NORTHSTAR CLEAN TECHNOLOGIES

Management's Discussion and Analysis

For the period ended June 30, 2023

DESCRIPTION OF BUSINESS AND OVERVIEW OF OPERATIONS AND FINANCIAL CONDITION

The following is management's interim discussion and analysis ("MD&A"), prepared as of August 22, 2023. This MD&A should be read in conjunction with the audited Annual Consolidated Financial Statements for the year ended December 31, 2022 and the accompanying notes, all as prepared in accordance with International Financial Reporting Standards ("IFRS"). All amounts are stated in Canadian dollars unless otherwise indicated.

Forward Looking Statements

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") is a Canadian-based clean technology company focused on the sustainable recovery and reprocessing of asphalt shingles. Northstar has developed a proprietary design process for taking discarded asphalt shingles, otherwise destined for already over-crowded landfills, and extracting the liquid asphalt for use in new hot mix asphalt, shingle manufacturing and asphalt flat roof systems, and aggregate and fiber for use in construction products and other industrial applications. Focused on the circular economy, Northstar plans to reprocess used or defective asphalt shingle waste back into its three primary components for reuse/resale at its first commercial scale up facility in Calgary, Alberta (the "Empower Calgary Facility"). 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.

Northstar has developed a proprietary design process known as the Bitumen Extraction & Separation Technology ("BEST") technology, to break down the components of single-use asphalt shingles that would otherwise be sent to a landfill, into market quality products. The component parts of a shingle are approximately 50% aggregate, 25% fibre and 25% liquid asphalt. Once reprocessed, these three products can be used in a variety of applications, including road asphalt, new asphalt shingles, construction products, and other industrial applications. The Company hopes to be able to sell these components to paving companies, cement companies, roofing companies, shingle manufacturers and other industrial and construction product manufacturers, who will benefit from a supply of low carbon, reprocessed products. The Company's proprietary process was developed over the last decade with technical and scientific assistance from the United Kingdom and Alberta. The Company will reprocess used and defective asphalt shingles into their component parts for reuse/resale and thereby seek to eliminate their disposal in a landfill.

On November 8, 2022, the Company announced that it has been issued a patent for the Company's front-end technology for reprocessing asphalt shingles by the United States Patent and Trademark Office ("USPTO"). This patent is expected to remain in force until 2042. Further, Northstar has filed follow-on continuation patent applications with the USPTO. As well as an application for patent approval in Canada and plans to file a Patent Cooperation Treaty international application.

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 entitled 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 Warrants formerly traded on the TSX Venture Exchange (the "TSX-V") under the symbol 'ROOF.WT'. The Warrant Shares expired as of June 23, 2023.

The Company listed its common shares on 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 facilitates electronic clearing and settlement of transfers in the United States. The head office and principal address of the Company is located at 1110-396 11th Ave SW, Calgary, Alberta, T2R 0C5 and its current facility is located at 7046 Brown Street, Delta, British Columbia, Canada, V4G 1G8 (the "Empower Pilot Facility"). The Company's registered and records office is also located at 7046 Brown Street, Delta, British Columbia, Canada, V4G 1G8.

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

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. The Company has its existing Empower Pilot Facility in Delta, BC and is in the development stages for advancing its Empower Calgary Facility in Calgary, AB.

Empower Pilot Facility – Delta, BC

The Empower Pilot Facility is located at 7046 Brown Street in Delta, British Columbia where the Company currently conducts its operations. The Empower Pilot Facility is located on a 4.23 acre property with a 20,000 square foot building. The site of the Empower Pilot Facility is ideal for the Company's operation, as it has a large yard which Northstar has designed for maximum throughput and is conveniently located for roofing companies, roofing contractors, and waste haulers throughout the Metro Vancouver area. The Company has leased the Empower Pilot Facility and surrounding lands pursuant to the Empower Lease for a period of five years from January 1, 2021 with an option to extend for an additional five years.

