was reduced in order to study and understand the mechanisms that required redesigning, modification or deletion in the process. A controlled systematic approach was implemented to study the problem, which included data acquisition and data analysis. To accomplish this, operational conditions were adjusted, measured, and recorded. Changes to the process were implemented to more accurately control flow under lower loads. Various data feedback systems were installed that included additional temperature transmitters, distillate line sight glasses, reconfigured programmable logic controllers to reduce control system latency.

During this period, under the constraints of operating intermittently at a reduced rate, the data observed highlighted the modifications and redesign required in order to progress towards steady state operation. For the three months ended December 31, 2021, approximately 20,000 liters of distillate were produced.

Immediately following this activity, the front-end engineering design and design basis memorandum were established. Engineering work that included process flow diagrams, piping and instrumentation, equipment sizing and material balance calculations were completed. The primary areas of the process that required a critical redesign in order to achieve steady state production included the following:

1. *Inlet Mixing* – complete redesign to the process inlet system that ensures that the wood biomass is appropriately dry mixed with the catalyst. The carrier fluid is introduced into the mixed components at the correct step in the process at the required temperature and rate. The prefeed slurry is then temperature and flowrate regulated into the reactor infeed.
2. *Reactor* – complete redesign to the reactor was found to be the best solution. Initial thoughts were to modify the existing reactor, but the number of changes required justified the decision to replace the reactor with a design for



purpose. This new design is expected to ensure a more efficient endothermic reaction, proper vapor velocities and better control over all aspects of the operation of the reactor.

3. *Reactor Waste Management* – the addition of a new design that manages the separation of 3-phase flow from the bottom of the reactor that includes product cooling, carried fluid separation and solids waste separation. This is expected to contribute to steady state production.
4. There are also additional changes and modifications to various pieces of equipment and control systems that will ensure better control and more efficient operations.

In March 2022, Cielo described what were referred to as Phase-I modifications made at the Aldersyde Facility to solve the root cause of plugging and coking in the system that prevented meaningful run-times. This work has resulted in improved product quality, reduced vapor line fouling, reduced waste volume and improved recovery of UMO. Data captured following the modifications were incorporated into the design of the R&D Facility from March to July 2022. During that period, 80,000 liters of distillate were produced.

Since completion of these Phase-I modifications, the plant has operated in a 'short-run' test mode to verify expectations. The Company announced that results observed to date are in-line with expected outcomes, with the following key parameters observed:

- Distillate Quality – Produced distillate liquid quality and coloring has improved dramatically. This is an indication of improved liquid distribution and more efficient reaction that contributes to a significant reduction in coking.
- Particulate Matter – Visible particulate matter does not appear in the liquid distillate production stream.
- Vapor Production Line – The distillate vapor production line, which transfers distillate from the reactor to the condenser, remains clean and clear after multiple runs. No plugging or coking has been observed within the line. It was the plugging and coking of this vapor line that was one of the greatest impediments to achieving continuous run-time and the source of costly maintenance to clear and clean equipment.
- Reactor Waste System – The newly designed and fabricated reactor waste separation system is a dramatic upgrade in the overall process. Initial results indicate reduced operating costs, less waste, and greater carrier fluid recirculation.

#### Project Status – Subsequent to Year Ended April 30, 2022

As disclosed in the Company's Management's Discussion and Analysis for the three- and nine-months ended January 31, 2022, the estimated cost requirement to achieve steady-state production on a commercial scale at the Aldersyde Facility was expected at approximately \$11.5 million until the end of 2022. Total estimated remaining cost requirement at January 31, 2022 was approximately \$7.7 million until the end of 2022. On May 12, 2022, the Company announced that the inflationary environment had resulted in cost estimates at least fifty percent higher than anticipated for phase II Aldersyde. As a result, the Company's plan became to focus on its R&D Facility in order to facilitate its strategy for the design of full-scale waste-to-fuel facilities. The Company also noted that fabrication of the R&D Facility is anticipated for calendar Q1 2023 with the design of a full-scale facility to commence in calendar 2023.

On June 13, 2022 the Company provided an operation update on the Phase-1 modifications, noting that the Aldersyde Facility would continue to operate to allow Cielo to modify and improve the design. A change in feedstock dimension was recently implemented to further improve the process, which resulted in improved distillate quality but impacted solid settling characteristics. Operations strategy and piping modification was required to manage the waste stream due to changed solids settling characteristics. Interim operations were positive, resulting in improved used motor oil recovery from reactor bottoms and reduced waste production. However, based on recent operations at the Aldersyde Facility with the existing equipment, process and production capacity limitations, the costs incurred to produce distillate are greater than the value of the distillate produced therefore rendering the current facility uneconomical. Considering the foregoing and as Cielo's focus is now on the R&D Facility as the most economical and efficient way to commercialization, Cielo has decided to cease operations of the Aldersyde Facility in its current state.

With the cessation of operations at the Aldersyde Facility, the Company no longer expects that it will recover all of the costs of the facility and related equipment through the normal course of business and anticipates this triggering event will result

in some impairment during fiscal 2023. While the amount of such impairment has not yet been quantified, assets and equipment related to the Aldersyde facility are \$29.0 million and \$1.1 million at April 30, 2022.

### **Research & Development Facility**

The R&D Facility is a scaled-down facility and intended to be the blueprint for a full-scale facility (the "Full-Scale Facility"). The purpose of the R&D Facility is to achieve a high degree of detailed performance characteristics, feedstock yields, optimum carrier fluid design, reactor design, catalyst experimentation and a detailed material balance for the system. The R&D Facility is expected to give Cielo the flexibility to experiment with a greater range of pressure and temperature regimes, reactor configurations and catalysts to greatly enhance the quality of the fuel yield. The detailed lab-grade engineering output is expected to facilitate the design of the Full-Scale Facility with predictable performance, capital cost expectations and operating cost metrics.

Cielo previously intended to locate the R&D Facility at the Fort Saskatchewan location. Due to operational synergies with staffing and existing infrastructure at Aldersyde, the Company is currently planning to locate the R&D Facility at its location in Aldersyde (pending approval from Alberta Environment and Parks).

Cielo will continue to assess various alternatives for the its property in Fort Saskatchewan (the "FS Property") and has taken steps intended to maximize the value of the FS Property while it's not in use and is considering various strategic alternatives for the FS Property. Currently, this includes the leasing of a portion of the FS Property to facilitate steady rental income (refer to "Fort Saskatchewan Lease" section below).

### Project Status

Management believes that successful commercialization of Cielo's technology requires further research and data focusing on identifying low-cost waste feedstocks that can be successfully converted into value-added products in a manner that is safe and minimizes any negative impact on the environment. Cielo requires more flexibility with respect to both intended feedstock and product/by-products. Management is of the view that Cielo needs to acquire and process more economical feedstocks.

Presently, Cielo is authorized by the AEP to utilize "wood residuals derived from non-treated wood processing operations" and used motor oil as feedstocks. Demand for wood residuals has increased in recent years to the point where management believes it is no longer viewed as a waste product and can be costly to acquire. As Cielo's mandate is to transform waste into value-added products and to prevent the waste from ending up in a landfill or being incinerated, Cielo has applied to the AEP to amend its existing approval to allow processing of the following additional feedstocks:

- Creosote treated railroad ties. Pyrolysis of wood produces creosote, as such the pyrolysis of creosote-treated railroad ties would not introduce any new complications to the process.
- Livestock pen shavings, i.e., waste straw, sawdust, and manure generated as waste from bovine and equine source facilities. Lignocellulosic in nature, this feedstock is not materially different from the current wood residual feedstock.

Future AEP amendments and facility modifications may be needed for testing rubber, plastics and organics. A primary use and purpose of the R&D Facility will be to test these alternate feedstocks and determine optimal conversion parameters in order to design the Full-Scale Facility. Given the size and the design of the current Aldersyde Facility, Cielo believes that performing this testing at that facility would be inefficient and uneconomical. The new R&D Facility will be more appropriately designed to enable testing at differing temperatures/pressures/residence times and to be equipped with adequate instrumentation to gather performance data. The new R&D Facility is intended to focus solely on primary thermal catalytic conversion and not to possess the adjunct distillation and hydrodesulphurization units the current facility possesses. All processing equipment in the current Aldersyde Facility will be removed from service (apart from the flare system, several tanks, and associated piping, which will be reused as ancillary equipment for the research facility.)

As disclosed in the Company's Management's Discussion and Analysis for the three- and nine-months ended January 31, 2022, the estimated cost requirement for the R&D Facility was approximately \$11.0 million until the end of calendar 2022.

Total estimated remaining cost requirement at January 31, 2022 was approximately \$9.5 million until the end of 2022. After completion of detailed engineering of the facility and updated equipment procurement, fabrication and construction costs, the revised capital cost estimate of the R&D Facility is CDN \$5.5 million, of which approximately \$1.0 million has been incurred. The estimated remaining costs for the R&D Facility is \$4.5 million. A portion of the net proceeds of the Unit Offering completed on July 8, 2022 are allocated for this purpose (see heading “2022 Financial Overview – Public Offering of Securities” for additional information).

### **Intellectual Property – License Termination**

Pursuant to an agreement entered into between Cielo and 1888711 Alberta Inc. (“1888 Inc”), dated June 14, 2016, subsequently amended and restated on November 1, 2017, Cielo held an exclusive global license, to complete the development and commercialization of the technology to convert and transform waste to fuel (the “**Technology**”) (the “**License Agreement**”). The Technology, which is patented in Canada and the United States, can utilize waste to produce fuel through a thermal catalytic depolymerization process.

