

# Ecolomondo Corporation

## MANAGEMENT'S DISCUSSION & ANALYSIS

**April 26, 2023**

The following management's discussion and analysis ("MD&A") of the operations, results, and financial position of Ecolomondo Corporation (the "**Company**"), dated April 26, 2023, covers the years ended December 31, 2022 and 2021 and should be read in conjunction with the audited annual consolidated financial statements of the Company including its subsidiaries Ecolomondo Environmental (Contrecoeur) Inc., Ecolomondo Environmental (Hawkesbury) Inc., 9083-5018 Quebec Inc. and Ecolomondo Process Technologies for the same periods, which were prepared in accordance with International Financial Reporting Standards ("**IFRS**"). Additional information on the Company is also available on SEDAR at [www.sedar.com](http://www.sedar.com).

Where we say "we", "us", "our", or the "Company", we mean Ecolomondo Corporation (formerly Cortina Capital Corp.) unless otherwise indicated. All amounts are presented in Canadian dollars unless otherwise indicated.

### ***Forward-looking statements***

*Certain statements contained in this MD&A may constitute forward-looking statements. These statements relate to future events or the Company's future performance. All statements, other than statements of historical fact, may be forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "seek", "anticipate", "plan", "continue", "estimate", "expect", "may", "will", "project", "predict", "propose", "potential", "targeting", "intend", "could", "might", "should", "believe, and similar expressions. These statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements. The Company believes that the expectations reflected in those forward-looking statements are reasonable but no assurance can be given that these expectations will prove to be correct and such forward-looking statements included in this MD&A should not be unduly relied upon by investors as actual results may vary. These statements speak only as of the date of this MD&A and are expressly qualified, in their entirety, by this cautionary statement.*

*With respect to forward-looking statements above and otherwise contained in this MD&A, the Company has made assumptions regarding, among other things:*

- *the legislative and regulatory environment;*
- *the impact of increasing competition;*
- *the ability to obtain regulatory and shareholder approvals; and*
- *the ability to obtain additional financing on satisfactory terms.*

*The Company's actual results could differ materially from those anticipated in these forward-looking statements as a result of the risk factors set forth below:*

- *volatility in the market conditions;*
- *incorrect assessments of the value of acquisitions;*
- *due diligence reviews;*
- *competition for suitable acquisitions; and*
- *volatility in the global economy created by the remnants of COVID-19 Pandemic and the geo-political instability throughout the planet.*

## Overall Performance

Ecolomondo Corporation was incorporated on September 30, 2015 under the Canada Business Corporations Act and is listed on the TSX Venture Exchange (the "**Exchange**") since October 2017 under the symbol ECM. The Company is a clean tech company that is marketing its proprietary Thermal Decomposition technology ("**TDP**"), that recovers valuable resources from end-of-life tires, namely steel, oil, carbon black, syngas and fiber. During the fiscal year 2022, the Company continued to work on process optimization, efficiency, safety, end-product processing and commissioning of its new TDP facility in Hawkesbury (Ontario, Canada), including preparing for its ramp-up to commercial production. To find out more about the Company and its technology, visit its website at [www.ecolomondo.com](http://www.ecolomondo.com).

During the fiscal year ended December 31, 2022, the Company continued to market its TDP turnkey facilities and to complete the commissioning of its new Hawkesbury TDP turnkey facility (the "**Project**"). With the Hawkesbury TDP facility being commissioned and the beginning of production ramped-up, the Company is currently working on the deployment of its new Shamrock, Texas, TDP turnkey facility, including evaluating several other sites to build additional TDP turnkey facilities in North America.

The Hawkesbury facility building is 46,200 sq.ft and has an impressive indoor clearance of 28 feet. It is state-of-the-art and houses 4 main production departments, tire shredding, thermal decomposition, recycled carbon black refining and oil fractionation. Once fully operational, this facility is expected to process a minimum of 14,000 metric tons of tire waste per year and produce 5,300 metric tons of recovered carbon black, 42,700 barrels of oil, 1,800 metric tons of steel, 1,600 metric tons of process gas and 850 metric tons of fiber. The company projects annual revenues of approximately C\$19.2 million and projects an EBITDA margin of approximately 53.4%.



The Company executed major steps at its Hawkesbury TDP turnkey facility during the year 2022, including:

- Completion and final inspection by authorities of all major building installations;
- Final commissioning of the shredding line;
- Final certification from TSSA (Technical Standards and Safety Authority) needed to operate the thermal department;
- Appointment of Mr. Hari K. Mynampati as the general manager of the TDP facility, bringing with him extensive experience in the carbon black industry. He will supervise the start-up and beginning of

operations of the facility along with the plant manager, Mr. André Lamarre;

- A supply agreement for scrap tires with a PRO (Producer Responsibility Organization), which contracts with tire producers to provide collection, management and administrative services to recover used tires;
- An initial purchase order from a multinational corporation for pyrolysis oil produced;
- Offtakes for over 80% of the Recovered Carbon Black (rCB) production.

The Hawkesbury TDP facility recently performed two successful tests in January 2023. These initial batches allowed the technical teams to identify and take corrective actions that lead to improved efficiency. Once reactor payloads have successfully achieved the 15,000 lbs threshold, the Company expects to start with its ramp-up phase, starting with one batch per day, followed by 2 batches per day and ending with six batches per day expected by June 2023. Full production is defined by the company as 3 shifts operating the plant on a continuous basis. The company has received a combination of purchase orders and off-take agreements for the high-quality oil, recovered carbon black and steel that will be produced at the Hawkesbury TDP facility.

The Company concluded on August 25 a Third Amending Agreement to its original loan agreement with Export Development Canada (“EDC”), the financial institution that loaned the Company C\$32.1 million to finance the construction of the Hawkesbury facility. The Amending Agreement allowed the deferral of interest and capital payments that were to become due August 31 and November 30, 2022. The Amending Agreement also allowed for the deferral of interest and capital payments that were to become due on February 28, 2023, and a further capital payment to become due May 31, 2023.

The Company raised capital on different occasions, all to the benefit of the Company’s working capital:

- Mr. Eliot Sorella, Chairman and CEO, through his holding company 3212521 Canada Inc., exercised approximately \$1,000,000 worth of stock options, half on July 12 and the other half on August 17;
- The Company closed on January 16, 2023 a non-brokered private placement for aggregate gross proceeds of \$1,000,051.60. This Private Placement is comprised of 2,222,336 units at the price of \$0.45 per Unit. Each Unit consisted of one common share and one common share purchase warrant. Each Warrant will entitle the holder thereof to acquire an additional Common Share of the Company for \$0.55 until July 16, 2023. Mr. Eliot Sorella, Chairman and CEO, through his holding company 3212521 Canada Inc., purchased 852,225 units for an aggregate amount of \$383,501.25.

