

## Management's Discussion and Analysis

For the three-month period ended March 31, 2022

Management's Discussion and Analysis March 31, 2022

#### DESCRIPTION OF BUSINESS AND OVERVIEW OF OPERATIONS AND FINANCIAL CONDITION

The following is management's interim discussion and analysis ("MD&A"), prepared as of May 30, 2022. This MD&A should be read in conjunction with the unaudited Interim Consolidated Financial Statements for the three months ended March 31, 2022 and the accompanying notes, the Company's audited Consolidated Financial Statements and the accompanying notes for the year ended December 31, 2021, all as prepared in accordance with International Financial Reporting Standards ("IFRS"). All amounts are stated in Canadian dollars unless otherwise indicated.

This report includes certain statements that may be deemed "forward-looking statements" within the meaning of applicable securities legislation. All statements, other than statements of historical facts that address such matters as future events or developments that the Company expects, are forward-looking statements and, as such, are subject to risks, uncertainties, assumptions and other factors of which are beyond the reasonable control of the Company. You can identify these statements by forward-looking words such as "expects", "does not expect", "plans", "anticipates", "does not anticipate", "believes", "intends", "estimated", "projects", "potential", "scheduled", forecast", "budget", and similar expressions, or that events or conditions "will", "would", "may", "could", "should" or "might" occur and similar words. Such statements give the Company's current expectations or forecasts of future events and are not guarantees of future performance and actual results or developments may differ materially from those expressed in, or implied by, this forward looking information. With respect to forward-looking statements and information contained herein, we have made numerous assumptions including among other things anticipated costs and expenditures and the Company's ability to achieve its goals. Although management believes that the assumptions made and the expectations represented by such statements or information are reasonable, there can be no assurance that a forward-looking statement or information herein will prove to be accurate. Forward-looking statements and information by their nature are based on assumptions and involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information. Factors that could cause actual results to differ materially from those in forward-looking statements include, for example, such matters as continued availability of capital and financing and general economic, market or business conditions. Although we have attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in the forward-looking statements or information, there may be other factors that cause actual results, performances, achievements or events not to be anticipated, estimated or intended. Accordingly, readers should not place undue reliance on forward-looking statements or information. Any forward-looking statements are expressly qualified in their entirety by this cautionary statement. The information contained herein is stated as of the current date and subject to change after that date and the Company does not undertake any obligation to update publicly or to revise any of the forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by applicable securities laws.

## **Description of Business**

Northstar Clean Technologies Inc. ("Northstar" or the "Company") was incorporated on August 21, 2017 as Blocktech Ventures Inc. under the laws of the British Columbia Corporations Act. On August 4, 2020, the Company entered into an amalgamation agreement and on December 23, 2020, the Company completed an amalgamation with its subsidiary 1257848 BC Ltd. and Empower Environmental Solutions Ltd ("Empower") (the "Amalgamation"). Upon Amalgamation, the Company acquired all the shares of Empower (41,248,577 shares) by issuing 44,331,147 Company shares in exchange. Pursuant to the agreement, following completion of the transaction, Empower shareholders owned approximately 64.92% of the combined company resulting in the shareholders of the Empower controlling the Company. Accordingly, the transaction was considered a reverse takeover transaction ("RTO").

The Company filed a preliminary prospectus dated April 15, 2021, an amended and restated preliminary prospectus dated May 7, 2021, and a final prospectus dated June 18, 2021. The Company raised \$12,241,312.30 on the issue of 34,975,178 Units at a price of \$0.35 per Unit. Each Unit is comprised of one common share in the capital of the Company (each, a "Share") and one-half of one transferable common share purchase warrant (each whole warrant, a "Warrant"). Each Warrant will entitle the holder thereof to acquire one Share (each, a "Warrant Share") at a price of \$0.50 per Warrant Share for a period of two years.

The Company listed its common shares on the on the TSX Venture Exchange (the "TSX-V") and began publicly trading on the TSX-V under the symbol 'ROOF' on July 13, 2021. On January 11, 2022, the Company's common shares commenced trading on the OTCQB Venture Market (the "OTCQB") under the ticker symbol 'ROOOF'. In addition, on January 11, 2022, the Company's common shares became eligible for book-entry and depository services at the Depository Trust Company ("DTC"), which

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facilitates electronic clearing and settlement of transfers in the United States. The head office and principal address of the Company is located at 7046 Brown Street, Delta, British Columbia, Canada, V4G 1G8 (the "Empower Pilot Facility"). The Company's registered and records office is 6204 – 125<sup>th</sup> Street, Surrey, British Columbia, Canada V3X 2E1.

On January 18, 2022, the Company incorporated Empower Environmental Solutions Calgary Ltd ("Calgary") under the laws of the Alberta Business Corporations Act, and on January 20, 2022, the Company incorporated Empower Environmental Solutions Toronto West Ltd. ("Toronto West") under the laws of the Ontario Business Corporations Act to facilitate possible expansion into those markets.

The Company, through its wholly-owned subsidiary Empower, has developed a proprietary design process technology at its Empower Pilot Facility for taking discarded or defective single-use asphalt shingles, otherwise destined for already over-crowded landfills, and extracting the liquid asphalt, aggregate and fiber for usage in new asphalt, shingles, construction products and other industrial applications. The Company's proprietary design process was developed over the last decade with technical and scientific assistance from the United Kingdom and Alberta. As part of this design process, we anticipate that Empower will process disposed shingle waste back into its component parts for reuse/resale, thus eliminating the need to dispose of the single-use waste, where it would sit in a landfill. The Company's principal office and facility operation is 7046 Brown Street, Delta, British Columbia, Canada, V4G 1G8.