On December 3, 2021, Cielo and 1888 Inc executed an agreement pursuant to which Cielo and 1888 Inc agreed that all rights of 1888 Inc to utilize the Technology and receive payment of royalty and refinery fees pursuant to the License Agreement were terminated. In consideration for terminating the License Agreement and transferring the patents and all related intellectual property to Cielo, 10,000,000 common shares in the capital of Cielo (the “Shares”) were issued to 1888 Inc. The Shares were subject to a 4-month hold period that expired on April 4, 2022.

### **Office Lease in Calgary, Alberta**

In September 2021, the Company entered into an approximate 10,000 square foot office lease agreement in Calgary. The term of the lease is 5 years commencing November 1, 2022 (the “Lease Term”). The annual lease payment includes base rent between \$104,000 to \$146,202, and additional rent of approximately \$200,000 during the Lease Term.

### **Executive changes**

On April 18, 2022, the Company announced the resignation of its CFO, Stephanie Li, and the appointment of its interim CFO, Anna Cheong.

On June 13, 2022, the Company announced the resignations of Gregg Gegunde, Chief Executive Officer and Chris Sabat, Chief Legal Officer and Corporate Secretary, and the return of Anna Cheong, who was acting as interim Chief Financial Officer, to a Controller position. Cielo also announced the appointment of Ryan Jackson as interim CEO and Jasdeep K. Dhaliwal as interim CFO and Corporate Secretary, as well as the appointment of Sheila Leggett as Audit Committee Chair to replace Ms. Dhaliwal.

On July 15, 2022, the Company announced the appointment of Ryan Carruthers to Executive Vice President, Operations.

### **Fort Saskatchewan Lease**

The Company entered into a commercial lease (the “Lease”) with a private, third-party corporation (the “Tenant”) for 15 of the approximately 60 acres owned by Cielo in Fort Saskatchewan, Alberta (the “FS Property”), which includes the building that is located on the FS Property (together the “Leased Premises”). The Lease is for a term of 5 years, beginning as of August 1, 2022, at a monthly base rent of \$50,000 plus 90% of the occupancy costs for the Leased Premises (such as property taxes, insurance, and building maintenance). The Tenant may extend the Lease for an additional period of 5 years. The Tenant has the right to terminate the Lease on April 30, 2025 upon three (3) months’ notice.

## **OUTLOOK**

The primary business objective the Company expects to accomplish is focused on the initiation in 2023 of the design of the Full-Scale Facility (a full-scale commercial waste-to-fuel facility) based on testing to be undertaken at the R&D Facility. Subsequent to the commissioning of the R&D Facility, the Company intends to continue to utilize the R&D Facility to generate the data required to design and define the economics of a commercial facility.

For additional details on the R&D Facility, see section entitled “2022 Operational Outlook – Operational Activities During and Subsequent to the Year Ended April 30, 2022 – Research and Development Facility”).

**Significant Events, Milestones or Objectives**

Below is a table setting out milestones expected to be achieved by the Company and their anticipated costs and timing:

Description	Estimated Costs (\$000)	Start Date	End Date	Duration (weeks)	Comments
<b>Level 1 (Quantitative) testing – bench scale unit</b>	\$880	Aug-22	Dec-22		Quantitative testing is expected to be performed to develop a library of information on various feed stocks.  Testing may identify modifications that will be required to the full-scale research facility.
<b>Research Facility Estimated Construction Costs and Schedule</b> (Costs to construct the R&D Facility including materials, fabrication, shipping, construction, and commissioning and start up.)					
Materials	\$2,715				Vessel, heaters, pumps, valves, etc.
Fabrication - research facility will be fabricated as modules at Arjae facility in Nisku then transported to site.	\$990	Jul-22	Dec-22	24	Fabrication commenced July 2022.  The Company expects material procurement and fabrication to take approximately 24 weeks.
Shipping and On Site Construction	\$610	Dec-22	Feb-23	6	On site construction is anticipated to be 4 to 6 weeks.
Commissioning and Start Up	\$185	Feb-23	Feb-23	2	Initial start-up would be on used motor oil and wood biomass and the Company expects that engineering data would thereafter be available.
<b>Total</b>	<b>\$4,500</b>	Jul-22	Feb-23	<b>32</b>	
<b>Research Facility (Level 3) Testing Timeline<sup>(1)</sup></b> (Costs associated with testing procedures and modifications after the construction and commissioning of the R&D Facility.)					
	<b>\$1,520<sup>(2)</sup></b>				Level 3 testing will provide heat and material balances, operating conditions, product yields, qualities and ability to perform technical and economic assessments for the various feed stocks.
Wood Biomass		Feb-23	Apr-23	6	Anticipate 1 week test run, 1 to 2 weeks to receive lab data and analyze test results. Added 3 weeks to account for any start up related challenges.
Railway Ties		Apr-23	May-23	4	Railway tie testing should not require modifications to the research facility. Provide 4 weeks for testing, lab analysis and analyzing results.
Research Facility Modifications for rubber		May-23	Jun-23	6	
Rubber		Jun-23	Jul-23	6	Testing on rubber and plastic may require modifications to the Research Facility. Allow 6 weeks duration from start to finish for testing rubber or

Research Facility Modifications for plastics		Jul-23	Sep-23	6	plastics and 6 weeks for system modifications.
Plastic		Sep-23	Oct-23	6	
Research Facility Modifications		Oct-23	Dec-23	6	
Continued testing to optimize yields, quality and/or other feed stocks		Dec-23			

**Notes:**

- (1) Requires the installation of a thermal oxidizer and flue gas wash to ensure proper oxidation and potential sequestration of any resultant sulphur, chlorine or nitrogen heteroatoms released from the feedstock. The thermal oxidizer and flue gas wash is estimated to cost \$100,000.
- (2) Total amount of \$2,400,000 for Level 3 testing. The amounts required for the various infeeds will vary based on the initial test results, testing time and modifications required.

**SELECTED ANNUAL INFORMATION**

The following table presents selected annual financial information for Cielo, followed by a further breakdown and analysis of the sections below:

(Thousands of dollars, except per share amounts)	Three months ended April 30,		Year ended April 30,	
	2022	2021	2022	2021
Total revenue	-	-	-	4
Financing costs	295	3,163	1,516	5,053
General and administrative	1,462	1,010	6,616	2,624
Research and development	899	951	5,467	2,053
Net loss	(2,197)	(33,884)	(14,445)	(39,709)
Net loss per share – basic & diluted	(0.00)	(0.10)	(0.02)	(0.11)

(Thousands of dollars)	April 30, 2022	April 30, 2021
Total assets	53,531	45,192
Total liabilities	19,932	20,687
Total non-current liabilities	16,959	1,574
Working capital (deficiency)	1,164	(688)

**Financing Costs**

	Three months ended April 30,		Year ended April 30,	
	2022	2021	2022	2021
Amortization of deferred financing costs	-	2,817	811	3,526
Interest on loans	540	1,039	1,518	3,267
Accretion of debentures	-	-	120	23
Accretion of lease liability	21	6	64	25
Capitalized interest	(266)	(699)	(997)	(1,788)
<b>Total</b>	<b>295</b>	<b>3,163</b>	<b>1,516</b>	<b>5,053</b>

Financing costs decreased by \$2.9 million and \$3.5 million for the three months and year ended April 30, 2022 compared to respective periods ended April 30, 2021. The decrease in amortization of deferred financing costs and interest on loans are associated with convertible debentures bearing interest at 15% in the prior year. The debentures were fully converted in Q1 2022.

### General and Administrative

(Thousands of dollars)	Three months ended April 30,		Year ended April 30,	
	2022	2021	2022	2021
Professional fees	535	485	2,441	1,388
Salaries and benefits	717	263	3,097	559
Property tax and insurance	188	165	612	456
Office and administrative	276	97	719	221
<b>Total</b>	<b>1,716</b>	<b>1,010</b>	<b>6,869</b>	<b>2,624</b>

General and administrative expenses increased by \$0.7 million for the fourth quarter of the year ended April 30, 2022 compared to the fourth quarter of the year ended April 30, 2021. The increases were related to salaries and benefits for additional employees hired to facilitate the growth of the Company and associated office and administrative expenses and consulting fees related to data collection and analysis for process formalization.

General and administrative expenses increased by \$4.2 million for the year ended April 30, 2022 compared to the year ended April 30, 2021. The increases were related to salaries and benefits for additional employees hired to facilitate the growth of the Company, consulting fees related to data collection and analysis for process formalization, professional fees for securities and TSXV filings, financing activities, external audit, and tax compliance services.

### Research and Development

(Thousands of dollars)	Three months ended April 30,		Year ended April 30,	
	2022	2021	2022	2021
Operating expenses	747	643	3,758	1,588
Personnel costs	152	308	1,709	465
<b>Total</b>	<b>899</b>	<b>951</b>	<b>5,467</b>	<b>2,053</b>

Research and development expenses decreased marginally by \$0.05 million for the quarter ended April 30, 2022, compared to the same period in the prior year ended April 30, 2021. The Aldersyde Facility was operating intermittently in Q4 2022 after commissioning of Aldersyde Phase I modifications. In the fourth quarter of the year ended April 30, 2021, the spending at Aldersyde was mainly capital spending on assets under construction related to the commissioning of the Aldersyde Facility.

Research and development expenses increased by \$3.4 million for the year ended April 30, 2022, compared to the same period in the prior year ended April 30, 2021. The increases were related to hiring additional R&D engineering and operational staff. Operating expense increases relate to activities at Aldersyde for research and development to attain steady-state production and repairs and maintenance to address production issues.