During the fiscal year ended December 31, 2022, the Company also executed key tasks on a corporate level:

- The Company held two webinars on Investors Update, on April 19 and September 28, 2022. Mr. Eliot Sorella, President & CEO of the Company, provided a focused discussion on the progress of the Hawkesbury TDP facility, the six-reactor TDP facility in Shamrock (Texas), and several other corporate matters, including the vision and future of Ecolomondo, followed by Q&A sessions;
- The Company engaged GlobalOne Media to provide social media management and content marketing services;
- Ecolomondo retained Red Cloud Securities Inc. to provide market making services;
- The Company launched its new website. This new, service-focused website is user-friendly, secured for user privacy protection, and makes accessibility a priority. The website will allow the investors and stakeholders to have real-time information and data on the Company and the Company’s stock, while having the latest corporate news, all providing a better experience to the reader. It provides a more interactive experience, allowing visitors to browse for information of interest freely. It allows one to meet the team, and learn about Ecolomondo’s TDP technology, corporate vision, mission and strategy;
- The Company obtained the ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 certification of its Integrated Management System (IMS), which acknowledges Ecolomondo’s commitment for quality,

environmental impact and health and safety at work. ISO standards are regularly reviewed to ensure its requirements reflect best practices for organizations, as well as the needs of customers, in the evolving marketplace. ISO 9001:2015 is the international standard that specifies requirements for a Quality Management System and focuses on providing consistent products and services that enhance customer satisfaction and meet applicable statutory and regulatory requirements. ISO 14001:2015 is the principal management system standard which specifies the requirements for the formulation and maintenance of an Environmental Management System (EMS). This helps to control the Company’s environmental aspects, reduce impacts, and ensure legal compliance. ISO 45001:2018 is an international standard for health and safety at work developed by national and international standards committees independent of government and was developed to mitigate any factors that can cause employees and businesses irreparable harm.

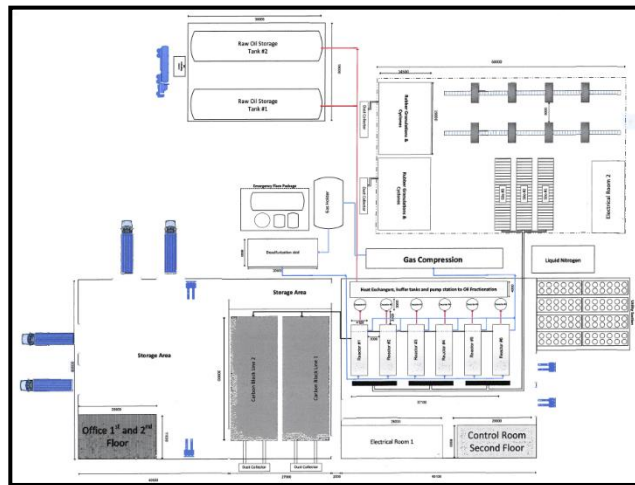
- On the social aspect the Company plans to measure global health and safety, injury rate and gender diversity, and finally in the corporate governance aspect, the Company is measuring ethics and anticorruption, ESG reporting and board independence.
- The Company recently secured the services of SCS Global to perform the required assessment to secure the International Sustainability and Carbon Certification (ISCC).

The Company has been actively working on its global expansion. It is currently in discussion with interested parties in France, Emirates, Saudi Arabia, Africa and USA.

In line with its expansion strategy, the Company has announced its next project, a six-reactor TDP facility to be located in Shamrock, Texas. Working in close consultation with the Shamrock Economic Development Corporation, Ecolomondo entered into a binding land purchase agreement for a 136.76 acre parcel of land on I-40 in Shamrock, Texas for the proposed plant construction. In the binding agreement with the Shamrock Economic Development Corporation, Ecolomondo will pay \$10.00 in consideration for selecting Shamrock, TX, as the location for its US launch. Strategically situated in Wheeler County and close to major hubs such as Dallas and Oklahoma City, the land is conveniently located on Interstate 40, a major east–west Interstate Highway running through the south-central portion of the United States.

Processing capabilities for the Shamrock facility is projected at 50,000 metric tons per year of end-of-life tires, yielding approximately 15,900 metric tons of recovered carbon black, 128,100 barrels of oil, 5,400 metric tons of steel, 2,550 metric tons of fiber and 4,800 metric tons of syngas; roughly three times the size of the Company’s Hawkesbury (Ontario) plant output that will soon commence commercial operations. Facility construction is expected to begin by the end of the fourth quarter of 2023 with completion expected by the end of the second quarter of 2025. Projected cost to build is approximately US \$93 million. The Company is currently in progressive discussions to secure the required project financing and is pursuing a potential joint venture partner.

Texas Plant layout – 3 times the size of the Hawkesbury TDP facility



The Company expects its revenues to come from the design, build and operation of TDP turnkey facilities, royalties from their operation, including the sale of after-market parts and services. Revenues for TDP turnkey facilities will come from selling of the end-products they produce, namely recovered carbon black, oil, gas, fiber and steel. During the period, the Company has made considerable inroads in securing offtake customers for its recovered carbon black, known as “Mondo Black”, for its oil, known as “Mondo Crude”, its steel and fiber, both domestically and internationally. For more information on the TDP recovered products, please visit the Company’s website at [www.ecolomondo.com](http://www.ecolomondo.com).

Recovered carbon black is the end-product that has the highest commercial value. Ecolomondo’s process and its optimization ensures a high percentage of recovered carbon black production of between 38% and 40% of reactor payloads that should result into higher revenues for TDP turnkey facilities. Carbon black is black powder normally manufactured using a highly polluting process, notably the direct combustion of hydrocarbons. Today, restrictions on emissions are causing the global supply of carbon black to plateau while global demand keeps spiraling. Any supply shortages could be easily filled by waste-to-resources companies like Ecolomondo and with a much greener environmental footprint. Management believes that strengthening demand and a tightening supply for virgin carbon black should set the stage for higher demand and prices in the future for recovered carbon black, ensuring a sustainable supply.

Production of TDP’s rCB reduces CO<sub>2</sub> emissions by approximately 90% compared to production of virgin carbon black. The strengthening demand and a tightening supply for virgin carbon black, caused by the geo-political events such as the Ukraine war and strong consumer demand, have set the stage for greater demand and higher prices for Ecolomondo’s rCB, ‘Mondo Black’.