## Outlook and growth strategy

As an emerging innovator in sustainable processing, Northstar's mission is to be the leader in the recovery and reprocessing of asphalt shingles in North America, extracting the recovered components from asphalt shingles that would otherwise be sent to landfill.

#### **Empower Pilot Facility**

The Company's Empower Pilot Facility in Delta, British Columbia is located on a 4.23 acre plot of land in an industrial area of Delta. In February 2022, the Company announced that it has initiated steady state production at the Empower Pilot Facility, which is expected to deliver throughput of asphalt shingles in the range of 10-20 tonnes per day ("tpd") up to 4-5 days per week. Steady state operation will continue at these levels with the objective of demonstrating repeatable production in terms of production safety, quality, and duration (hours per day and days per week). Most importantly, the two primary output products (liquid asphalt and aggregate) are being produced exactly as designed, meeting the Company's end product specifications. The production of specification products has enabled the Company to deliver samples of its "green asphalt" and aggregate to multiple major road construction companies, shingle manufacturers, and other industry stakeholders. These samples are now enabling detailed technical analysis to be carried out by a wide range of the Company's potential customers. Internal testing capability has also been implemented at the Empower Pilot Facility, enabling the development of a quality assurance program for the Company's reprocessed products.

Since October 2021, the Company has been implementing the changes identified through the unit-by-unit commissioning of the Company's proprietary BEST process. This commissioning process, combined with the ramp up to steady state production, has provided a clear roadmap for commercial production levels targeted at 50-75 tpd. The Company believes that the operation of its Empower Pilot Facility validates the use of Northstar's proprietary Bitumen Extraction & Separation Technology ("BEST") in the foundational design of the Company's future "scale up" facilities.

On March 3, 2022, the Company announced that it received positive testing results from an independent third-party testing facility for two of its outputs, liquid asphalt and aggregate. After initiating steady state production, liquid asphalt and aggregate were produced through the reprocessing of single-use asphalt shingles currently stockpiled on-site at the Empower Pilot Facility. These independent third-party test results for liquid asphalt and aggregate confirm that these products meet the Company's end product specification objectives.

#### **Calgary Scale Up Facility**

On March 3, 2022, the Company announced that the Board of Directors of the Company approved the selection of the City of Calgary, Alberta, Canada as the planned site location for the Company's first asphalt shingle reprocessing scale up facility ("Calgary Empower Facility"). Based on the independent engineering design study, the Calgary Empower Facility is expected

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to be the Company's first modular scale up facility and will be designed and engineered with an estimated capacity of 150–200 tpd. The scale up facility's build and design are part of the Company's national roll out and expansion strategy to operate asphalt shingle reprocessing facilities across North America. The Company's front-end engineering design ("FEED") for the scale up facility was completed at the end of Q1 2022.

- Enter into long-term lease at the target site selection
  - Complete detailed plant engineering and construction drawings
  - Complete life cycle assessment ("LCA") for Calgary Empower Facility
  - Commence procurement of equipment

**Expected Sequence of Events** 

- Complete operational personnel and contractor hiring
- Commence Calgary Empower Facility pre-construction
- Commercial production at Calgary Empower Facility

The Company previously commenced an exploratory site selection process for its first expansion facility. The Company then commenced a detailed geographic target market analysis to evaluate potential site locations. After identifying several potential geographic markets for Northstar's flagship facility, the Company determined that the City of Calgary was the most attractive location for the Company's first expansion facility for the following reasons:

- Strategic center of Canada's "Energy Transition" economy
- Strong provincial, municipal, and community support for emissions reduction projects
- Sophisticated government programs for energy transition projects
- Favorable long-term leasing rates for industrial land
- Abundance of suitable industrial land options located close to landfill(s)
- Significant asphalt shingle supply of an estimated 30,000 to 50,000 tonnes per year
- Close proximity to major industry partners, including shingle manufacturers and off-take partners
- Abundance of highly skilled labour for engineering, materials handling and hydrocarbon processing
- A clear road map for non-dilutive project financing and government grants

Final site selection and other construction terms are subject to several factors, including local support and final approval by the Company's Board of Directors. Upon securing financing and receiving required environmental and operating permits, the Company plans to begin construction on the Calgary Empower Facility in the second half of 2022 with targeted operations by the end of the first half of 2023.

The Calgary Empower Facility will operate under "Empower Environmental Solutions Calgary Ltd.", a wholly owned subsidiary of the Company.