### Share Based Compensation

	Three months ended April 30,		Year ended April 30,	
	2022	2021	2022	2021
Stock options	167	95	1,133	242
Restricted share units	91	-	489	156
Deferred share units	105	-	140	-
<b>Total share-based compensation</b>	<b>363</b>	<b>95</b>	<b>1,762</b>	<b>398</b>

Share based compensation increased by \$0.3 million for the quarter and \$1.3 million for the year ended April 30, 2022, compared to the respective prior year periods. The increases were related to the issuance of stock options, restricted share units and deferred shared units to employees and directors of the Company in December 2021 and March 2022.

### Depreciation and Amortization

	Three months ended April 30,		Year ended April 30,	
	2022	2021	2022	2021
PP&E	79	37	252	150
Intangible assets	19	-	48	-
Right-of-use assets	43	11	143	37
Total depreciation & amortization	141	48	443	187

Depreciation and amortization increased by \$0.1 million for the three months and \$0.3 million for the year ended April 30, 2022, compared to the respective prior year periods. The increases were related the depreciation of right-of-use assets for the Calgary head office lease and higher depreciation of PP&E related to additions of the building in Fort Saskatchewan and additions to equipment in the current year.

### Gain on settlement of debt with shares & other

The gain on settlement of debt in the current year and current quarter was a result of the derecognition of the First Mortgage Loan upon repayment of \$5.5 million of the loan and additional modifications including the removal of the loan covenants and the extension of the term of the First Mortgage Loan from 12 months to 24 months, now maturing September 2023.

### Fair Value change of warrant liability

During the year ended April 30, 2018, the Company completed a \$3.5 million financing arrangement (the "BJK Loan") with BJK Holdings Ltd. ("BJK"), which included \$3.5 million of debt financing as well as the issuance of 25.0 million share purchase warrants (the "BJK Warrants"). Each BJK Warrant entitled BJK to purchase one common share of the Company at an exercise price of \$0.20 (the "Exercise Price"). The terms of the BJK Warrants contained an adjustment clause to increase the number of the BJK Warrants outstanding, and to decrease the Exercise Price, for any reorganizations or dilutive events during the term of the Bonus Warrants. In May 2021, the Company issued 20,589,474 common shares upon the exercise of 20,589,474 BJK Warrants outstanding in connection with the BJK Loan. The exercise prices of these warrants were between \$0.09 to \$0.25 per share.

The BJK Warrants were recognized as a current liability in the statements of financial position with the unrealized gains/losses resulting from the changes in fair value each period recognized as a non-cash item in the statement of net and comprehensive loss. As these BJK Warrants were exercised, the fair value of the recorded warrant liability on the date of exercise was removed from the warrant liability account and recorded in share capital along with the proceeds from the exercise. The BJK Warrants were fully exercised in Q1 2022.

### Other (income) expenses

In February 2021, the Company entered into a purchase commitment with FCF for 900,000 litres of low sulfur diesel at \$1.67/liter for an aggregate purchase price of \$1.5 million (the "Purchase Commitment"). In connection with the Purchase Commitment, 3.75 million common share purchase warrants (the "Finder Warrants") were issued to a finder connected to FCF (the "Finder"), each exercisable into one common share of Cielo at a price of \$0.135 per common share for a period of two years from the date of issuance. The Finder also received a cash commission equal to 5% of the aggregate purchase price of the Purchase Commitment.

The \$1.1 million value of the Finder Warrants was expensed and recorded in Other expenses (income). The Finder Warrants were exercised in accordance with their terms in September 2021.

## SUMMARY OF QUARTERLY RESULTS

Fluctuations in net loss for each quarter generally relate to the amounts of financing, research and development, and share based compensation expenses the Company incurred during the respective quarter. The business of Cielo, when in commercial production, is expected to exhibit some seasonality and cyclicity due to overall consumption patterns of refined products, broad macro-economic activity, and extenuating events. Low carbon fuels act as both substitutes and measures to reduce carbon intensities of fossil fuels. Seasonal increases in demand for heating oil can increase diesel prices as refiners may produce more heating oil to meet demand. In addition, broad economic conditions, and geopolitical instability, such as COVID-19 and the ongoing conflict between Russia and Ukraine, can impact the consumption of fuels. In some cases, consumer preferences and rates of adoption of low carbon fuels may partially or completely offset any declines as a result of broad economic declines.

The table below summarizes Cielo's financial results for the last eight fiscal quarters:

	2022				2021			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Total revenue	-	-	-	-	-	-	-	4
Net loss	(2,197)	(4,368)	(4,841)	(3,039)	(33,884)	(1,620)	(2,929)	(1,276)
Net loss per share - basic & diluted	(0.00)	(0.01)	(0.01)	(0.00)	(0.07)	(0.01)	0.01)	(0.01)

The net loss for the three months ended April 30, 2022 was \$2.2 million, a decrease of \$2.2 million compared to the third quarter of fiscal 2022 and a decrease of \$31.7 million compared to the fourth quarter in the prior year.

The decrease of \$2.2 million in net loss was mainly due to (i) a decrease of \$0.8 million in share-based compensation due to the immediate vesting of a portion of the restricted share units, deferred share units and stock options on December 31, 2021 (ii) a gain of \$0.3 million recorded in the current quarter related to the amendment of the First Mortgage Loan (iii) a deferred tax recovery of \$0.9 million recorded in the current quarter related to the warrants issued with the First and Second Mortgage Loans.

The decrease of \$31.7 million in net loss in the current quarter compared to the prior year quarter was primarily due to (i) a decrease of \$2.9 million in financing costs due to amortization of deferred financing costs on convertible debentures in the prior year quarter; (ii) a decrease of \$27.6 million in the fair value change of warrant liability due to the measurement of outstanding liability classified warrants at the prior year quarter which were fully exercised in Q1 2022 and (iii) a decrease of \$1.0 million in Other (income) expenses related to a charge recognized in the prior year quarter in connection with warrants issued for the prepaid oil sale offset by increases in general and administrative expenses of \$0.7 million.

## LIQUIDITY AND CAPITAL RESOURCES

### Working Capital

Cielo's primary objective for managing liquidity and capital resources is to ensure the Company has sufficient funds available for research, development, and other corporate activities. The Company has working capital of \$1.2 million at April 30, 2022, compared to \$0.7 million deficiency as at April 30, 2021. The decrease in working capital deficiency of \$1.9 million was mainly due to: (i) the decrease in deferred revenue and fees due to the reclassification of the deferred fees paid to Renewable U reclassified as long-term liabilities and the repayment of \$1.5 million of the prepaid oil sales to FCF (ii) the decrease of \$10.1 million in the short-term warrant liability due to the exercise of the BJK Warrants to equity in Q1 2022 (iii) the repayment of the current portion of long-term loans of \$1.0 million in Q1 2022 (iv) the decrease in accounts payables (iii) offset by the decrease in cash balance which was used to fund research, development, and corporate activities;



The Company has not reached planned commercial operations or generated sufficient operational cash flows to meet the Company's planned growth or to fund research, development and corporate activities. The Company will require additional capital to fund costs relating to research, development and other corporate activities over the next year and beyond, and to fund payments of short-term indebtedness as they become due and otherwise fund the working capital deficiency. The Company continues to explore alternatives to generate additional financing, which may include raising additional equity and debt or entering into strategic partnerships; however, there is no assurance that these initiatives will be successful, and they may depend on prevailing commodity prices, general economic conditions and the Company's success in its research and development activities.

### Cash Flow Summary

The following table summarizes the Company's sources and uses of funds for the three months and year ended April 30, 2022 and 2021 from continuing operations:

(Thousands of dollars)	Three months ended April 30,		Year ended April 30,	
	2022	2021	2022	2021
Operating activities	(3,919)	1,730	(16,377)	(1,274)
Financing activities	5,187	18,525	21,521	24,489
Investing activities	(1,111)	(3,344)	(19,639)	(6,121)

### Operating Activities

Net cash used in operating activities was \$3.9 million for the three months and \$16.3 million for the year ended April 30, 2022. The cash used in operating activities was used to fund general and administrative and research and development expenditures; payment of the deferred revenues; and reduction in accounts payable.

### Financing Activities

#### Public Offering of Units

On July 8, 2022, the Company completed the Offering (see section entitled "2022 Financial Overview – Public Offering of Securities for details).

The Company has used certain of the gross proceeds and intends to use the balance of the gross proceeds of the Offering as set out below:

<u>Principal Purpose</u>	<u>Offering (\$000)</u>
Expenses relating to the Offering (Agent's Fee and estimated Offering expenses)	\$820
Capital equipment and costs (R&D Facility) <sup>(2)</sup>	\$4,500
Research and Development	\$2,400
General and Administration Expenses	\$780
<b>Total use of gross proceeds</b>	<b>\$8,500</b>

The above-noted allocation represents the Company's intention with respect to its use of proceeds based on current knowledge and planning by management of the Company. Actual expenditures may differ from the estimates set forth above. The Company will require additional financing over and above the Offering in order to meet its longer-term business objectives.

#### Repayment of Purchase Commitment with FCF

In February 2021, the Company entered into a purchase commitment with FCF for 900,000 litres of low sulfur diesel at \$1.67/litre for an aggregate purchase price of \$1.5 million (the "Purchase Commitment"). In connection with the Purchase Commitment, 3.75 million common share purchase warrants were issued to FCF, each exercisable into one common share of Cielo at a price of \$0.135 per common share for a period of two years from the date of issuance. These warrants have

been fully exercised in accordance with their terms as of the date of this MD&A. FCF also received a cash commission equal to 5% of the aggregate purchase price of the Purchase Commitment.