The other end-products of the Company’s TDP facilities are also commodities that have strong global markets. The oil is comparable to a refined quality synthetic oil being high in carbon could be used to produce green virgin carbon black, solvents and polymers.

The steel extracted from waste tires is a high-grade product that is in strong demand by steel foundries and mills. TDP also produces hydrocarbon gas, high-BTU with a calorific value approaching propane gas. This gas is used as the energy source for the thermal process, making Ecolomondo’s thermal technology almost completely energy self-sufficient.

The Company further advises that the current global market conditions and the current geo-political global instability have created tight supply of virgin products that set the stage for higher pricing which should eventually translate into higher revenues for the Company.

Supported by increasing global consumption, the Company expects that there should be an abundant supply of scrap tire feedstock for the foreseeable future. The Company expects that the continued global expansion of tire manufacturing should generate an increasing and stable supply of scrap tire feedstock that should help drive Ecolomondo’s future growth.

### **Impact of the COVID-19 Crisis and Geo-Political Instability on the Company**

The world economy may still be impacted by the tailwinds of the COVID-19 pandemic, chronic geo-political instability and a slowing global economy, and even though the Company takes all necessary precautions needed to mitigate any negative impact brought about by these events, the Company advises that it is impossible to determine with accuracy the impact they may bring to the Company and its results.

## Significant Projects That Have Not Yet Generated Revenues

### *Contrecoeur pilot facility*

The Contrecoeur facility is an industrial-scale TDP facility based in Contrecoeur, Quebec, that was built in 1998. Since then, this facility was mostly used to develop the Company's proprietary TDP technology. It was instrumental in achieving many of the proprietary milestones such as efficient process parameters, automation, emission controls, water recycling and safety, all needed for TDP to operate commercially, while ensuring quality and consistency of its end-products so that they achieve market acceptance to maximize value.

With the completion and start of operations of the Hawkesbury facility, the Company is assessing the role of the Contrecoeur facility and how it can be best utilized and how it will contribute to the future goals set by the Company.

### *Hawkesbury facility*

In March 2019, the Company agreed on definitive terms with Mr. Gregory Matzel, a New Jersey and Pennsylvania-based real estate developer to be Ecolomondo's future partner in the new Hawkesbury 2-reactor TDP turnkey facility. Mr. Matzel contributed \$2,467,720 (US\$1,900,000) (valued at \$2,573,360 as at December 31, 2022) as his share of the capital required to purchase 45% equity stake in the joint venture entity, Ecolomondo Environmental (Hawkesbury) Inc., the corporate entity that is the owner of the Hawkesbury TDP turnkey facility.

Ecolomondo Environmental (Hawkesbury) Inc. purchased the land for the TDP turnkey facility in 2018 and the Town of Hawkesbury built the access road to the plant location on Tessier street. On April 3, 2019, the Company and EDC announced a loan agreement of \$32.5 million in project financing for the construction of the Hawkesbury facility while a groundbreaking ceremony was held on August 21, 2019, and financial closing of the agreement was successfully executed on December 23, 2019.

Construction was completed during the fiscal year 2022 and the facility is currently in final commissioning and beginning its ramp-up phase. Please visit the Company's website at [www.ecolomondo.com](http://www.ecolomondo.com) for updates on the Company's Hawkesbury facility.

As of December 31, 2022, capital expenditures for the Hawkesbury facility totaled \$42,451,275 and the term loan with EDC reached \$34,002,693. The Company contributed equity of \$9,814,462 to fulfill the covenants of its loan and amending agreements.

The Company believes that the successful commercial operation of the Hawkesbury facility as a TDP turnkey facility is an important step in the Company's growth strategy and management expects that by achieving this milestone, it should help bring global attention and help drive the Company's global expansion.

### *Shamrock TDP Facility*

The Company made considerable headway on its Shamrock, Texas project in regards to financing, feedstock supply, offtake agreements, EPC contractor and finding a joint venture partner. The Shamrock facility will serve as the Company's flagship entry into the US market. Coupled with the production capacity of the Hawkesbury (Ontario) facility, the Company will produce over 21,000 metric tons of recovered carbon black per year. Management believes that this unprecedented production capacity of recovered carbon black will position Ecolomondo to become a leading industry player.

With the strong support of the local Shamrock Economic Development Corporation and the USDA, infrastructure works, budgeted at US\$2.6 million for gas, water and sewage, have recently started and will soon be completed.

The total budgeted cost of the Shamrock project is approximately US\$93 million. The Company has engaged the services of a leading U.S. Investment Bank to advise on the financing, which is projected to be approximately US\$73 million. It is anticipated that the financing to close in the fourth quarter of 2023, with ground breaking to begin soon thereafter.

## **Results of Operations**

### **Results of Operations for the Years Ended December 31, 2022 and 2021**

#### *Ancillary revenues*

During the years ended December 31, 2022 and 2021, the Company has ancillary revenues of \$81,632 and \$53,941, respectively.

The increase of \$27,691 in ancillary revenues between the years ended December 31, 2022 and 2021 is due to an increase of \$34,610 in other revenues (revenues that are not government assistance nor interest), from \$19,623 in the year ended December 31, 2021 to \$54,233 in the year ended December 31, 2022. These revenues were essentially from sales by the wholly-owned subsidiary, Ecolomondo Process Technologies Inc.

#### *General and administrative expenses*

The Company's general and administrative expenses reflect all expenses that management considers overhead and administrative salaries and excludes expenses related to the construction and commissioning of the Hawkesbury TDP facility, which are capitalized in the Plant Under Construction. In addition to the administrative expenses, overhead expenses include advertising and marketing, travel, utilities, insurance, communications and professional fees.

General and administrative expenses were \$653,587 for the year ended December 31, 2022 compared to \$1,372,351 for the year ended December 31, 2021. General and administrative expenses decreased by \$718,764 mostly due to a stock-based compensation of \$876,308 in the year ended December 31, 2021 compared to nil in the year ended December 31, 2022.

#### *Operating, research and development expenses*

*Operating, research and development expenses* include expenses related to general operations of the Company and its subsidiaries and research and development expenses. Operating, research and development expenses consist primarily of expenses for personnel focused on finding and developing improved processes and operations. These expenses also consist of facility costs, lab materials and related overhead. The Company's research and development expenses are associated with its Contrecoeur facility and are incurred as a direct result of the efforts to keep improving and developing the TDP technology platform. Accordingly, the Company expects to incur ongoing research and development expenses.

The Company expenses all operating, research and development costs as they are incurred when they do not meet the criteria for capitalization. Operating, research and development expenses for the year ended December 31, 2022 were \$918,138, compared to \$843,391 for the year ended December 31, 2021. The increase of \$74,747 is mainly attributable to an increase in salaries and short-term benefits of \$74,045, which were \$132,738 for the year ended December 31, 2022 compared to \$58,693 for the year ended December 31, 2021.