#### Market Overview

The durability, reliability and economic performance of the asphalt shingle makes it the most popular roofing material in North America, according to the Asphalt Roofing Manufacturer's Association.<sup>1</sup> However, asphalt shingle waste has long been a problem for municipalities which operate landfills. In metropolitan areas that handle large amounts of construction waste, shingle waste is generally disposed of in volume at municipal landfills. Asphalt is petroleum-based, is energy intensive to produce and scores very low on an environmental scorecard. Once the asphalt shingles are worn out on a roof of a home or building, it is a problem to dispose of them in a sustainable or environmentally friendly way. As a result, asphalt shingles represent the fourth largest category of construction waste according to the US Environmental Protection Agency ("US EPA").<sup>2</sup> The Asphalt Roofing Manufacturer's Association ("ARMA") estimated that 13.2 million tons of asphalt shingle scrap from roof tear-offs is produced annually in the United States.<sup>3</sup> According to a 2020 report from Global Market Insights, the market for asphalt shingles in Canada exceeded US\$1.35 billion in 2020 and is estimated to grow at over 3.7% compounded annual growth rate ("CAGR") between 2021 and 2027 to a market size of US\$1.85 billion.<sup>4</sup> According to a 2018 report from Global

<sup>1</sup> See: https://www.asphaltroofing.org/asphalt-shingle-brands/

<sup>2</sup> US EPA, "Advancing Sustainable Materials Management: 2018 Fact Sheet", 2020.

<sup>3</sup> ARMA, "Guidelines for the Use of Reclaimed Asphalt Shingles in Asphalt Pavements", 2015.

<sup>4</sup> Global Markets Insights, "Canada Asphalt Shingles Market Size, Growth Forecast", 2020 (published July 2021).

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Markets Insights, the market for asphalt shingles in the United States exceeded US\$7 billion and is projected to grow at over 3.8% CAGR between 2018 and 2025. <sup>5</sup> A 2007 study estimated that over 1.25 million tons of asphalt shingle waste is generated in Canada annually. <sup>6</sup> Currently, based on Company management's industry knowledge, some operators collect and grind shingles known as "reprocessing asphalt shingles" (or "RAS" in the paving industry), which are then sent to paving companies as an ingredient in new asphalt for highways, roads and parking lots. However, their activity (typically 3-10% of road mix) is limited due to restrictive parameters placed on asphalt producers. Roads that use RAS tend to experience pre-mature cracking and the mixes with RAS do not generally last as long as expected to. Paving companies and transportation departments have thus reduced the amount of RAS used in asphalt mixtures. In 2018, approximately 2 million tons of discarded asphalt shingles were repurposed in the United States, according to the United States Environmental Protection Agency ("EPA"). <sup>7</sup> To address the large volume of asphalt roofing waste, some governments in Canada are considering implementing waste disposal bans for asphalt roofing. <sup>8</sup>

The Company believes its business will appeal to roofing contractors, shingle manufacturers and waste haulers by enabling them to dispose of their used or off-spec shingles at the Company's facility, at a meaningful discount to market rates for disposing of shingles in landfills, rather than paying higher fees to deposit the shingles in a landfill. The Company believes general global trends in sustainability will encourage groups such as these to seek alternatives to landfill disposal and to seek out environmentally friendly solutions. Once in commercial production, the Company expects to be able to provide these alternative solutions through its proprietary process design technology while also generating the "tipping fee" revenue that provides the raw material inputs for the Company's repurposing needs. The Company then employs its proprietary process design technology to convert the asphalt shingles into three primary products – liquid asphalt, aggregate and fiber – that are planned to be sold to paving companies, cement companies and other industrial and construction product manufacturers, who can benefit from a discounted purchase price to virgin products. Furthermore, the growth potential for the venture is expected to be significant as the Company's plants can theoretically be located in any medium or large metropolitan area (estimated over 1 million people in population) where asphalt shingles are present.

The fact that roofing contractors and waste haulers must pay a tipping fee, at a price higher than the Company's proposed tipping fee, to deposit single-use asphalt shingles in landfills, which therefore enhances the economics of the business and the price competitiveness of our end products. To encourage roofing contractors and waste haulers to provide their discarded shingles to the Empower Facility as feedstock, the Company intends to offer a discount to landfill tipping fees. These tipping fees are expected to supplement the Company's income from the sale of finished product. In addition, the Company will offer a tangible discount to market for the price it will charge customers for liquid asphalt in order to gain entry into that marketplace. At present, we envisage that fiber and aggregate will be sold for market value.

In addition to the advantages of the Company's business model mentioned above, management believes that the very fact that the product is nearly one hundred percent repurposed will make it attractive to individuals, corporations and governments. We believe that the fact that a facility can be operated in every major metropolitan area where asphalt shingles are present makes the Company a compelling business opportunity.

<sup>5</sup> Global Markets Insights, "Asphalt Shingles Market Size, Growth Forecast", 2018 (published June 2019).

<sup>6</sup> Athena Institute, "Enhanced Recovery of Roofing Materials", 2007.

<sup>7</sup> US EPA, "Advancing Sustainable Materials Management: 2018 Fact Sheet", 2020.