Pursuant to the Purchase Commitment (see section entitled “Selected Annual information – Other (income) Expenses”), the Company was obligated to make commercially reasonable efforts to produce the fuel as soon as practicable. However, delayed production was not to be considered a material breach of the Purchase Commitment, provided Cielo made commercially reasonable efforts to produce the fuel. In the event the Company was not able to deliver the fuel with a minimum resale price of \$1.67 per litre, or a minimum aggregate resale price of \$1.5 million, there were to be no penalty provisions, and the Company would either produce additional fuel to achieve an aggregate resale price of \$1.5 million, or refund FCF the balance of the \$1.5 million, deducting the actual aggregate resale price achieved.

Pursuant to a request received from FCF, on April 22, 2022, Cielo refunded without payment of interest or other penalty the \$1.5 million prepaid to Cielo for the purchase of renewable diesel by FCF. The payment was made in the ordinary course as Cielo’s production was not in a position to deliver the renewable diesel purchased by FCF.

#### First Mortgage Loan

See section entitled “2022 Financial Overview – First Mortgage Loan” for details of the First Mortgage Loan, completed in August 2021.

#### Convertible Debenture Financing

See section entitled “2022 Financial Overview – Private Placement – Convertible Debentures” for details of the convertible debenture financing completed in August 2021.

#### Share Issuance upon Conversion of Debentures

In June 2021, the principal amount of \$0.7 million of debentures was converted into 12,462,500 common shares of the Company at the conversion prices between \$0.05 to \$0.08 per common share. The debentures had been issued prior to the year ended April 30, 2022.

#### Share Issuance upon Exercise of Warrants

In September 2021, 3,750,000 outstanding warrants issued pursuant to the Purchase Commitment were exercised at the exercise price of \$0.135 per share. The Company issued 3,750,000 common shares and received gross proceeds of \$0.5 million.

In May 2021, 20,589,474 outstanding warrants were exercised at the exercise prices between \$0.09 to \$0.25 per share. The Company issued 20,589,474 common shares and received gross proceeds of \$1.9 million. The warrants had been issued prior to the year ended April 30, 2022.

#### Share Issuance upon Exercise of Options

In May 2021, 445,000 stock options were exercised at the exercise price of \$0.10 per share. The Company issued 445,000 common shares and received gross proceeds of \$0.04 million.

In January 2022, 200,000 stock options were exercised at the exercise price of \$0.10 per share. The Company issued 200,000 common shares and received gross proceeds of \$0.02 million.

#### Share Issuance for IP Purchase Agreement

In December 2021, 10,000,000 common shares were issued to 1888 Inc in consideration for terminating the License Agreement and transferring the patents and all related IP to Cielo. The common shares were subject to a 4-month hold period expiring on April 4, 2022.

### Repayment of Promissory Note

In August 2021, the Company made a payment of \$1.0 million to 1823741 Alberta Ltd., to repay the principal and interest amounts owing to 1823741 Alberta Ltd.

### **Investing Activities**

Net cash used in investing activities was \$1.1 million for the three months, and \$19.6 million for the year ended April 30, 2022. This costs primarily relate to capital expenditures for the Aldersyde Facility and the R&D Facility as noted below:

(Thousands of dollars)	<b>Construction in Progress</b>	<b>Land</b>	<b>Building</b>	<b>Equipment</b>	<b>Computers</b>	<b>Total</b>
Corporate	-	10,165	2,967	-	38	<b>13,170</b>
Aldersyde Facility	4,568	3	28	348	23	<b>4,970</b>
R&D Facility	1,443	-	-	-	-	<b>1,443</b>
<b>Total additions to property, plant and equipment</b>	<b>6,011</b>	<b>10,168</b>	<b>2,995</b>	<b>348</b>	<b>61</b>	<b>19,583</b>

### **Capital Expenditures**

On July 8, 2022, the Company completed the Offering (see section entitled “2022 Financial Overview – Public Offering of Securities for details).

The Company intends to use a portion of the gross proceeds to fund the capital expenditures for the R&D Facility and further fund research and development activities.

<b>Principal Purpose</b>	<b>Amount (\$000)</b>
Capital equipment and costs (R&D Facility) <sup>(2)</sup>	\$4,500
Research and Development	\$2,400

### **CONTRACTUAL LIABILITIES AND COMMITMENTS**

As at April 30, 2022, the Company is committed to expenditures under various contracts with service providers for general and administrative services. As at April 30, 2022, the Company had contractual obligations as follows:

(Thousands of dollars)	<b>2023</b>	<b>2024</b>	<b>2025 +</b>	<b>Total</b>
Lease obligations	144	180	515	839
General and administrative contracts	105	-	-	105
Other	313	299	40	652
<b>Total contractual obligations</b>	<b>562</b>	<b>479</b>	<b>555</b>	<b>1,596</b>

### **OFF-BALANCE SHEET ARRANGEMENTS**

As at April 30, 2022, Cielo did not have any off-balance sheet arrangements in place that would materially impact its financial position or results of operations.

## RELATED PARTY TRANSACTIONS

### **1888711 Alberta Inc.**

A director and former officer of Cielo was also a director and officer of 1888 Inc for a portion of the year ended April 30, 2022, while the License Agreement was in place. The director and former officer of Cielo resigned from 1888 Inc. prior to the termination of the License Agreement in December 2021. See section entitled “2022 Operational Outlook – Intellectual Property – License Termination” for details regarding the License Agreement between Cielo and 1888 Inc. that was terminated in December 2021.

For the year ended April 30, 2022, Cielo charged 1888 Inc total expenses of \$0.004 million and \$0.017 million (2021 - \$0.023 million and \$0.039 million), respectively, in relation to 1888 Inc using Cielo’s office space for business purpose, and other business expenses that Cielo paid on behalf of 1888 Inc. As at April 30, 2022, the amount receivable from 1888 Inc was \$nil (April 30, 2021 - \$0.186 million).

### **Renewable U Energy Inc. (“Renewable U”)**

In September 2021, the Senior Vice President of Global Development & Indigenous Relations and Senior Vice President of Corporate Development & Investor Relations, who were also directors and shareholders of Renewable U, both resigned from their positions with Cielo in order to focus their efforts on Renewable U, a privately-owned Alberta corporation. For the year ended April 30, 2022, the CEO, director and shareholder of Renewable U, Ryan Jackson was also a director of Cielo until June 12, 2022.

The Company entered into memorandums of understanding (the “MOUs”) in total with Renewable U and its affiliates to build and commission nine (9) waste to fuel facilities, at no cost to Cielo other than internal costs, one each in Grand Prairie, Alberta, Calgary, Alberta, Medicine Hat, Alberta, Lethbridge, Alberta, Halifax, Nova Scotia, Toronto, Ontario, Winnipeg, Manitoba, Kamloops, British Columbia, and a location to be determined in the United States. The Company and Renewable U intend to amend the MOU for Lethbridge, Alberta to another location.

Pursuant to the MOUs and prior to the year ended April 30, 2022 in each case, in consideration for the opportunity to enter into joint arrangement agreements, Renewable U and its affiliates paid a fee of \$0.25 million to the Company for the execution of each MOU. The Company will also be responsible for overseeing the planning, construction, commissioning, and operation of each facility and will receive a management fee for the planning and construction of each facility equal to 7% of the project costs for each such facility subject to certain exclusions and will continue to receive management fees once operations begin based on industry standards. The fees are non-refundable unless a joint arrangement agreement is not executed. In the event that the Company does not execute a definitive joint arrangement agreement, the fees would be repaid by cash or by an issuance of common shares of the Company. During the year ended April 30, 2022, the Company reclassified the amounts related to the MOUs from current to long term as the obligation of the Company to either execute definitive agreements or refund the fees under the various MOUs is not expected to arise in the next 12 months.

For the year ended April 30, 2022, the Company charged Renewable U management fees and recovery of expenses of \$0.005 million and \$0.09 million, respectively (2021 - \$0.016 million and \$0.242 million) and made a credit adjustment of \$0.06 million to the recovery of expenses related to fiscal Q4 2021 in fiscal Q1 2022. The management fees were recorded as other expenses (income) in the statements of loss and comprehensive loss. As at April 30, 2022, the amount receivable from Renewable U was \$nil (April 30, 2021 - \$0.1 million).

On June 13, 2022, Cielo also announced the appointment of Ryan Jackson as interim CEO. Mr. Jackson stepped down from his roles as Director and CEO of Renewable U effective on June 12, 2022. Mr. Jackson continues to be a beneficial, indirect shareholder of Renewable U, holding 10% or less of the outstanding shares of Renewable U.

## OUTSTANDING EQUITY

Cielo's issued and outstanding common shares, along with common shares potentially issuable are as follows:

(Number of common shares, warrants, options, and units)	April 30, 2022	April 30, 2021
Common shares	662,329,912	611,682,938
<b>Total common shares issued and outstanding</b>	<b>662,329,912</b>	<b>611,682,938</b>
Convertible debentures	-	12,462,500
Warrants	62,000,000	24,331,159
Stock options	27,249,695	1,395,000
RSUs	3,666,667	-
DSUs	2,100,000	-
<b>Total common shares potentially issuable</b>	<b>95,016,362</b>	<b>38,188,659</b>
<b>Total</b>	<b>757,346,274</b>	<b>649,871,597</b>

Subsequent to the year ended April 30, 2022:

1. On July 8, 2022, the Company completed the Offering (see section entitled "2022 Financial Overview – Public Offering of Securities for details).
2. As a result of the partial repayment to the First Mortgage Loan, the term of 5,500,000 of the 12,000,000 First Mortgage Bonus Warrants was reduced and the 5,500,000 of the First Mortgage Bonus Warrants expired on May 19, 2022.
3. 9,166,667 options and all of the outstanding 3,666,667 RSUs were forfeited due to the departure of the Executives.