### *Financial expenses*

The financing fees for the EDC term loan, related to the Hawkesbury facility, totaled \$642,500 and are amortized on a straight-line basis over the term of the debt. Financial expenses were \$66,698 for the year ended December 31, 2022 and \$68,165 for the year ended December 31, 2021, respectively.

### *Gain on revaluation of warrant liability*

In September 2021, the Company raised capital with a non-brokered private placement, consisting of 6,153,845 units at a price of \$0.65 per Unit for gross proceeds to the Company of \$4,000,000. Each Unit is comprised of one common share and one-half of one share purchase Warrant. Each whole Warrant entitles the holder to acquire one additional common share in the capital of the Company at a price of \$1.00 per Warrant Share, for a period of three years from the date the Units are issued. However, considering the Corporation may reduce the Exercise Price of the Warrants, the warrants were recorded at fair value on the day of issue as a liability and then revalued on December 31, 2021. A gain on revaluation of warrant liability is recorded in the Consolidated Statements of Loss and Comprehensive Loss for an amount of \$427,043 for the year ended December 31, 2022 (\$1,404,381 for the year ended December 31, 2021).

### *Loss before income taxes*

The operating loss for the year ended December 31, 2022 was \$1,129,748 compared to a loss of \$825,585 for the year ended December 31, 2021. The increase of \$304,163 in the loss for the year ended December 31, 2022 compared to the year ended December 31, 2021 is mostly attributable to (i) a gain on revaluation of warrant liability of \$427,043 during the year ended December 31, 2022 compared to a gain of \$1,404,381 in the year ended December 31, 2021, partially offset by (ii) a decrease of \$718,764 in general and administrative expenses between the two periods.

### *Income taxes*

For both the years ended December 31, 2022 and 2021, the Company had no current income tax expense. The Company had deferred income tax recovery of \$93,147 and \$176,024 for the years ended December 31, 2022 and 2021, respectively.

As at December 31, 2022, the Company has net operating loss carry-forwards of approximately \$6,723,000 (\$6,922,000 as of December 31, 2021) that may be available to reduce taxable income in future years in various amounts through 2041. The Company has determined that the realization of the future tax benefits arising from the net operating loss carry-forwards is not likely to occur and, therefore, deferred tax assets have been recognized in the consolidated financial statements to the extent that taxable temporary differences exist to offset them.

Deferred taxes arising from temporary differences and unused tax losses are summarized as follows:

	January 1, 2022	Recognized in comprehensive loss	December 31, 2022
	\$	\$	\$
Deferred tax liabilities (assets)			
Non-current assets			
Equipment	293,367	(93,147)	200,220



Unused tax losses	<u>293,367</u>	<u>(93,147)</u>	<u>200,220</u>
	January 1, 2021	Recognized in comprehensive loss	December 31, 2021
	\$	\$	\$
Deferred tax liabilities (assets)			
Non-current assets			
Equipment	552,391	(259,024)	293,367
Unused tax losses	<u>(83,000)</u>	<u>83,000</u>	
	<u>469,391</u>	<u>(176,024)</u>	<u>293,367</u>

Unused tax losses and deductible temporary differences for which no deferred tax assets have been recognized on the consolidated financial statements are as follows:

	December 31, 2022	December 31, 2021
	\$	\$
Tax losses	<u>6,723,000</u>	<u>6,992,000</u>

The following table presents the year of expiration of the Company's unused tax losses carried forward for which no deferred tax assets have been recognized as at December 31, 2021:

	\$
2032	585,000
2033	216,000
2034	1,007,000
2035	500,000
2036	1,076,000
2037	414,000
2038	446,000
2039	707,000
2040	281,000
2041	819,000
2042	672,000
	<u>6,723,000</u>

The reconciliation of the combined Canadian federal and provincial statutory income tax rate to the Company's effective income tax rate is detailed as follows:

	December 31, 2022	December 31, 2021
	%	%
Combined federal and provincial income tax rate	26.50	26.50
Non-deductible expenses	(20.76)	(10.41)
Deferred tax assets not recognized	(2.83)	(10.55)
Non-taxable revenues	10.02	
Other	<u>(4.70)</u>	<u>(0.94)</u>
	<u>8.24</u>	<u>6.48</u>

The Company has investment tax credits related to research and development amounting to \$163,000

(\$163,000 in 2021) that have not been recognized in the consolidated financial statements as such credits are not reimbursable, rather they are available to reduce future taxable income.

## **Results of Operations for the Three-Month Periods Ended December 31, 2022 and 2021**

### *Ancillary revenues*

During the quarters ended December 31, 2022 and 2021, the Company had ancillary revenues of \$12,138 and \$24,432, respectively. This decrease in ancillary revenues between the two periods is essentially due to the decrease in business revenue for Ecolomondo Process Technologies, which were \$19,622 in the three-month period ended December 31, 2021 compared to nil in the same period in 2022. Revenue for both periods includes interest income in relation to cash and cash equivalents.

### *General and administrative expenses*

The Company's general and administrative expenses reflect all expenses that management considers overhead and administrative salaries and excludes expenses related to the construction and commissioning of the Hawkesbury TDP facility, which are capitalized in the Plant Under Construction. In addition to the administrative expenses, overhead expenses include advertising and marketing, travel, utilities, insurance, communications and professional fees.

General and administrative expenses decreased by \$987,357 between the two periods. They were \$11,314 for the quarter ended December 31, 2022, compared to \$998,671 for the quarter ended December 31, 2021. The decrease is (i) mostly due to a stock-based compensation of \$876,308 during the quarter ended December 31, 2021 compared to nil in the same period ended December 31, 2022, and to (ii) a decrease in foreign exchange loss of \$194,988, which was \$13,312 during the quarter ended December 31, 2022 compared to \$208,300 during the quarter ended December 31, 2021.

### *Operating, research and development expenses*

*Operating, research and development expenses* include expenses related to general operations of the Company and its subsidiaries and research and development expenses. Operating, research and development expenses consist primarily of expenses for personnel focused on finding and developing improved processes and operations. These expenses also consist of facility costs, lab materials and related overhead. The Company's research and development expenses are associated with its Contrecoeur facility and are incurred as a direct result of the efforts to keep improving and developing the TDP technology platform. Accordingly, the Company expects to incur ongoing research and development expenses. The Company expenses all operating, research and development costs as they are incurred and if they do not meet the criteria for capitalization.