<sup>8</sup> Canadian Counsel of Ministers of the Environment, "Guide for Identifying, Evaluating and Selecting Policies for Influencing Construction, Renovation and Demolition Waste Management", 2019

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#### PERFORMANCE SUMMARY

The following is a summary of the significant events and transactions that occurred during the three months ended March 31, 2022 and for the subsequent period to the report date hereof:

- (a) During the three months ended March 31, 2022
  - On January 18, 2022, the Company incorporated Empower Environmental Solutions Calgary Ltd ("Calgary").
  - On January 20, 2022, the Company incorporated Empower Environmental Solutions Toronto West Ltd. ("Toronto West").
  - the Company spent \$248,872 on acquisitions of plant equipment.
  - the Company spent \$272,863 in research and development expenses.
- (b) During the year ended December 31, 2021
  - the Company spent \$1,050,129 on acquisitions of plant equipment.
  - the Company sold a piece of equipment that was not suitable for \$24,000 incurring a loss of \$80,000.
  - the Company wrote-off \$109,321 of equipment that failed during testing.
  - the Company spent \$633,461 in research and development expenses.
  - Empower repaid \$1,917,265 in loan principal.
  - Empower renegotiated a new 5-year lease agreement on its premises effective January 1, 2021 for an initial term of 5 years with an option to extend for an additional 5 year. The Basic annual rents are as follows:
    - o from January 1, 2021 to December 31, 2022 \$558,435 per annum
    - o from January 1, 2023 to December 31, 2024 \$583,563 per annum, and
    - o from January 1, 2025 to December 31, 2025 \$609,837 per annum
    - o Estimated additional rents are approximately \$126,000 per annum.
  - The Company filed a preliminary prospectus dated April 15, 2021 an amended and restated preliminary prospectus dated May 7, 2021, and a final prospectus dated June 18, 2021 and began trading on the TSX Venture Exchange ("TSX-V") on July 13, 2021 under the symbol "ROOF".
  - The Company raised \$12,241,312 on the issue of 34,975,178 Units at a price of \$0.35 per Unit. Each Unit is comprised of one common share in the capital of the Company (each, a "Share") and one-half of one transferable common share purchase warrant (each whole warrant, a "Warrant"). Each Warrant will entitle the holder thereof to acquire one Share (each, a "Warrant Share") at a price of \$0.50 per Warrant Share for a period of two years from listing on a public market and such warrants trade on the TSX-V under the symbol "ROOF.WT". In addition, to the cash portion of the finder's fees in the amount of \$705,098, 2,014,565 Broker Warrants on Escrow Release valued at \$391,873.
  - The Company issued 702,736 shares to settle outstanding loans payable of \$200,000 plus \$45,958 in accrued interest.
  - Each of the directors, being Neil Currie, James Currie, Gordon Johnson, James Borkowski and Gregg Sedun, provided bridge loans totaling \$480,000 in aggregate during the period which were repaid in the same period with interest totaling \$2,495.
  - The Company negotiated \$270,000 plus GST and PST in equipment purchases with an offsetting loan with a company controlled by an Officer of the Company.

## **Selected Annual Information**

	Year Ended December 31, 2021	Year Ended December 31, 2020	Year Ended December 31, 2019
Loss and comprehensive loss	\$ 7,207,912	\$ 6,596,793	\$ 901,168
Basic and diluted loss per share	0.08	0.16	0.02
Total assets	12,374,613	4,859,762	2,365,966
Total liabilities	3,102,023	2,503,071	2,117,806

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#### SUMMARY OF QUARTERLY RESULTS

	March 31, 2022	December 31, 2021	September 30, 2021	June 30, 2021
Total assets	\$ 10,180,750	\$ 12,374,613	\$ 14,279,089	\$ 16,094,979
Property, plant and equipment	3,235,492	3,205,404	2,903,864	2,712,702
Working capital (deficit)	3,661,725	5,492,200	7,822,655	9,331,991
Shareholders' equity (deficit)	7,510,032	9,272,590	11,465,690	12,801,486
General and administrative expenses	1,769,094	1,715,220	1,793,040	1,804,089
Loss and comprehensive loss	(2,032,940)	(2,320,211)	(1,904,360)	(1,853,482)
Basic and diluted loss per share	(0.02)	(0.02)	(0.02)	(0.02)

	March 31, 2021	December 31, 2020	September 30, 2020	June 30, 2020
Total assets	\$ 12,816,534	\$ 4,859,762	\$ 2,602,964	\$ 2,390,818
Property, plant and equipment	2,573,141	2,370,872	2,232,882	2,112,403
Working capital (deficit)	(1,358,439)	(62,755)	(1,907,428)	(2,139,647)
Shareholders' equity	1,991,514	2,356,691	(131,710)	(10,661)
General and administrative expenses	1,107,245	5,898,105	119,300	321,134
Loss and comprehensive loss	(1,129,859)	(5,894,744)	(142,372)	(324,222)
Basic and diluted loss per share	(0.02)	(0.14)	(0.01)	(0.01)

#### **Results of Operations**

The following discussion addresses the operating results and financial condition of the Company for the three months ended March 31, 2022, compared with the three ended March 31, 2021.

## For the three-month ended March 31, 2022:

#### Loss and comprehensive for the period

The Company had a loss and comprehensive loss for the three-month period ended March 31, 2022, of \$2,032,940 (2021 - \$1,129,859). The net increase of \$2,032,940 in the loss and comprehensive loss for the three-month period ended March 31, 2022 compared to the three-month period ended March 31, 2021 was mainly due an increase of \$661,849 in General and administrative expenses, with an increase in research and development expenses of \$244,272 and an increase in other income of \$3,040 mainly consisting of foreign exchange gains and interest income. The changes in General and administrative, Research and development expenses and other income are noted below.

#### Other income

During the three-month period ended March 31, 2022, the Company reported interest income of \$6,939 (2021 - \$5,977) and foreign exchange gain of \$2078 (2021 - \$Nil) compared to the three-month period ended March 31, 2021. The interest income is due from a net investment in sublease and reported separately from the interest expense of \$4,667 on the lease liability and interest received on GST refunds, and the exchange gain is on US currency purchases.