As at the date of this MD&A, the following securities of Cielo are issued and outstanding:

(Number of common shares, warrants, options, and units)	August 24, 2022
Common shares	802,272,768
Convertible debentures	-
Warrants	195,842,856
Broker Warrants	7,344,589
Stock options	18,083,028
RSUs	-
DSUs	2,100,000
<b>Total common shares potentially issuable</b>	<b>223,370,473</b>
<b>Total</b>	<b>1,025,643,241</b>

## SIGNIFICANT ACCOUNTING POLICIES AND CRITICAL ACCOUNTING ESTIMATES

Note 4 to the financial statements for the years ended April 30, 2022 and 2021 includes a summary of significant accounting policies.

The preparation of the financial statements in accordance with IFRS as issued by the International Accounting Standards Board ("IASB") requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, income, and expenses. Estimates and judgments are evaluated each reporting period and based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. These estimates and assumptions are subject to inherent risk of uncertainty and actual results may differ from these estimates and assumptions.

Significant estimates are used for, but not limited to, the measurement of the fair value of convertible debentures, warrant liability, share-based payment transactions, and deferred income taxes.

## **NEW ACCOUNTING STANDARDS AND INTERPRETATIONS**

There have been no new accounting standards and interpretations issued by the IASB that have a material impact on the Company's financial statements for the year ended April 30, 2021.

## **RISK FACTORS**

An investment in the securities of the Company involves numerous and significant risks. Investors should carefully consider the risk factors that have affected, and which in the future are reasonably expected to affect, the Company and its financial position. The following are certain factors relating to the Company's business which investors should carefully consider. These risks and uncertainties are not the only ones the Company is facing. Additional risk and uncertainties not presently known to us, or that we currently deem immaterial, may also impair our operations. If any such risks actually occur, the business, financial condition, liquidity and results of our operations could be materially adversely affected.

### **Early Stage Technology Research, Development and Manufacturing Capability**

The Company continues to be in the research and development stage, both in terms of its technology and in terms of its manufacturing capability. The Company's existing facilities and research and development activities and the research and development of new technologies and processes may require significant spending which may negatively impact our operating results. The Company has earned limited revenues to date and has supported its operations through cash flow from product sales and various debt and equity financings. While the current Aldersyde Facility and process is uneconomical, parts of the Aldersyde Facility and equipment may be utilized in the future and incorporated a redesign. If the Aldersyde Facility cannot be redesigned to be commercially viable, a substantial amount of the carrying value will be deemed to be impaired requiring a write-down. The timing and magnitude of any such impairment will be monitored and will ultimately depend on facts and conditions at the time that a triggering event has been identified. The Company's operations continue to be subject to all of the risks inherent in a company developing a new technology to market. The likelihood of success of the Company must be considered in light of the problems, expenses and delays frequently encountered in connection with an early-stage development business and the research, development and introduction of new products and new technology.

### **The Company faces operational risks and its facilities may fail performance expectations**

Waste to fuel refining operations generally involve a high degree of risk including hazards and risks normally encountered in obtaining feedstock, process design, the fluctuation of fuel prices and possible damage to, or destruction of the producing facilities, damage to life or property, environmental damage and possible legal liability. Certain operational risks include fire, explosion, and spills. The costs of any of these incidents could have a material adverse effect on the Company's business, financial condition, results of operations, legal liability, cash flows or prospects.

The performance of the Company's TCD and related systems at its Aldersyde Facility, R&D Facility and potential additional facilities may encounter problems due to the failure of technology, the failure to combine technologies properly, operator error or the failure to maintain and service the facilities properly. There is no certainty that the facilities will, or will continue to, result in production of commercial quantities of low carbon fuels. Refining operations are subject to hazards such as equipment failure and fuel storage areas, which may result in environmental pollution and consequent liability. Many potential problems and delays are beyond the Company's control, such as the COVID-19 pandemic or the Russia-Ukraine crisis, which may result in closures and supply chain disruptions. Any problem with the Company's facilities, whether originating from its technology, design, or installation, could have a material adverse effect on the Company's business, financial condition, results of operations, legal liability, cash flows or prospects.

A number of factors related to the development and operation of individual facilities could adversely affect the Company's business, including:

- regulatory changes that affect the demand for or supply of low carbon fuels and the prices thereof, which could have a significant effect on the Company's cash flows and financial condition;

- regulatory changes to waste management policies or changes to the waste collection industry that could reduce the amount of waste available to be used at our facilities;
- changes in the regulatory in the regions where the Company operates or is developing new facilities;
- ability to obtain regulatory permits on acceptable terms;
- changes in energy commodity prices, such as diesel fuel and naphtha;
- a decrease in the availability, pricing and timeliness of delivery of raw materials and components necessary for the facilities to function;
- the competitive landscape if an increased number of waste to energy facilities become operational; and
- unexpected delays in the development and completion of facilities as well as unforeseen events giving rise to force majeure or unexpected delays once such facilities are operational.

Any of these factors could prevent the Company from completing or operating its projects, or otherwise adversely affect its business, financial condition and results of operations.

The final amount of capital expenditures relating to the development of our facilities may be significantly greater than expected, in which case we may be required to curtail or delay construction and development of our facilities, which would reduce our planned production capacity and adversely affect our growth plans, cash flows and financial condition. We or our joint arrangement partners will likely need to raise capital for the construction and development of our facilities, which may not be available on acceptable terms, or at all.

#### **We will rely on certain intellectual property to operate our facilities**

Cielo relies or may rely on a combination of patents, trademarks, trade names, trade secrets, confidentiality agreements and other contractual restrictions on disclosure to protect its intellectual property rights. Cielo also enters into confidentiality agreements with employees, consultants and other third parties, and controls access to and distribution of Cielo's confidential information. Cielo's success will depend in part on its ability to maintain or obtain and enforce patent and other intellectual property protection for Cielo's process and technologies and to preserve trade secrets, and to operate without infringing upon the proprietary rights of third parties. Setbacks or failures in these areas could negatively affect Cielo's ability to compete and materially and adversely affect Cielo's business, financial condition and results of operations.

If Cielo is unable to protect intellectual property or if a competitor develops or obtains exclusive rights to a breakthrough technology, the impact on our business and financial performance may be significant. Developments in technology could trigger a fundamental change in waste processing and the renewable energy industries, which may adversely impact volumes at our facilities and ultimately the Company's financial performance.

Cielo has obtained, directly or indirectly, patents and/or filed patent applications in the United States and Canada, and may, in the future, seek additional patents or file patent applications.

There can be no assurance that Cielo will be successful in obtaining patents it applies for in the future. Third parties may infringe on our patents. To counter infringement or unauthorized use, we may need to file infringement claims, and in an infringement claim, there is risk that a court will decide that a patent of ours is invalid or unenforceable, in whole or in part, and that we have the right to stop the other party from using the invention at issue. Additionally, there can be no assurance that the scope of any claims granted in any patent will provide Cielo with adequate protection for the processes used by Cielo currently or in the future. Cielo cannot be certain that the creators of our technology were the first inventors of inventions and processes covered by the patents and patent applications or that they were the first to file. Accordingly, there can be no assurance that Cielo's patents will be valid or will afford Cielo with protection against competitors with similar technology or processes.

## **Transition of Key Management Positions**

The transition of our key management positions will be critical to our success, and the failure to successfully manage this transition could adversely impact our business. We have announced the appointment of an interim chief executive officer and interim chief financial officer. The departure of key leadership personnel often results in the loss of significant knowledge and experience, and the ability of our new management to quickly expand their knowledge of our business will be critical to their ability to make informed decisions about our strategy and operations.

Any significant leadership change or senior management transition involves inherent risks, and any future changes to our management that may occur during the transition could cause significant disruption to the Company and its operations. The failure to adequately manage succession of senior management and other key personnel or the failure of key employees to successfully transition into new roles could cause further disruption to our business. In addition, changes in senior management may create uncertainty among investors, employees, business partners and others concerning the Company's future direction and performance. Any disruption in our operations or adverse impacts from such uncertainty could have a material adverse effect on our business, financial condition, cash flows and results of operations.

Additionally, there can be no assurance that further changes to management will not occur. It is important to note that the Company may not be successful in its search or may not meet its objective on a timely basis. The failure to meet its objective at all or on a timely basis, as well as undergoing other changes to management, could have an adverse effect on the Company's business, financial condition, cash flows and results of operations.

## **We rely on certain key personnel and may be subject to labour disruptions**

Cielo's success will depend on its directors and officers to develop its business and manage its operations and on its ability to attract and retain key personnel. The loss of any key person, including but not limited to the Company's President and CEO, or the inability to find and retain new key persons, could have a material adverse effect on Cielo's business. No assurance can be provided that Cielo will be able to attract or retain key personnel in the future, which may adversely impact its operations.

Cielo is also exposed to the risk of labour disruption in its operations. While Cielo does not anticipate any material labour disruptions in the near future, any prolonged work stoppages or other labour disputes could have an adverse impact on Cielo's financial results.