The Company expenses all operating, research and development costs as they are incurred when they do not meet the criteria for capitalization. Operating, research and development expenses for the quarter ended December 31, 2022 were \$239,773, compared to \$233,788 for the same quarter ended December 31, 2021. The increase of \$5,985 is attributable to an increase of \$11,300 in salaries and short-term benefits, which were \$35,500 in the quarter ended December 1, 2022, compared to \$24,200 in the quarter ended December 31, 2021.

### *Loss before income taxes*

Loss before income taxes went from a loss of \$178,494 for the three-month period ended December 31, 2021

to a gain of \$14,538 during the same period ended December 31, 2022. The positive variation of \$193,032 between the two periods is attributable to (i) a negative gain on revaluation of warrant liability of \$1,133,724 during the last quarter of 2022 compared to the last quarter of 2021, related to the two private placements, partially offset by (ii) a decrease of \$987,357 in general and administrative expenses, which were \$11,314 for the quarter ended December 31, 2022, compared to \$998,671 for the quarter ended December 31, 2021.

#### *Income taxes*

For both the three-month periods ended December 31, 2022 and 2021, the Company had no current income tax expense. The Company had deferred income tax expense of \$15,282 and \$67,595 for the quarters ended December 31, 2022 and 2021, respectively. The decrease in deferred income tax expense of \$52,313 is mainly attributable to the reduction in the taxable temporary differences of the equipment and intangible assets from the depreciation and amortization being taken.

## **Cash Flows**

### **Cash Flows for the Years Ended December 31, 2022 and 2021**

	<b>Cash Flows</b>	
	<b>Year ended</b>	
	<b>December 31, 2022</b>	<b>December 31, 2021</b>
	\$	\$
Operating Activities	(45,113)	(1,484,115)
Investing Activities	(5,119,115)	(11,178,512)
Financing Activities	864,533	13,260,773
<b>Net Increase (Decrease) in Cash</b>	<b>(4,299,695)</b>	<b>598,146</b>

Operating Activities: Net cash used by the Company's operating activities during the year ended December 31, 2022 decreased by \$1,439,002 compared to the year ended December 31, 2021, primarily due to (i) a decrease in gain on revaluation of warrant liability of \$977,338 between the two periods and to (ii) a positive variance in changes in working capital items of \$1,463,073 between the two periods, partially offset by (iii) a decrease of \$876,308 in stock based compensation and by (iv) an increase of \$387,040 in net loss between the two periods.

Investing Activities: Net cash used for investing activities during the year ended December 31, 2022 decreased by \$6,059,697 compared to the year ended December 31, 2021, which is essentially due to a decrease of \$6,209,397 in cash used for "Plant under construction", which totaled \$5,119,115 for the year ended December 31, 2022 and \$11,328,512 in the year ended December 31, 2021.

Financing Activities: During the year ended December 31, 2022, cash flows provided by financing activities decreased by \$12,396,240, from \$13,260,773 in the year ended December 31, 2021 to \$864,533 in the year ended December 31, 2022. This decrease came primarily from a smaller amount of cash provided from long term debt for the construction of the new turnkey TDP facility in Hawkesbury, from \$9,502,843 in the year ended December 31, 2021 to \$20,000 in the year ended December 31, 2022, partially offset by proceeds from exercise of options of \$1,000,000 during the year ended December 31, 2022 compared to \$47,500 during the year ended December 31, 2021.

The Company anticipates its material liquidity needs in the near and intermediate term to consist of the following:

- Working capital needs, including operating expenses and costs associated with research and

- development and future developments and the commercialization of the TDP technology;
- Funding the commissioning and production of the Hawkesbury TDP facility.

The Company does not anticipate paying any cash dividends on its capital stock in the foreseeable future as it currently expects to retain all future earnings, if any, in the operation and expansion of its business.

### Cash Flows for the Three-Month Periods Ended December 31, 2022 and 2021

	<b>Three-Month Periods ended</b>	
	<b>Dec 31, 2022</b>	<b>Dec 31, 2021</b>
	\$	\$
Operating Activities	384,681	(544,998)
Investing Activities	(5,427)	(1,503,973)
Financing Activities	(1,045,700)	3,558,056
<b>Net Increase (decrease) in Cash</b>	<b>(666,446)</b>	<b>1,509,085</b>

Operating Activities: Net cash provided by the Company's operating activities during the quarter ended December 31, 2022 increased by \$929,679 compared to the same period ended December 31, 2021, mostly due to (i) a positive variation in the gain on revaluation of warrant liability in the amount of \$1,133,724 between the two periods and to (ii) a positive variation of \$888,665 in working capital items between the two periods, partially offset by (iii) a decrease of \$876,308 in stock based compensation in the quarter ended December 31, 2022 compared to the quarter ended December 31, 2021.

Investing Activities: Net cash used for the Company's investing activities during the quarter ended December 31, 2022 decreased by \$1,498,546 compared to the same period ended December 31, 2021. The decrease in cash used for the Company's investing activities is mostly due to a decrease in investing activities in "Plant under construction" of \$1,648,546 between the two periods.

Financing Activities: Net cash provided by the Company's financing activities during the quarter ended December 31, 2022 decreased by \$4,603,756 compared to the same period ended December 31, 2021 mostly due to (i) a private placement with net proceeds of \$3,860,757 during the period ended December 31, 2021 compared to nil in the same period in 2022, and to (ii) a decrease of \$958,861 in long term debt financing related to the Hawkesbury Project, which decreased by \$983,573 in the period ended December 31, 2022 compared to a decrease of \$24,712 in the period ended December 31, 2021.

### Assets, Liabilities and Shareholders' Equity

As of December 31, 2022, total assets were \$43,958,075, compared to \$41,587,914 as of December 31, 2021. The primary reasons for the increase of \$2,370,161 in total assets between December 31, 2022 and December 31, 2021 was (i) an increase of \$7,514,076 in "Plant under construction", partially offset by (ii) a decrease of \$4,299,695 in cash, by (iii) a decrease in equipment of \$600,028, which is due to the depreciation of the equipment in Contrecoeur between December 31, 2021 and December 31, 2022, and by (iii) a decrease of \$371,153 in prepaid expenses and deposits.

As of December 31, 2022, total liabilities were \$41,348,511, compared to \$38,941,749 as of December 31, 2021. The increase of \$2,406,762 in total liabilities between the two periods is mostly due to (i) an increase of \$1,928,384 in long term debt, related to the Hawkesbury Project, and to (ii) an increase of \$775,273 in accounts payable and accrued liabilities, partially offset by (iii) a decrease in warrant liability of \$427,043, related to the two private placements.