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#### Research and development expenses ("R&D")

During the three-month period ended March 31, 2022, the Company reported R&D of \$272,863 compared to \$28,591 for the three-month period ended March 31, 2021. The items that caused the \$244,272 increase is noted in the following:

In comparison to the three-month period ended March 31, 2021:

- Contract consulting fees of \$135,197 (2021 \$7,368) increased by \$127,829 due to timing as the Company pushes to complete its final phase of testing of the asphalt shingle processing equipment and the use of consultants for its R&D.
- Repairs and maintenance of \$3,472 (2021 \$Nil) increased by \$3,472 on repairs and small modifications to the processing equipment as the Company is it continues testing and fine tuning the equipment.
- Site materials of \$134,194 (2021 \$21,223) increased by \$112,971 as the Company continued to refine and do numerous tests which consumed materials and equipment.

#### General and administrative expenses

General and administrative expenses of \$1,769,094 (2021 - \$1,107,245) are primarily comprised of advertising and promotion, interest, depreciation, management fees, office expenses, professional fees, rent and utilities, transfer agent and regulatory fees, share-based compensation, and travel. The net increase was \$661,849 compared to the three-month period ended March 31, 2021. Items that caused the net decrease are noted in the following:

In comparison to the three-month period ended March 31, 2021:

- Advertising and promotion of \$281,383 (2021 \$743) increased by \$280,640 as the Company listed its shares in a public market on July 13, 2021 and begun to promote the Company and reports to shareholders.
- Bank charges and interest of \$58,938 (2021 \$85,574) decreased by \$26,636. Accretion interest on new leases on the premises and acquisition of the Northstar lease account for a decrease of \$10,086, a decrease of Loan interest of \$12,191 due to a principal reduction in the Company's bank loan and a reduction of bank charge and finance charges of \$4,359.
- Consulting of \$116,800 (2021 \$130,575) decreased by \$13,775 due to some of the consultants being hired as employees after the Company listed in the public market, causing an increase in wages and benefits.
- Depreciation of \$222,737 (2021 \$115,492) increased by \$107,245 mainly due to the Company beginning to depreciate its processing equipment.
- Insurance of \$36,261 (2021 \$Nil) increased by \$36,261 due to acquiring D&O and property and plant liability insurance.
- IT and Communications of \$34,995 (2021 \$Nil) increased by \$34,995 due to money spent on software licenses and external IT services that were needed to support the business
- IT and communications of \$34,995 (2021 \$Nil) increased by \$34,995 as the Company expended funds on new computer licences and supplies.
- Office and miscellaneous of \$23,218 (2021 \$Nil) increased by \$23,218 was due to an increase subscription, licences, and general office supplies.
- Professional fees of \$109,252 (2021 \$149,088) decreased by \$39,836. Legal fees decreased by \$65,475 as the Company required such services to complete its listing in the prior period, offset by increases in Accounting fees which increased by \$21,000 due to the hiring of the Chief Financial Officer, accruals for Audit fees which increased by \$11,500 for the period and a decrease in other fees of \$6,861.
- Rent and utilities of \$76,054 (2021 \$36,759) increased by \$39,295 due to the new lease renegotiated and beginning January 1, 2021 which accounted for \$24,495 and the remaining amount of the \$14,800 increase was due to additional office space required.
- Share-based compensation of \$270,392 (2021 \$518,724) decreased by \$248,342 due to timing of options granted in the current period the vesting of the stock options on historical issuances.
- Transfer agent and regulatory fees of \$29,533 (2021 \$17,970) increased by \$11,563 as the Company listed its shares in a public market on July 13, 2021 whereas the comparative cost were due to prelisting costs.
- Travel of \$64,184 (2021 \$3,968) increased by \$60,216 as the Company brought in certain consultants to assist in refining and promoting the Company's and its processing equipment.
- Wages and benefits of \$445,357 (2021 \$48,352) increased by \$397,005 as the Company hired the Empower management as employees on the RTO and the costs reported in Wages and benefits were previously reported as Management fees. In addition, the Company began hiring additional administrative staff in September 2021 and other staff there were previously paid as consultants.

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#### LIQUIDITY AND CAPITAL RESOURCES

The Company's development of asphalt processing activities has been funded to date primarily through the issuance of common shares and loan financings, and the Company expects that it will continue to be able to utilize this source of financing until it develops cash flow from its processing operations. Other than as discussed herein, the Company is not aware of any trends, demands, commitments, events or uncertainties that may result in its liquidity either materially increasing or decreasing at present or in the foreseeable future. Material increases or decreases in the Company's liquidity will be substantially determined by the success or failure of its commercialization of a proprietary process technology for the processing of asphalt shingles and the extraction and recovery of asphalt cement, fiberglass/felt and mineral aggregates to be sold and used in asphalt pavement, shingle manufacturing, construction products, and other industrial applications, as well as its continued ability to raise capital.

The Company anticipates spending approximately \$5,000,000 in capital resources on its processing equipment and R&D in the next twelve months. The Company was continually searching for additional funding and partners to complete its repurposing and reprocessing pilot facility in Delta, BC and operating expenditures until it partnered with Northstar and became a wholly owned subsidiary on December 23, 2020.