## **The Company's ability to operate as a going concern is in doubt.**

The audit opinion and notes that accompany the Company's Financial Statements disclose a going concern qualification to its ability to continue in business. The Financial Statements have been prepared under the assumption that the Company will continue as a going concern. The Company is a research and development stage company and has incurred losses since its inception. The Company has incurred losses resulting in an accumulated deficit of \$72.9 million as at April 30, 2022 and further losses are anticipated in the development of its business. The Company's ability to continue as a going concern is dependent on its ability to raise capital to fund its future the design of a full-scale commercial waste-to-fuel facility and working capital requirements or its ability to profitably execute its business plan. The Company's plans for the long-term return to and continuation as a going concern include financing its future operations through sales of its Common Shares and/or debt and the eventual profitable full-scale commercial waste-to-fuel facility. Additionally, the volatility in capital markets and general economic conditions in Canada, the U.S. and elsewhere can pose significant challenges to raising the required funds. These factors raise substantial doubt about the Company's ability to continue as a going concern. The Company's Financial Statements do not give effect to any adjustments required to realize its assets and discharge its liabilities in other than the normal course of business and at amounts different from those reflected in the Financial Statements.

## **Need for Future Financing**

The future development of the Company's business will require additional financing or refinancings. There are no assurances that such financing or refinancings will be available, or if available, available upon terms acceptable to the Company. If sufficient capital is not available, the Company may be required to delay the expansion of its business and operations, which could have a material adverse effect on the Company's business, financial condition, prospects or results of operations.



## **Uncertainties Relating to the Company's Business Plans**

There is no assurance that broad successful commercial applications may be feasible for the Company. The Company is continuing to explore, develop, and test feedstock and there can be no assurance that the feedstocks will be economic for commercial application, that test results will be successful, if completed at all, that any necessary permits or approvals required in order to commercialize will be obtained by the Company, or that existing technology or products will become profitable. Should the Company fail to achieve any of the foregoing, this could have a material adverse impact on the business and planned business of the Company.

### **Testing Alternative Waste Feedstock may not Generate Expected Levels of Output**

Testing alternative waste feedstocks to produce low carbon waste to energy fuels, such as diesel, naphtha and kerosene involves a high degree of risk including hazards and risks normally encountered in obtaining feedstock, process design, the fluctuation of fuel prices and possible damage to, or destruction of the producing facilities. Additionally, there is a risk that the use of carrier fluids other than used motor oil could be unviable. There is no certainty that the testing of alternative waste feedstocks and other carrier fluids will result in a production of fuels, low carbon or otherwise, on a commercially viable basis on the timetable we anticipate, or at all. Any extended interruption and or volume disruption in the testing process, or a failure of the process for any reason to generate the expected amount of output, could adversely affect the Company's business and operating results.

### **The Company has discretion in its use of the proceeds from the Offering**

The Company intends to use the net proceeds of the Offering completed in July 2022 and any additional financing transactions as disclosed. Management of the Company maintains broad discretion to spend the proceeds in ways that it deems most efficient and may use the net proceeds other than as described and in ways that an investor may not consider desirable. As a result, an investor will be relying on the judgment of management for the application of the net proceeds of the Offering. The application of the proceeds to various items may not necessarily enhance the value of the Common Shares. The failure to apply the net proceeds as disclosed could adversely affect the Company's business and, consequently, could adversely affect the price of the Common Shares on the open market.

### **Loss of Investment**

An investment in the Units is suitable only for those investors who are willing to risk a loss of some or all of their investment and who can afford to lose some or all of their investment.

### **Liquidity Risk**

Liquidity risk is the risk that the Company will not be able to meet its obligations as they come due. The Company's ability to continue as a going concern is dependent on management's ability to raise the required capital through future equity or debt issuances but there can be no assurance that such financing will be available on a timely basis under terms acceptable to the Company. The Company manages its liquidity risk by forecasting cash flows from operations and anticipating any investing and financing activities.

### **Dividend risk**

The Company currently intends to reinvest all future earnings in order to finance the development and growth of its business. Therefore, the Company does not anticipate paying dividends on the Common Shares in the foreseeable future. The Company's dividend policy will be reviewed from time to time by the Board in the context of the Company's earnings, financial condition and other relevant factors. Until the time that the Company does pay dividends, which the Company may never do, the Company's shareholders will not be able to receive a return on their common shares unless they sell them.

### **Forward-Looking Statements may prove to be inaccurate**

Investors are cautioned not to place undue reliance on forward-looking statements. By its nature, forward-looking statements involve numerous assumptions, known and unknown risks and uncertainties, of both a general and specific nature, that could cause actual results to differ materially from those suggested by the forward-looking statements or contribute to the possibility that predictions, forecasts or projections will prove to be materially inaccurate.

Additional information on the risks, assumptions and uncertainties are found in this Prospectus under the heading “Special Note Regarding Forward-Looking Statements”.

**The market price of the Common Shares may be volatile and is subject to wide fluctuations**

The market price of the Common Shares may be volatile and subject to wide fluctuations in response to numerous factors, many of which are beyond the Company’s control. This volatility may affect the ability of holders of Common Shares to sell their securities at an advantageous price. Market price fluctuations in the Common Shares may be due to the Company’s operating results failing to meet expectations of securities analysts or investors in any period, downward revision in securities analysts’ estimates, adverse changes in general market conditions or economic trends, acquisitions, dispositions or other material public announcements by government and regulatory authorities, the Company or its competitors, along with a variety of additional factors. These broad market fluctuations may adversely affect the market price of the Common Shares. Financial markets have at times historically experienced significant price and volume fluctuations that have particularly affected the market prices of equity securities of companies and that have often been unrelated to the operating performance, underlying asset values or prospects of such companies. Accordingly, the market price of the Common Shares may decline even if the Company’s operating results, underlying asset values or prospects have not changed. There can be no assurance that continuing fluctuations in price and volume will not occur. If such increased levels of volatility and market turmoil continue, the Company’s operations could be adversely impacted and the trading price of the Common Shares may be materially and adversely affected.

**Future sales or issuances of securities and dilution of Common Shares**

Shareholders of the Company will incur immediate dilution as a result of the Offering. The Company may sell additional Common Shares or other securities in subsequent offerings. The Company may also issue additional securities to finance future activities. The Company cannot predict the size of future issuances of securities or the effect, if any, that future issuances and sales of securities will have on the market price of the Common Shares. Sales or issuances of a substantial number of Common Shares, or the perception that such sales could occur, may adversely affect the prevailing market price of the Common Shares. With any additional sale or issuance of Common Shares, investors will suffer dilution to their voting power and the Company may experience dilution in its earnings per Common Share.

**The Company may be unable to obtain additional financing on acceptable terms or at all**

The continued development of the Company may require additional financing. The failure to raise or procure such additional funds may result in the delay or postponement of the Company’s business objectives. There can be no assurance that additional capital or other types of financing will be available if and as needed or that, if available, will be on terms acceptable to the Company. If additional funds are raised by offering equity securities, existing shareholders could suffer significant dilution.

**The Company has a history of Negative Cash Flow**

The Company has a history of negative cash flow from operating activities. To the extent that the Company has negative cash flow in future periods, the Company may need to allocate a portion of the net proceeds received from the sale of Offered Shares hereunder or other financings to fund such negative cash flow. There can be no assurance that additional capital or other types of financing will be available when needed, or that these financings will be on terms at least as favourable to the Company as those previously obtained, or available to the Company at all.

**We intend to conduct some of our operations through joint arrangement and our joint arrangement partners’ interests may not always align with our own**

We intend to conduct some of our operations through joint arrangements, including joint arrangements with Renewable U, in which we may share control over certain economic and business interests. There will be a variety of risks associated with our interest in the joint arrangements, including:

- potential disagreements with our joint arrangement partners about how to construct, operate or finance a facility;
- joint arrangement partners may have economic, business or legal interests, or goals that are inconsistent with our goals and interests;

- joint arrangement partners may be unable to meet their, or may not meet their, obligations under our arrangements with them; and
- disagreements with joint arrangement partners over the exercise of their rights under the agreements that will govern their relationship with us.

Failure by us, or an entity in which we have a joint arrangement interest, to adequately manage the risks associated with joint arrangements, and any differences in views among us and our joint arrangement partners, which could prevent or delay actions that are in the best interest of us or the joint arrangement, could have a material adverse effect on our, or our joint arrangements', financial performance, results of operations, and liquidity.

We intend to negotiate the definitive agreements with Renewable U at the appropriate and agreed-upon time(s) to formally implement the joint arrangements with them. The definitive agreements will replace the MOUs currently in place with Renewable U. The entering into of definitive agreement with Renewable U may be delayed, which could adversely affect the timing for the construction and development of the joint arrangement Facilities. Moreover, there can be no assurance that we will enter into definitive agreements with Renewable U or that the definitive agreements, if entered into, will reflect the terms and conditions as set forth in the MOUs. Under the MOUs, Renewable U will be obligated to finance the construction costs for the applicable facilities. There can be no assurance that Renewable U will be able to obtain such financing on acceptable terms or at all.

Any change in our relationships with Renewable U, whether as a result of economic or competitive pressures or otherwise, including any decision by Renewable U to change or seek to change the terms of our contractual relationships with them, could have a material adverse effect on our business and financial results.

**We are dependent on third parties for our feedstock and significant interruptions in our access to certain key inputs may impair operations at our facilities**

As feedstocks comprise the primary input in converting waste to fuels, changes in the price or availability of feedstocks can significantly affect Cielo's business. We are dependent on third parties for our feedstock. The Company relies on obtaining long-term for the supply of feedstock materials. There can be no assurance that the Company will be able to contract for feedstock or re-contract with any given party upon expiry of a given contract, nor is there any assurance that the Company would be able to replace lost feedstock as a result of a failure to renew an existing contract.

The price or availability of feedstock is influenced by many factors, including market demand, policies with respect to collection or management of waste and general economic and regulatory factors. The significance and relative effect of these factors on the price or availability of feedstock is difficult to predict. Any event that tends to negatively affect the supply of feedstock, could increase feedstock prices and potentially harm Cielo's business. In addition, Cielo may also have difficulty, from time to time, in physically sourcing feedstock on economic terms due to supply shortages. Such a shortage could require Cielo to suspend operations until feedstock is available at economical terms, which would have a material adverse effect on our business, results of operations and financial position.