In 2022, the Company initiated production at the Empower Pilot Facility which delivered significant results in several key areas:

1. The production fully proved the Company's proprietary BEST technology with shingle feedstock processed into aggregate, fiber and asphalt ("Products").
2. The process enabled the supply of Products to potential customers for detailed testing, research & development. This testing helped to secure the long-term offtake agreement for the Empower Calgary Facility and allowed subsequent successful testing with a number of shingle and flat roof manufacturers. Importantly, the testing results supported the Company's view that the asphalt produced by the BEST technology is suitable for all three target market sectors of road paving, asphalt shingle manufacturing and flat roof manufacturing.
3. The production of Products generated valuable feedback for the design of the Empower Calgary Facility from customers, vendors and from the production process itself. The feedback has been incorporated into the detailed design process for the Empower Calgary Facility by the Company's vendors and as part of the integrated facility design led by BBA Engineering

("BBA"). In the Company's view, the feedback, derived from steady state operations at the Empower Pilot Facility, significantly de-risks the Empower Calgary Facility design.

Given the success of the detailed testing, research & development activities described above, the Company will now focus resources, including manpower, capital and G&A costs, on the Empower Calgary Facility. In order to conserve limited resources, the Company will not pursue additional investment in the Empower Pilot Facility and will now operate it as an "on demand" facility that is focused on providing partners and potential customers with product for R&D, manufacturing and product testing. The Company expects to operate the Empower Pilot Facility to supply major manufacturers with the Products necessary to complete manufacturing and testing during H1 2023 and on an ad-hoc, on demand, basis thereafter.

Empower Calgary Facility – Calgary, AB

On March 17, 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 ("Empower Calgary Facility"). On February 24, 2023, Northstar announced that its wholly owned subsidiary Empower Environmental Solutions Calgary Ltd. signed a long-term 15-year lease agreement with Mook Group of Companies (the Landlord") for an industrial-zoned property of 3.98 acres located in Rocky View County, a municipal district adjacent to the City of Calgary, Alberta, as the site for the Company's planned scale-up facility in Calgary. The lease is for an initial term of 15 years, with two extension options of five years each. The Landlord has been issued a conditional development permit from Rocky View County. Based on management's knowledge at this point in time, the Company believes this is the only permit or approval required to collect asphalt shingles and commence construction and operation of the Empower Calgary Facility.

Based on the independent front-end engineering design ("FEED") study announced on March 31, 2022, the Calgary Empower Facility is expected to be the Company's first modular scale up facility and is expected to 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.

Expected Sequence of Events

- Enter into financing arrangements to fully fund the construction and commissioning of the Empower Calgary Facility – Q2/Q3 2023
- Complete detailed engineering and construction drawings – Expected to commence in H2 2023
- Commence procurement of long-lead item equipment – Expected in Q3 2023
- Continue site development work at the site for the Calgary Empower Facility – Commenced in Q2 2023 and ongoing
- Commence securing supply of feedstock for Calgary Empower Facility – Expected to commence in H2 2023
- Complete operational personnel and contractor hiring
- Commence Empower Calgary Facility pre-construction
- Commence Empower Calgary Facility construction
- Commence Empower Calgary Facility commissioning and ramp up
- Commence commercial operations at the Empower Calgary Facility
- Commercial production at the Empower Calgary Facility

On October 6, 2022, Northstar announced the execution of a term sheet with McAsphalt Industries ("McAsphalt") for a 5-year (with automatic 3-year renewal options) take-or-pay offtake agreement with McAsphalt, whereby McAsphalt will purchase, on an exclusive basis, 100% of the liquid asphalt production from the Calgary Empower Facility. Subsequently, on March 2, 2023, Northstar announced the execution of the McAsphalt Offtake Agreement with McAsphalt. The key commercial terms of the contract remain unchanged from the original McAsphalt Offtake Term Sheet, as previously disclosed by the Company on October 6, 2022.

RECENT KEY DEVELOPMENTS IN LAST 12 MONTHS

Q3 2022

- On August 3, 2022, Northstar announced that is received its brokering license from Metro Vancouver for collection of asphalt shingles and associated tipping fees at the Empower Pilot Facility.