Currently, the Company's overhead expenses are averaging approximately \$500,000 per month (excluding share-based payments on issuance of stock options) during the development and setting up of the asphalt processing plant. The Company assesses its financing requirements and its ability to access equity or debt markets on an ongoing basis. The assessment considers: the stage and success of the Company's evaluation activities to date; the continued participation of the Company's partners in evaluation activities; and financial market conditions. It is possible that future economic events and global conditions may result in further volatility in the financial markets which could negatively impact the Company's ability to access equity or debt markets in the future. In March 2021, the Company issued 702,736 shares in settlement of \$245,958 in Debt. On March 25, 2021 and March 26, 2021, the Company raised \$12,241,312 on 34, 975,178 Subscription Receipts at a price of \$0.35 per Subscription Receipt. The Subscription Receipts incurred \$705,098 in finders fees payable in cash of which \$352,649 was withheld from the Subscription Receipts and the balance of \$352,449 in finders fees were paid on Escrow Release. Each Subscription Receipt converted into one unit upon the receipt of the final prospectus by the British Columbia Securities Commission on June 22, 2021. In May 2021, the Company received an aggregate of \$480,000 in loans from each of the directors, being Neil Currie, James Currie, Gordon Johnson, James Borkowski and Gregg Sedun, as bridge loans as the Company completed its public listing and repaid the bridge loans in full in June 2021 from proceeds of the share issuances.

As at March 31, 2022, the Company had working capital of \$3,661,725 compared to working capital of \$5,492,200 as at December 31, 2021. As at March 31, 2022, the Company had cash of \$3,891,457 compared to \$5,948,876 as at December 31, 2021.

Net cash used in operating activities for the three months ended March 31, 2022, was \$1,648,939 compared to \$618,409 provided for the three months ended March 31, 2021, consisting primarily of the operating loss for the period and the change in non-cash items.

Net cash used in investing activities for the three months ended March 31, 2022, was \$253,872 compared to \$605,338 by investing activities during the three months ended March 31, 2021 was consisting of cash used for the acquisition of property, plant and equipment of \$248,872 (2021 - \$202,838), refundable deposits paid \$5,000 (2021 - \$402,500).

Net cash used in financing activities for the three months ended March 31, 2022 was \$154,608 compared to \$11,407,588 provided during the three months ended March 31, 2021 which consisted of \$15,000 (2021 - \$351,967) in loan payments, \$Nil (2021 - \$12,251,812) in proceeds from share subscriptions less \$Nil (\$2021 - \$352,649) in share issue costs, \$158,591 (2021 - \$152,038) in lease liability repayment on IFRS-16 leased premises, and proceeds on sublease payments of \$18,983 (2021 - \$12,430).

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

The Company has not entered into any off-balance sheet transactions.

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#### PROPOSED TRANSACTIONS

The Company currently does not have any proposed transactions; however, it is seeking to expand its business in other jurisdictions.

#### **CHANGES IN ACCOUNTING POLICIES**

## Classification of Liabilities as Current or Non-Current (Amendments to IAS 1)

The IASB has published Classification of Liabilities as Current or Non-Current (Amendments to IAS 1) which clarifies the guidance on whether a liability should be classified as either current or non-current. The amendments:

- · clarify that the classification of liabilities as current or non-current should only be based on rights that are in place "at the end of the reporting period"
- · clarify that classification is unaffected by expectations about whether an entity will exercise the right to defer settlement of a liability
- · make clear that settlement includes transfers to the counterparty of cash, equity instruments, other assets or services that result in extinguishment of the liability.

The amendment is effective for annual periods beginning on or after January 1, 2023. Earlier application is permitted. The Company does not expect the adoption of this amendment to have a significant impact.

#### RELATED PARTY TRANSACTIONS

As at March 31, 2022, accounts payable and accrued liabilities include \$16,004 (December 31, 2021 - \$178,759) owing to companies with certain directors in common or companies controlled by directors or former directors as follows:

Name of Company, Directors and/or Officers	Directors/Officers	March 31, 2022	De	cember 31, 2021
Aidan G. Mills	President & CEO, Director, namely, Aidan G. Mills	\$ 7,829	\$	112,607
Anacortes Management Ltd	A director, namely, James Currie	\$ 6,300	\$	-
Gord Johnson	A director, namely, Gord Johnson	\$ -	\$	27,500
Terry Charles	A former director and COO, namely, Terry Charles	\$ 1,875	\$	30,319
Rosemary Pritchard	CFO, namely, Rosemary Pritchard	\$ -	\$	8,333
		\$ 16,004	\$	178,759

# Management's Discussion and Analysis March 31, 2022

During the period ended March 31, 2022 and 2021, the Company paid or accrued the following amounts to companies controlled by directors and former directors or companies having certain directors and former directors in common:

Name of Company, Directors and/or Officers	Directors/Officers	March 31, 2022	March 31, 2021
Expenses:			
Aidan Mills	President & CEO, Director		
(Wages and benefits)		\$ 62,500	\$ -
(Share-based payments)		\$ 53,516	\$ -
Currie Capital Corp.	A director and former CEO,		
(Consulting fees)	namely, Neil Currie	\$ -	\$ -
(Share-based payments)	-	\$ 18,759	\$ -
Gord Johnson	A director,		
(Wages and benefits)	namely, Gord Johnson	\$ 41,250	\$ 24,176
(Share-based payments)	•	\$ 8,036	\$ 39,297
Gregg Sedun	A director,		
(Share-based payments)	namely, Gregg Sedun	\$ 13,388	\$ 39,297
James Borkowski	A director,		
(Share-based payments)	namely, James Borkowski	\$ 8,036	\$ 39,297
Anacortes Management Ltd	A director,		
(Consulting fees)	namely, James Currie	\$ 24,000	\$ -
(Share-based payments)		\$ 16,073	\$ 78,595
Rosemary Pritchard	A CFO,		
(Wages and benefits)	namely, Rosemary Pritchard	\$ 50,000	\$ -
(Share-based payments)		\$ 13,048	\$ -
Terry Charles	A former director and COO,		
(Wages and benefits)	namely, Terry Charles	\$ 41,250	\$ 24,176
(Share-based payments)	- ·	\$ 2,685	\$ 39,297

#### **COMMITMENTS**

The Company renegotiated a new lease effective January 1, 2021 for an initial term of 5 years with an option to extend for an additional 5 year. The basic annual rents are as follows:

- from January 1, 2021 to December 31, 2022 \$558,435 per annum
- from January 1, 2023 to December 31, 2024 \$583,563 per annum, and
- from January 1, 2025 to December 31, 2025 \$609,837 per annum

Estimated additional rents are approximately \$126,000 per annum.

## Management's Discussion and Analysis

## March 31, 2022

#### LOANS PAYABLE

		Credit	Sha	areholder	Ι	Directors'	F	Equipment		Total
	F	acility		Loans		Loans		Loan		
Loans payable:										
Balance – December 31, 2020	1,36	5,557		551,710		-		-		1,917,267
Advances		-		-		480,000		-		480,000
Accrued interest	3	5,252		16,744		2,495		-		54,491
Repayment of loan and interest	(1,40	0,809)	(	(322,496)	(	(482,495)		-	(	2,205,800)
Shares for debt		-	(	(245,958)		-		-		(245,958)
Equipment received for loan		-		-		-		270,000		270,000
Interest accretion on low interest loan		-		-		-		(30,985)		(30,985)
Balance – December 31, 2021		-		-		-		239,015		239,015
Less current portion		-		-		-		(90,000)		(90,000)
Long term portion	\$		\$	-	\$	-	\$	149,015	\$	149,015
Balance – December 31, 2021		_		_		-		239,015		239,015
Accrued interest		-		-		-		663		663
Repayment of loan		-		-		-		(15,000)		(15,000)
Interest accretion on low interest loan		-		-		-		5,189		5,189
<b>Balance – March 31, 2022</b>		-		-		-		229,867		229,867
Less current portion		-		-		-		(120,000)		(120,000)
Long term portion	\$	-	\$	-	\$	-	\$	109,867	\$	109,867

#### Credit Facility:

The Company had a variable rate term loan with a maximum authorized limit of \$1,500,000 with Vancity Savings Credit Union. The credit facility carried an annual interest rate of Vancity Prime + 1.75%, was calculated and payable monthly and secured by a general security agreement and personal guarantees of certain Directors and Shareholders. All amounts due under the credit facility are due on demand and the remaining balance was repaid in December 2021. The amount outstanding as at March 31, 2022 was \$Nil (December 31, 2021 - \$Nil).

#### Shareholder loans:

The Company had a loan payable to a non-related party shareholders in the amount of \$523,520. The loans carried an annual interest rate of 10%, was unsecured and were paid in full in June 2021 of which \$245,958 was settled with the issuance of 702,736 shares (Note 9). The amount outstanding as at March 31, 2022 was \$Nil (December 31, 2021 - \$Nil).

The Company had a loan payable to a non-related party shareholder in the amount of \$28,190. The amount was non-interest bearing, is unsecured and was repaid in full in June 2021. The amount outstanding as at March 31, 2022 was \$Nil (December 31, 2021 - \$Nil).

## Directors' loans:

During the year ended December 31, 2021, the Company had borrowed \$480,000 from directors of the Company. The loans carried an annual interest rate of 6%, was unsecured and were paid in full in June 2021 with interest totaling \$2,495.

#### Equipment loan:

The Company acquired \$270,000 of equipment from a company controlled by an officer of the Company during the year ended December 31, 2021. The loan carries an annual interest rate of 1% per annum, secured by the equipment and repayable in monthly instalments of \$5,000 plus interest for the first 6 months and \$10,000 per month plus interest until fully paid. Interest payments begin in July 2022. The equipment loan was recognized as the present value using a 10% market rate of interest. The difference was recognized as a shareholder contribution in reserves on low interest loan. The amount outstanding as at March 31, 2022 was \$229,867 (December 31, 2021 - \$239,015).

#### CAPITAL MANAGEMENT

The Company's capital comprises its shareholders equity under management. The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to pursue the development of its processing technology and to maintain a flexible capital structure which optimizes the costs of capital at an acceptable risk.

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

In order to facilitate the management of its capital requirements, the Company prepares expenditure budgets that are updated as necessary depending on various factors, including successful capital deployment and general industry conditions. The Board of Directors does not establish quantitative return on capital criteria for management, but rather relies on the expertise of the Company's management to sustain future development of the business.