In addition to feedstock, our business is dependent on a number of other key inputs and their related costs, including raw materials, supplies and equipment related to our operations, as well as electricity, water and other utilities. Any significant interruption, price increase or negative change in the availability or economics of the supply chain for key inputs could curtail or preclude our ability to develop our facilities or continue production and may have a material adverse impact on our business and results of operations.

## **Environmental regulations could have a significant impact on the energy industry**

All phases of operating low carbon fuel production facilities present environmental risks and hazards. Cielo is subject to environmental regulation implemented or imposed by a variety of federal, provincial and municipal laws and regulations as well as international conventions. Among other things, environmental legislation provides for restrictions and prohibitions on spills and discharges, as well as emissions of various substances produced in association with low carbon fuel operations. Legislation also requires that facility sites be operated, maintained, abandoned and reclaimed in such a way that would satisfy applicable regulatory authorities. Compliance with such legislation can require significant expenditures and a breach may result in the imposition of fines and penalties, some of which may be material. Environmental legislation is evolving in a manner we expect may result in stricter standards and enforcement, larger fines, penalties and liability, as well as potentially increased capital expenditures and operating costs. The discharge of pollutants into the air, soil or water may give rise to liabilities to governments and third parties and may require us to incur costs to remedy such discharge.

Although it is not a primary focus of management to achieve the standards for renewable and bio-fuels, Cielo intends to work toward achieving these standards with the goal of allowing its fuel products to warrant a premium. Renewable energy regulations are evolving, which could require the Company to incur substantial costs associated with compliance or alter certain aspects of its business plan. It is also possible that regulations may be enacted in the future that will be directly applicable to certain aspects of the Company's operations. The Company cannot predict the nature of any future laws, regulations, interpretations or applications towards renewable energy policies, nor can it determine what effect additional governmental regulations or administrative policies and procedures, when and if promulgated, could have on the Company's business. The Company's business may suffer if environmental policies change to no longer encourage the development and growth of low carbon fuels. Public opinion can also exert a significant influence over the regulation of the renewable energy industry. A negative shift in the public's perception in the feasibility of renewable energy could affect future legislation or regulations in Canada and abroad which may have an adverse effect on our business.

Failure to comply with government regulations could subject Cielo to civil and criminal penalties, require Cielo to forfeit property rights and may affect the value of Cielo's assets or Cielo's ability to conduct its business. Cielo may also be required to take corrective actions, including, but not limited to, installing additional equipment, which could require Cielo to make substantial capital expenditures. Cielo could also be required to indemnify its employees in connection with any expenses or liabilities that they may incur individually in connection with regulatory action against them. These could result in a material adverse effect on our business, financial condition and results of operations.

## **We have a limited operating history and a history of net losses, and we may not achieve or maintain profitability in the future**

The Company has no history of significant or consistent earnings and there is no assurance that the Aldersyde Facility or any future facility will generate earnings, operate profitably, or provide a return on investment in the future.

Cielo has not generated sufficient positive cash flow on a consistent basis to cover corporate overhead costs and interest and principal payments on loan obligations. Cielo's ability to do so going forward will depend in part on factors over which management has no control. It may be a significant period of time before Cielo achieves consistent revenues while, concurrently, Cielo expects to incur significant costs in connection with ongoing research and development activities.

Few low carbon fuel facilities are developed into profitable businesses without significant help from government subsidies. Major expenses may be required to establish the facility business. It is impossible to ensure that the current business plan by the Company will result in a profitable commercial refining operation.

In addition, Cielo's prospects must be considered in light of the risks and uncertainties encountered by an early-stage company in the rapidly evolving low carbon fuel market, where supply and demand may change significantly in a short period of time.

Our efforts to grow our business may be more costly than we expect and we may not generate enough revenue to offset our operating expenses. We may incur significant losses in the future for a number of reasons, including as a result of unforeseen expenses, difficulties, complications and delays in obtaining governmental licenses and the other risks described in this MD&A. The amount of any future losses will depend, in part, on our ability to generate revenue on the one hand and any increases in our expenses on the other hand. If we continue to incur losses in the future, the net losses and negative cash flows incurred to date, together with any such future losses, will have an adverse effect on our shareholders' equity and working capital. Because of the numerous risks and uncertainties associated with our business and industry, we are unable to accurately predict when, or if, we will be able to achieve profitability. Even if we achieve profitability at some point in the future, we may not be able to sustain profitability in subsequent periods. If we are unable to achieve and sustain profitability, the market price of our common shares may significantly decrease and our ability to raise capital, expand our business or continue our operations may be impaired.

#### **The results of our operations will depend on commodity prices**

The profitability of the Company's operations will be significantly affected by changes in the market price of various fuels derived from waste. The level of interest rates, the rate of inflation, world supply and stability of exchange rates can all cause significant fluctuations in fuel prices. Such external economic factors are in turn influenced by changes in international investment patterns and monetary systems and political developments. The price of diesel fuel has fluctuated widely in recent years, and future serious price declines could cause continued commercial production to be impracticable. Depending on the price of diesel fuels, cash flow from operations may not be sufficient to fund growth or pay our obligations. Market fluctuations and the price of fuels derived from waste, may render refining uneconomical. Short-term operating factors relating to the production of fuels from waste, such as the increased feedstock costs or drop in low carbon fuel prices, could cause the refining operation to be unprofitable in any accounting period.

#### **We require permits and authorizations to conduct our operations**

Cielo's existing and proposed operations require, and Cielo's planned growth will require, licenses, permits and in some cases renewals of these licenses and permits from various governmental authorities both domestically and abroad. As at the date of this MD&A, Cielo is seeking an amendment to its AEP approval to allow other feedstocks to be tested at the R&D Facility. While Cielo is able to complete the design and fabrication of the R&D Facility without this amended approval, it will need to obtain the approval before testing can begin. Cielo's ability to obtain, amend, comply with, sustain, or renew such licenses and permits on acceptable, commercially viable terms are subject to change, as, among other things, the regulations and policies of applicable governmental authorities may change. Cielo's inability to obtain, amend to conform to our operations, or extend a license or a loss of any of these licenses or permits may have a material adverse effect on our business, financial condition and results of operations.

#### **Improvements in or new discoveries of alternative energy technologies could have a material adverse effect on our financial condition and results of operations**

Because our business depends on the demand for oil products, including diesel, any improvement in or new discoveries of alternative energy technologies (such as fuel cells), government mandated use of such technologies or government restrictions or quotas on the use of oil that increase the use of alternative forms of energy and/or reduce the demand or market for oil, and related products could have a material adverse impact on our business, financial condition and results of operations.

New or changing technologies may be developed, consumers may shift to alternative fuels or alternative fuel vehicles (such as electric or hybrid vehicles) other than the fuels from waste we produce, and there may be new entrants into the low carbon fuels production industry that could meet demand for lower-carbon transportation fuels and modes of transportation in a more efficient or less costly manner than our technologies and products, which could also have a material adverse effect on our business.

In the event our competitors or future competitors design or implement new methodologies or new technology relating to the refining or re-refining of waste it could reduce demand for diesel or make our facilities uneconomic.

### **Developments with respect to low-carbon fuel policies and the market for alternative fuels may affect demand for our fuels and could adversely affect our financial performance**

Low-carbon fuel policies, blending credits, and stricter fuel efficiency standards to help reach GHG emissions reduction targets help drive demand for our fuels derived from waste. Any changes to, a failure to enforce, or a discontinuation of any of these policies, goals, and initiatives could have a material adverse effect on our businesses.

### **Our operations face risks of interruption and casualty losses**

Cielo may be subject to unexpected events and natural hazards, including severe weather events, interruption of utilities and infrastructure or occurrence of pandemics, which could cause sudden or complete cessation of its day-to-day operations. Severe weather events that could affect operations at our facilities, including wildfires, may become more frequent as a result of climate change. Any failure to respond effectively or appropriately to such events could adversely affect our operations, reputation and financial results.

Our facilities will be our principal operating assets. As a result, our operations could be subject to significant interruption if one or more of our facilities were to experience a major accident or mechanical failure, be damaged by severe weather or other natural or man-made disaster, such as an act of terrorism, or otherwise be forced to shut down. If any facility were to experience an interruption in operations, earnings from the facility could be materially adversely affected (to the extent not recoverable through insurance) because of lost production and repair costs.

### **Insurance may not be adequate or provided for losses we may incur**

The Company may carry insurance to protect against certain risks in such amounts as it considers adequate. Risks not insured against include environmental pollution or other hazards against which such corporations cannot insure or against which they may elect not to insure.

Although Cielo obtains, or may obtain, insurance to protect against certain risks, there are limitations on insurance coverage that may not be sufficient to cover the full extent of such costs, or a particular risk may not be insurable in all circumstances, or the Company may elect not to obtain insurance in certain circumstances. A significant event that is not fully insured against could have a material adverse effect on Cielo's financial position, results of operations and cash flows.