The Company had a working capital deficit of \$5,713,699 as of December 31, 2022 compared to a working capital surplus of \$25,105 as of December 31, 2021. This decrease of \$5,738,804 in working capital is mostly attributable to (i) a decrease in cash of \$4,299,695, to (ii) an increase of \$775,273 in accounts payable and accrued liabilities and to (iii) an increase of \$371,153 in prepaid expenses and deposits.

As of December 31, 2022, the Company had an accumulated deficit of \$22,018,374 compared to an accumulated deficit of \$20,981,773 as of December 31, 2021. The \$1,036,601 increase in the accumulated deficit between the two periods is attributable to the net loss recorded for the year ended December 31, 2022.

## **Liquidity**

The Company manages its capital to ensure the Company's ability to meet strategic objectives, including the construction and completion of the Hawkesbury TDP facility and the commercialization of the TDP technology. The capital structure of the Company consists of cash, term deposits, advances from a company under common control, long-term debt and equity.

As of December 31, 2022, the Company had cash on hand of \$105,268 however on January 16, 2023, it closed a private placement of \$1,000,051, bolstering its cash on hand. The Company has fulfilled all financial covenants agreed to in its term loan with EDC for the Hawkesbury Project and expects to cover its working capital needs for the year ending December 31, 2023. It expects to use a further \$2,300,000 during the next fiscal year, mostly for working capital, commissioning and ramp-up phase of the Hawkesbury facility. The Company expects to have positive cash flows mostly resulting from the operations of the Hawkesbury facility of approximately \$950,000. The Company continues to re-assess its working capital needs regularly and amounts that it may need for its working capital, operations and global expansion and, if needed, may decide to borrow or raise capital.

## **Off-Balance Sheet Arrangements**

The Company is not currently a party to, or otherwise involved with, any off-balance sheet arrangements that have or are reasonably likely to have a current or future material effect on its financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

## **Additional Financing Requirements**

The Company manages its capital to ensure the Company's ability to meet strategic objectives, including the construction and completion of the Hawkesbury TDP facility and the commercialization of the TDP technology. The capital structure of the Company consists of cash, term deposits, advances from a company under common control, long-term debt and equity.

The Company continues to re-assess its working capital needs regularly and amounts that it may need for its operations an global expansion and, if needed, may decide to borrow or raise capital.

## **Long-Term Debt**

The Company has (i) a long-term debt for advance from a company under common control in the amount of \$1,518,853 as of December 31, 2022, unchanged from December 31, 2021, (ii) government loans, for an

amount of \$120,000, as of December 31, 2022, which is governmental support to Canadian companies for the COVID-19 crisis, and (iii) lease liabilities for a manufacturing facility and some equipment from companies under common control in the amount of \$78,455 as of December 31, 2022, compared to \$19,700 as of December 31, 2021. The Company also committed to long-term debts related to the turnkey TDP facility in Hawkesbury: (i) the balance of purchase price of the land, for an amount of \$120,000 as of December 31, 2022, which is payable in 10 equal annual installments of \$20,000, bearing interest at 3% per annum, and (ii) advances in the amount of \$34,002,693 on a term loan from EDC as of December 31, 2022.

### **Seasonality**

The Company expects neither its sales nor commercial production of TDP turnkey facilities to be subject to seasonality. The Company also does not anticipate that its clients' production and sales of carbon black substitute, oil and steel, to be subject to seasonality either. However, selling and construction of TDP facilities may take longer than expected because the size and extent of the potential project may force clients to scrutinize or even delay their decision and, for these reasons, there may be volatility in the Company's sales of such facilities.

### **Standards, amendments and interpretation to existing standards that are not yet effective**

At the date of authorization of these consolidated financial statements, certain new standards, amendments and interpretations to existing standards have been published by the International Accounting Standards Board but are not yet effective, and have not been early adopted by the Company. Any other new standards and interpretations that have been issued are not expected to have a material impact on the Company's consolidated financial statements.

### **Basis of measurement**

The consolidated financial statements have been prepared on the historical cost basis, as explained in the accounting policies below.

### **Basis of consolidation**

The consolidated financial statements include the accounts of the Company and those of Ecolomondo Environmental (Contrecœur) Inc, Ecolomondo Environmental (Hawkesbury) Inc., 9083-5018 Quebec Inc. and Ecolomondo Process Technologies Inc. (incorporated in 2021), directly or indirectly, wholly-owned subsidiaries. The Company controls a subsidiary if it is exposed, or has rights, to variable returns from its involvement with the subsidiary and has the ability to affect those returns through its power over the subsidiary. All subsidiaries have a reporting date of December 31. All intercompany balances and transactions have been eliminated upon consolidation.

### **Foreign currency translation**

The consolidated financial statements are presented in Canadian dollars, which is also the functional currency of the Company and all of the subsidiaries. Accordingly, monetary assets and liabilities are translated into Canadian dollars at the exchange rate in effect at the end of each reporting period. Non-monetary assets and liabilities are translated at historical exchange rates. Revenues and expenses are translated at average exchange

rates during the reporting period. The related gains or losses are accounted for in the consolidated statements of loss and comprehensive loss. The Company has not utilized any foreign currency hedging strategies to mitigate the effect of its foreign currency exposure.

### **Plant under construction**

Plant under construction includes any cost that is directly attributable to the construction of a new plant and to bringing the plant to the condition necessary for it to be capable of operating in the manner intended by management. Such costs include the cost of the land, as well as borrowing costs that are directly attributable to the construction and any deposit made on the construction.

### **Equipment**

Equipment is accounted for at cost less accumulated depreciation. Depreciation is based on estimated useful life using the straight-line method, and the following periods:

	<u>Periods</u>
Reactor	15 years
Office equipment	5 years
Other equipment	5 years

Estimates of useful life are updated as required and are reviewed at least annually. Maintenance and repairs are expensed as incurred.

The plant under construction is not amortized until construction is complete and operating in the manner intended by management.

### **Impairment testing of plant under construction, equipment and intangible assets**

For impairment assessment purposes, assets are grouped at the lowest level for which there are largely independent cash inflows (cash-generating units). As a result, some assets are tested individually for impairment and some are tested at the cash-generating unit level. Individual assets or cash-generating units are tested for impairment whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. Non-amortizable assets are tested for impairment annually.

An impairment loss is recognized for the amount by which the asset's (or cash-generating unit's) carrying amount exceeds its recoverable amount, which is the higher of fair value less costs of disposal and value-in-use. To determine the value-in-use, management estimates expected future cash flows from each cash-generating unit and determines a suitable discount rate in order to calculate the present value of those cash flows. The data used for impairment testing procedures are directly linked to the Company's latest approved budget, adjusted as necessary. Discount factors are determined individually for each cash-generating unit and reflect current market assessments of the time value of money and asset-specific risk factors.