In order to maximize ongoing development efforts, the Company does not pay dividends. The Company's investment policy is to invest its short-term excess cash in highly liquid short-term interest-bearing investments with maturities of 365 days or less from the original date of acquisition, selected with regards to the expected timing of expenditures from continuing operations.

To fund future operations and exploration activities, the Company will need to raise funds through future share issuances, issue new debt or dispose of assets.

There have been no changes to the Company's approach to capital management during the three months ended March 31, 2022. The Company is not subject to externally imposed capital requirements.

## FAIR VALUE OF FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

#### **Financial Risk Management Objectives**

The Company examines the various financial instrument risks to which it is exposed and assesses the impact and likelihood of those risks. These risks may include credit risk, liquidity risk, currency risk and interest rate risk. Where material, these risks are reviewed and monitored.

#### **Capital Management**

The Company manages its capital to ensure that it will be able to continue as going-concern while maximizing the return to shareholders through the optimization of debt and equity balances.

The capital of the Company consists of items included in Shareholders' Equity of \$7,510,032.

The Company manages its capital structure and makes adjustments in light of changes in economic conditions. To maintain or adjust the capital structure, the Company may issue equity or return capital to shareholders. There were no changes to the Company's approach to capital management during the period ended March 31, 2022. The Company is not subject to externally imposed capital requirements.

#### Credit risk

Credit risk is the risk that a counterparty to a financial instrument will fail to discharge an obligation or commitment that it has entered into with the Company. The carrying amounts of financial assets best represent the maximum credit risk exposure at the reporting date.

Cash is held with reputable banks in Canada. The long-term credit rating of these banks, as determined by Standard and Poor's, was A+.

## Liquidity risk

Liquidity risk is the risk that the Company will not meet its financial obligations as they become due.

Accounts payables and accrued liabilities are paid in the normal course of business generally according to their terms. In the normal course of business, the Company enters into contracts that give rise to commitments for future minimum payments. As

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at March 31, 2022, the Company had \$3,891,457 cash to settle current liabilities of \$1,025,808 and as such, management believes the Company's exposure to liquidity risk is insignificant.

#### **Interest Rate Risk**

Interest rate risk is the risk that the fair value or future cash flows of financial instruments will fluctuate because of changes in market interest rates. The Company is not subject to interest rate risk.

#### Foreign currency risk

The Company is exposed to foreign currency risk to the extent that monetary financial instruments are denominated in United States dollars. The Company has not entered any foreign currency contracts to mitigate this risk. The Company's sensitivity analysis suggests that a 10% change in the rate of exchange between the Canadian and United States dollar would have an insignificant impact on its results of operations as it held nominal financial assets and liabilities denominated in United States dollars.

#### Fair Value Measurements Recognized in the Statement of Financial Position

The following table summarizes the carrying values of the Company's financial instruments.

		March 31, 2022	De	ecember 31, 2021
Financial assets at FVTPL (i) Financial liabilities at amortized cost (ii)	\$ \$	3,891,457 674,144		5,948,876 998,558

- (i) Cash
- (ii) Accounts payable and accrued liabilities and loans payable

The Company categorizes its financial assets and liabilities measured at the fair value into one of three different levels depending on the observability of the inputs used in the measurement.

The three levels are defined as follows:

- Level 1 inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets.
- Level 2 inputs to valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.
- Level 3 inputs to the valuation methodology are unobservable and significant to the fair value measurement.

Cash is measured at fair value using Level 1 inputs.

The fair values of other financial liabilities approximate their carrying value, due to their short-term nature or market rate of interest.

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## **OUTSTANDING SHARE DATA as at May 30, 2022:**

a) Authorized Share Capital:

Unlimited number of common shares without par value

b) Issued Share Capital:

106,125,903 common shares with a stated value of \$24,698,274

c) Outstanding stock options:

	Expiry Date	Exercise Price	Number of Options
	February 16, 2031	\$ 0.35	3,300,000
	July 12, 2026	\$ 0.35	2,100,000
	December 15, 2024	\$ 0.35	875,000
	December 15, 2026	\$ 0.35	400,000
	February 7, 2027	\$ 0.35	200,000
	May 31, 2023	\$ 0.35	100,000
	April 19, 2027	\$ 0.35	260,854
Outstanding	-		7,235,854
Exercisable			5,225,000

#### d) Outstanding share purchase warrants:

	Expiry Date	Exercise Price	Number of Warrants
Finders warrants	July 13, 2026 (1) July 13, 2026 (1) July 13, 2026 (1)	\$ 0.279 \$ 0.279 \$ 0.465	4,596,268 406,249 490,615
Finders warrants  Broker warrants	July 13, 2026 (1) June 22, 2023	\$ 0.465 \$ 0.500 \$ 0.500	204,457 17,472,584 2,014,565
Outstanding and exercisable	June 22, 2023	\$ 0.500	25,184,738

<sup>(1)</sup> The warrants outstanding on acquisition were converted at a ratio of 1 old for 1.0747 new warrants on December 23, 2020 and the price was adjusted by the same ratio. All warrants were reissued on July 13, 2021, for a period of 5 years when the Company become publicly listed and trading, with a new expiry date of July 13, 2026. These warrants are non-transferable.

e) Shares held in escrow or pooling agreements: Nil