### **Certain of our directors and officers serve as director and/or officers of other companies**

Certain of the directors and officers of the Company also serve, or may serve, as directors and/or officers of other companies. Consequently, there exists the possibility for such directors and/or officers to be in a position of conflict with respect to the Company. Cielo's CEO was a director and officer of Renewable U. He resigned from this positions concurrently with the appointment to Cielo as CEO, however he remains a beneficial, indirect shareholder of Renewable U, holding 10% or less of the issued and outstanding shares of Renewable U. Situations may arise where these directors and officers will be in competition with the Company or be subject to conflicting interests, as a result of their positions with such other entities. Conflicts of interest, if any, which arise will be subject to and be governed by procedures prescribed by the BCBCA which require a director or officer of a corporation who is a party, has a material interest in, or is a director or an officer of or has a material interest in any person who is a party to, a contract or transaction with the Company, to disclose his interest and to refrain from voting on any matter in respect of such contract unless otherwise permitted under the BCBCA. Certain directors or officer may determine that they are unable to continue in their positions with the Company as a result of a conflict of interest, which could have a material adverse effect on the Company's business.

### **We are vulnerable to the potential difficulties associated with rapid growth**

We believe that our future success depends on our ability to manage the rapid growth that we have experienced, and the continued growth that we expect to experience. The Company's expected growth depends on its ability to leverage its industry experience and relationships with its partners, customers and vendors to ensure the economic viability of pursued opportunities. While the Company intends to focus on managing its costs and expenses over the long term, it expects to invest to support its growth and may have additional unexpected costs. It may not be able to expand quickly enough to exploit potential market opportunities.

### **The waste to energy market is a relatively new industry**

Because the waste to energy industry is in a nascent stage in Canada, there is a lack of information about comparable companies available for potential investors to review in deciding about whether to invest in us and, few, if any, established companies whose business model we can follow or upon whose success we can build.

Accordingly, investors should rely on their own estimates regarding the potential size, economics and risks of the waste-to-energy market in deciding whether to invest in our common shares.

There is no assurance that the industry and market will continue to exist and grow as currently estimated or anticipated or function and evolve in the manner consistent with management's expectations and assumptions. We could also be subject to other events or circumstances that adversely affect the waste-to-energy industry, such as reductions in fuel consumption.

### **We may not be able to secure adequate or reliable sources of funding required to operate our business**

Cielo's business is dependent on having access to sufficient capital and financial resources to fund its growth and investment in operations. Any failure to maintain adequate financial resources could impair Cielo's growth or ability to satisfy financial obligations as they come due. There can be no assurance that adequate capital resources will be available in the future on acceptable terms or at all.

In the future, Cielo may need additional financing to operate or grow its business. Cielo's ability to obtain additional financing, if and when required, will depend on investor and lender demand, success of Cielo's research and development activities, operating performance, the condition of the capital markets and other factors. Cielo cannot guarantee that additional financing will be available on favourable terms when required, or at all. If Cielo raises additional funds through the issuance of equity, equity-linked or debt securities, those securities may have rights, preferences or privileges senior to the rights of Cielo's existing securityholders. Cielo's existing securityholders will experience dilution, perhaps to a substantial level, if Cielo raises the additional financing through the sale of shares of common stock. If Cielo is unable to obtain adequate financing or financing on terms satisfactory to management when required, Cielo's ability to continue to support the operation or growth of our business could be significantly impaired and our operating results will likely be harmed.

### **We face competition from other producers of low carbon fuel**

There is competition within the low carbon fuel industry which is considered to have commercial potential. The Company will compete with other interests, many of which have greater financial resources than it will have for the opportunity to participate in promising projects. Significant capital investment is required to achieve commercial production.

Cielo faces competition from other producers of fuels from waste with respect to the procurement of feedstock and selling of such fuels. Such competition could be intense, thus driving up the cost of feedstock and driving down the price for Cielo's products. Competition will likely increase if profit margins available to low carbon fuels producers rise. Additionally, new companies may enter the market, thus increasing the competition.

Other companies may have greater success in the recruitment and retention of qualified employees, as well as in conducting their own production and fuel marketing operations, and may have greater access to feedstocks, market presence, economies of scale, financial resources, and engineering, technical and marketing capabilities, which may give them a competitive advantage.

### **The loss of one or more of our larger customers could have a material adverse effect on our business**

Once we begin commercial operations, the loss of one or more of our larger offtake customers could have a material adverse effect on our business, financial condition, results of operations and cash flow. In addition, financial difficulties experienced by customers could adversely impact their demand for our services and cause them to request amendments to our contracts with them.

### **Cyberattacks may cause disruptions to the Company's operations and could have a material effect on its business**

Cielo is dependent on technology in our operations and if the technology fails, it could adversely impact the financial and operational performance of the Company. A cybersecurity incident including a breach of secure and private information could negatively impact our financial performance, subject us to criticism or affect our relationships with customers, employees, investors and other stakeholders. Cyber incidents including theft, alteration or destruction could lead to litigation, fines, other remedial action, heightened regulatory scrutiny and damage to its reputation. A breach of the Company's cyber/data security measures could have a material adverse effect on the Company's business, operations, financial condition and operating results.

The Company's operations also depend on the timely maintenance, upgrade and replacement of networks, equipment, information technology systems and software, as well as pre-emptive expenses to mitigate the risks of failures. Any of these and other events could result in information system failures, delays and/or increase in capital expenses. The failure of information systems or a component of information systems could, depending on the nature of any such failure, adversely impact the Company's reputation, results of operations, cash flows and financial condition.

Although to date the Company has not experienced any material losses relating to cyberattacks or other information security breaches, there can be no assurance that it will not incur such losses in the future. The Company's risk and exposure to these matters cannot be fully mitigated because of, among other things, the evolving nature of these threats. As cyber threats continue to evolve, the Company may be required to expend additional resources to continue to modify or enhance protective measures or to investigate and remediate any security vulnerabilities.

Any of these factors could have a material adverse effect on the Company's results of operations, cash flows and financial position.

### **The market value of our shares may fluctuate**

The market price of Cielo Shares, as a publicly traded stock, can be affected by many variables not directly related to the corporate performance of the Cielo, including the market in which it is traded, the strength of the economy generally, the availability and attractiveness of alternative investments, and the breadth of the public market for the stock. The effect of these and other factors on the market price of Cielo Shares in the future cannot be predicted.

### **COVID-19 and other outbreaks may further disrupt our operations**

As a result of the COVID-19 pandemic, the Company paused all operations of Aldersyde Facility and temporarily laid-off operators while maintaining essential personnel. Although the effects of the COVID-19 pandemic have largely improved as at the date of this MD&A, there is no assurance that the pandemic may not again worsen, or that another pandemic may not arise at a future time.

COVID-19 or similar pandemics may have adverse impacts on the Company, including, among others:

- volatility in the global capital markets, which may increase cost of capital and adversely impact access to capital;
- continued impacts on workforces throughout the regions in which COVID-19 (or any other pandemic) is present, which may result in the Company's workforce being unable to work effectively;
- supply chain disruptions.

Future local, regional, national or international outbreaks of contagious diseases, such as COVID-19, could have an adverse effect on local economies and potentially the global economy, which may adversely impact the price of and demand for oil, (and correspondingly, decrease the demand for our fuels which could have a material adverse effect on our business, financial condition, results of operations and cash flows). Additionally, such an outbreak, if uncontrolled, may result in temporary shortages of staff to the extent our work force is impacted, which may have a material adverse effect on our business.



### **Litigation and legal claims could have an adverse impact on our business**

We may be subject to legal proceedings and governmental investigations from time to time related to our business and operations. Lawsuits or claims against us could have a material adverse effect on our business, financial condition, results of operations and cash flow.

### **Acquisitions entail numerous risks and may disrupt our business or distract management**

We may consider and evaluate acquisitions of, or significant investments in, complementary assets as part of our business strategy. Acquisitions involve numerous risks, including unanticipated costs and liabilities, and difficulty in integrating the operations and assets of the acquired assets. Any acquisition could have a material adverse effect on our business, financial condition, results of operations and cash flow.

It's possible we may incur substantial debt to finance future acquisitions and also may issue equity securities or convertible securities for acquisitions. Debt service requirements could be a burden on our results of operations and financial condition. We would also be required to meet certain conditions to borrow money to fund future acquisitions. Acquisitions could also divert the attention of management and other employees from our day-to-day operations and the development of new business opportunities. Even if we are successful in integrating future acquisitions into our operations, we may not derive the benefits such as operational or administrative synergies we expect from acquisitions, which may result in us committing capital resources and not receiving the expected returns. In addition, we may not be able to continue to identify attractive acquisition opportunities or successfully acquire identified targets.

### **The Russia/Ukraine crisis, including the impact of sanctions or retributions thereto, could adversely affect the Company's business**

The Company's operations could be adversely affected by the effects of the escalating Russia/Ukraine crisis and the effects of sanctions imposed against Russia or that country's retributions against those sanctions, embargos or further-reaching impacts upon energy prices, food prices and market disruptions. The Company cannot accurately predict the impact the crisis will have on its operations and the ability of contractors to meet their obligations with the Company, including uncertainties relating to the severity of its effects, the duration of the conflict, and the length and magnitude of energy bans, embargos and restrictions imposed by governments. In addition, the crisis could adversely affect the economies and financial markets of Canada and in general, resulting in an economic downturn that could further affect the Company's operations and ability to finance its operations. Additionally, the Company cannot predict changes in commodities pricing which may alternately affect the Company either positively or negatively.

### **Risks related to politics and the economy**

Cielo may be affected by possible political or economic instability. The risks include, but are not limited to, terrorism, military repression, extreme fluctuations in currency exchange rates and high rates of inflation. Changes or shifts in political attitude in certain countries may adversely affect Cielo's business. Operations may be affected in varying degrees by government regulations with respect to restrictions on price controls, export controls, income taxes and maintenance of assets. The effect of these factors cannot be accurately predicted.

## **ADDITIONAL INFORMATION**

Additional information related to Cielo is available on SEDAR at [www.sedar.com](http://www.sedar.com).