Any impairment loss is charged to the individual asset or on a pro rata basis to the assets in a cash-generating unit. All assets are subsequently reassessed for indications that an impairment loss previously recognized may no longer exist. An impairment loss is reversed if the asset's or cash-generating unit's recoverable amount exceeds its carrying amount.

As at December 31, 2022 and 2021, the Company determined that there was no impairment of equipment, plant under construction and right of use assets.

## **Financial instruments**

### *Recognition, initial measurement and derecognition*

Financial assets and financial liabilities are recognized when the Company becomes a party to the contractual provisions of the financial instrument and are measured initially at fair value adjusted for transaction costs. Subsequent measurement of financial assets and financial liabilities is described below.

Financial assets are derecognized when the contractual rights to the cash flows from the financial asset expire or when the financial asset and substantially all the risks and rewards are transferred. A financial liability is derecognized when it is extinguished, discharged, cancelled or expires.

### *Classification and initial measurement of financial assets*

Financial assets, other than those designated and effective as hedging instruments, are classified into one of the following categories: amortized cost, fair value through profit or loss, and fair value through other comprehensive income. In periods presented, the Company only has financial instruments classified at amortized cost.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Company's business model for managing them. The Company's cash, receivables (excluding sales taxes receivable) and term deposits are classified in the category of amortized cost upon initial recognition. Receivables from the sale of by-products that do not contain a significant financing component or for which the Company has applied the practical expedient are measured at the transaction price determined under IFRS 15.

### *Subsequent measurement*

In subsequent periods, the measurement of financial instruments depends on their classification.

The Company measures financial assets at amortized cost if the assets meet the following conditions:

- a) They are held within a business model whose objective is to hold the financial assets and collect its contractual cash flows
- b) The contractual terms of the financial assets give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding.

After initial recognition, these are measured at amortized cost using the effective interest method. Discounting is omitted where the effect of discounting is immaterial.

The Company recognizes a loss allowance for expected credit losses arising from financial assets. The amount of expected credit losses is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective financial information.

### *Classification and subsequent measurement of financial liabilities*

The Company's financial liabilities include accounts payable and accrued liabilities, excluding salaries and benefits payable, certain deferred revenues, advances from a company under common control, deposit from a



future partner, long-term debt and the warrant liability.

Financial liabilities, other than the warrant liability, are measured subsequently at amortized cost using the effective interest method and all revenues and expenses relating to financial liabilities are recognized in consolidated loss. The warrant liability carries at fair value through profit or loss.

#### *Fair Value*

The Company must classify the fair value measurements of financial instruments according to a three-level hierarchy, based on the type of inputs used in making these measurements. These tiers include:

- Level 1: observable inputs such as quoted prices in active markets;
- Level 2: inputs other than quoted prices in active markets that are either directly or indirectly observable; and
- Level 3: unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions.

#### **Leases**

The Company recognises a right-of-use asset and a lease liability with respect to a lease on the date the underlying asset is available for use by the Company (hereafter, the “commencement date”).

The right-of-use asset is initially measured at cost, which includes the initial lease liabilities adjusted for lease payments on or before the commencement date, plus initial direct costs incurred and an estimate of all of the costs for dismantling and removing the underlying asset, less any lease incentives received.

The right-of-use asset is amortised over the shorter of the estimated useful life of the underlying asset or the lease term on a straight-line basis. Additionally, the cost of a right-of-use asset is reduced by any accumulated impairment losses and, as appropriate, adjusted for any remeasurement of the related lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, calculated using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate. Generally, the Company uses its incremental borrowing rate as its discount rate. The lease payments included in the lease liability include the following, in particular:

- Fixed payments, including in-substance fixed payments, less any lease incentives receivable;
- Variable payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- Lease payments relating to extension options that the Company is reasonably certain it will exercise.

The interest expense relating to lease liabilities is recognised in profit or loss using the effective interest method.

The lease liability is remeasured when there is a change in future lease payments resulting from a change in an index or when the Company changes its measurement with respect to the exercise of a purchase, extension or termination option.

The lease liability adjustment is adjusted against the related right-of-use asset or recorded in profit or loss if

the right-of-use asset is reduced to zero.

Lease payments relating to leases with a lease term of 12 months or less and leases for which the underlying asset is of low value are recognised on a straight-line basis as an expense in profit or loss.

## **Revenue recognition**

### *Sale of facilities*

When a letter of intent is signed for the potential sale of a facility, a deposit representing a commitment fee is received in anticipation of signing a contract for the sale of the facility. Such deposits are presented as deferred revenues. If the contract is signed, the commitment fee is credited against the contract price. If the potential buyer chooses not to proceed with the project, the commitment fee is retained by the Company and recognized in revenue upon the termination of the letter of intent.

As at December 31, 2022 and 2021, there were no contracts signed for the sale of facilities.

### *Ancillary revenues*

The sale of by-products contains a single performance obligation to transfer such goods. Revenue is recognized when control of goods has transferred to customers. Control is considered transferred in accordance with the terms of sale, generally when goods are shipped to external customers as that is generally when legal title, physical possession and risks and rewards of goods/services transfers to the customers.

## **Research and development costs and investment tax credits**

Research expenses and development costs that do not meet the criteria for capitalization are expensed as they are incurred. Such costs consist primarily of materials and employee related expenses including salaries and benefits.

Investment tax credits are accounted for during the year in which the research and development costs are incurred, provided that the Company is reasonably assured that the credits will be received. The investment tax credits must be examined and approved by the tax authorities and it is possible that the amounts granted will differ from the amounts recorded.

## **Government assistance**

Government assistance is recognized when there is reasonable assurance that the Company has met the requirements of the government program, provided that the Company has reasonable assurance that the amount will be received.

Non-nominal government grants are recorded at a nominal amount.

## **Provisions**

Provisions for legal disputes, onerous contracts or other claims are recognised when the Company has a present legal or constructive obligation as a result of a past event, it is probable that an outflow of economic resources

will be required from the Company and amounts can be estimated reliably. The timing or amount of the outflow may still be uncertain.

Provisions are measured at the estimated expenditure required to settle the present obligation, based on the most reliable evidence available at the reporting date, including the risks and uncertainties associated with the present obligation. Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. Provisions are discounted to their present values, where the time value of money is material.

No liability is recognised if an outflow of economic resources as a result of present obligations is not probable. Such situations are disclosed as contingent liabilities unless the outflow of resources is remote.

### **Share capital, warrants and options**

Class "A" shares, warrants not meeting the definition of a liability and options are classified as equity. Incremental costs directly attributable to the issuance of shares are recognized as a deduction from the proceeds in equity in the period where the transaction occurs.

Balances from cancelled or expired warrants not meeting the definition of a liability and options are transferred to deficit.

### **Units**

Proceeds from the issuance of units are allocated between share capital and warrants according to their relative fair values when the warrants do not meet the definition of a liability. The Company uses the share price at the date of issuance for the fair value of the shares and the Black-Scholes pricing model to determine the fair value of the warrants.

When the warrants issued as part of a unit meet the definition of a liability, the warrants are measured at fair value and the residual value is allocated to the share capital.

### **Income taxes**

Tax expense recognized in consolidated comprehensive loss comprises the sum of current and deferred taxes that are not recognized directly in equity.

Current tax is based on the results for the period as adjusted for items that are not taxable or deductible. Current tax is calculated using tax rates and laws enacted or substantially enacted at the reporting date.

Deferred income taxes are calculated using the liability method. Deferred tax is recognized in respect of temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated balance sheets. A deferred tax asset is recognized for unused tax losses, tax credits and deductible temporary differences to the extent that it is probable that future taxable income will be available against which they can be utilized. Deferred tax is calculated using tax rates and laws enacted or substantially enacted at the reporting date, and which are expected to apply when the related deferred income tax asset is realized or the deferred tax liability is settled.

The carrying amounts of deferred tax assets are reviewed at each reporting period and reduced to the extent that it is no longer probable that sufficient taxable income will be available to allow all or part of the deferred

tax asset to be utilized. Unrecognized deferred tax assets are reassessed at each reporting period and are recognized to the extent that it has become probable that future taxable income will allow the deferred tax asset to be recovered.

### **Share-based compensation and other share-based payments**

The Company has a stock option plan under which directors, executives, employees and consultants can be granted stock options of the Company.

The fair value is measured at the grant date and recognized as an expense in profit or loss with a corresponding amount to options in equity over the period during which the options vest. The fair value of the options granted is measured using the Black-Scholes option pricing model, taking into account the terms and conditions upon which the options were granted. Any consideration paid by the employees on exercise or purchase of stock options is credited to share capital. The value attributed to stock options is transferred to share capital at the issuance of common shares.

In the normal course of operations, the Company grants shares in exchange for goods or services to parties other than staff members. For these transactions, the Company evaluates the goods or services received and the increase in equity, which is the counterpart, directly to the fair value of goods or services received, unless that fair value cannot be reliably estimated. In this case, the fair value is the value of shares issued on the market at the date the goods or services are received.

### **Basic and diluted net loss per share**

The Company presents basic and diluted loss per share data for its common shares calculated by dividing the loss by the weighted average number of common shares outstanding during the year. Diluted loss per share is determined by adjusting the loss and the weighted average number of common shares outstanding for the effects of all warrants and stock options that may add to the total number of common shares in the case where they would not have an anti-dilutive impact.

For the years ended December 31, 2022 and 2021, the diluted loss per share was the same as the basic loss per share since the options and warrants had an anti-dilutive effect. Accordingly, the basic and diluted loss per share for those years were calculated using the basic weighted average number of shares outstanding.

### **Significant management judgment in applying accounting policies and estimation uncertainty**

When preparing the consolidated financial statements, management makes a number of judgments, estimates and assumptions about the recognition and measurement of assets, liabilities, revenues and expenses.

### **Significant management judgment**

The following are significant management judgments in applying the accounting policies of the Company that have the most significant effect on the consolidated financial statements.

#### *Recognition of deferred tax assets*

The extent to which deferred tax assets can be recognized is based on an assessment of the probability that

future taxable income will be available against which the deductible temporary differences and tax loss carry-forwards can be utilized.

#### *Capitalization of development costs*

Determining whether the recognition requirements for the capitalization of development costs of the TDP are met requires judgment. As at December 31, 2022 and 2021, the Company determined that not all recognition requirements were met. Thus, the Company did not record any development costs in the consolidated balance sheets for the years ended December 31, 2022 and 2021.

#### *Going concern*

The assessment of the Company's ability to continue as a going concern and to raise sufficient funds to pay for its ongoing operating expenses and meet its liabilities for the ensuing year involves significant judgment based on historical experience and other factors, including expectation of future events that are believed to be reasonable under the circumstances. See Note 2 for more information.

### **Estimation uncertainty**

Information about estimates and assumptions that have the most significant effect on recognition and measurement of assets, liabilities, revenues and expenses is provided below. Actual results may be substantially different.

#### *Impairment of plant under construction and equipment*

In assessing impairment, management estimates the recoverable amount of each asset or cash-generating unit based on expected future cash flows and uses an interest rate to discount them. Estimation uncertainty relates to assumptions about future operating results and the determination of a suitable discount rate. As at December 31, 2022 and 2021, the Company determined that there was no impairment of plant under construction, equipment and right of use assets.

#### *Useful lives of depreciable assets*

Management reviews its estimate of the useful lives of depreciable assets at each reporting date, based on the expected utility of the assets. Uncertainties in these estimates relate to technological obsolescence that may change the utility of certain equipment.

#### *Leases*

Recognizing leases requires judgement and use of estimates and assumptions. Judgement is used to determine whether there is reasonable certainty that a lease extension or cancellation option will be exercised. Furthermore, management estimates are used to determine the lease terms and the appropriate interest rate to establish the lease liability.

#### *Investment tax credits*

Investment tax credits related to research and development activities are accounted for during the year in which the related research and development expenses are incurred. The investment tax credits must be examined and approved by the tax authorities and it is possible that the amounts granted by the tax authorities will differ from the amounts recorded.

### *Share-based compensation*

The estimation of share-based compensation requires the selection of an appropriate valuation model and consideration as to the inputs necessary for the valuation model chosen. The Company has made estimates as to the volatility determined by reference to historical data of comparable entities, the probable life of options and warrants granted and the time of exercise of those options and warrants. The model used by the Company is the Black-Scholes valuation model.

### *Warrant liability*

The Company used the Black-Scholes method to determine the fair value of the warrant liability. The Company has made estimates as to the volatility determined by reference to its historical share data, the risk-free interest rate and the probable life of the warrants granted.

## **Related Party Transactions**

Related party transactions consist of the advance from a company under common control and lease agreements.

### *Transactions with key management personnel*

Key management of the Company are the members of the Board of Directors, as well as officers of the Company. Key management personnel remuneration for the year ended December 31, 2022 amounts to \$109,344 (\$262,316 in 2021), including stock options.

## **Additional Information**

Additional information relating to the Company can be found on SEDAR at [www.sedar.com](http://www.sedar.com).