- On August 16, 2022, Northstar announced that it completed a non-brokered private placement for 1,250,000 common shares at $0.40 per share with Renewable U Energy Inc. ("Renewable U").

- On September 14, 2022, Northstar announced that it signed a non-binding letter of intent for a long-term 15-year lease for an industrial zoned property of 3.98 acres located in Greater Calgary.

Q4 2022

- On October 4, 2022, Northstar announced a strategic partnership through the execution of a binding term sheet with Renewable U to fully fund Northstar's Phase 1 Expansion Program through financing of over $43.5 million. The transaction was terminated in April 2023.

- On October 6, 2022, Northstar announced the execution of a binding term sheet for a 5-year (with automatic 3-year renewal options) offtake agreement with McAsphalt, a wholly owned subsidiary of the Colas Group ("Colas") (XPAR:RE), whereby McAsphalt will purchase, on an exclusive basis, 100% of the liquid asphalt production from the Calgary Empower Facility.

    - **About McAsphalt:** For over 50 years, McAsphalt has been the industry's top asphalt expert, offering asphalt products and services from over 27 strategically located terminals across Canada, coast to coast to coast. A world leader in the construction, recycling, and maintenance of transportation infrastructure**.**
    - **About Colas:** Colas Canada is a Canadian leader in transportation infrastructure – materials, construction, rehabilitation, preservation and maintenance of roads, highways, airport runways, port, industrial and logistics infrastructure, subdivisions, urban infrastructure, parking lots and more. Colas companies in Canada are part of the Colas Group, a world leader in the construction, recycling, and maintenance of transportation infrastructure.
    - **Pricing:** The agreed terms of the sale price of the liquid asphalt are confidential due to commercial sensitivity reasons, but the pricing is market based and includes the market index, a quality and locational differential, and a sustainability premium.
    - **Risk Management:** Risk management pricing is also incorporated into the pricing mechanism.
    - **Third Party Sales:** Northstar and McAsphalt will have the ability to enter into third party sales agreements for the liquid asphalt product produced from the Empower Calgary Facility. The detailed terms of any third-party sales are confidential.
    - **Planning, Regulatory and Government Agency Support:** McAsphalt will support Northstar in planning, regulatory and government agency engagement with respect to the Empower Calgary Facility.
    - **Carbon Credits:** Northstar and McAsphalt will work together on the development of a protocol to create carbon credits. Should carbon credits be created, the sustainability premium will be calculated based on the joint contribution to the protocol development.

- On November 8, 2022, Northstar announced that it has been issued a patent for the Company's front-end technology for reprocessing asphalt shingles by the United States Patent and Trademark Office ("USPTO"). This patent is expected to remain in force until 2042. Further, Northstar has filed follow-on continuation patent applications with the USPTO. As well as an application for patent approval in Canada and plans to file a Patent Cooperation Treaty international application.

- On November 17, 2022, Northstar announced the first collection of previously landfill bound asphalt shingles at the Company's asphalt shingle reprocessing facility in Delta, British Columbia.

- On November 18, 2022, Northstar announced a corporate and intellectual property update.

- On December 15, 2022, Northstar announced that it closed $1,440,000 non-brokered private placement of non-transferable unsecured convertible debentures. The Convertible Debentures bear an interest of 10% per year, paid semi-annually in arrears, and mature 36 months from the date of issue.

Q1 2023

- On January 30, 2023, Northstar announced that on January 20, 2023, the Landlord for the land for Northstar's Empower Calgary Facility near Calgary, Alberta received a conditional development permit from Rocky View County. The Conditional Development Permit was issued to the Landlord and includes standard conditions that need to be completed prior to issuance of a development permit.

- On February 13, 2023, the Company announced that Northstar's Empower Calgary Facility was approved for a non-repayable government grant of up to approximately $7.1 million by Emissions Reduction Alberta ("ERA"), an Alberta-based government entity funded by the Government of Alberta. The lead applicant organization is Empower Calgary, a wholly owned subsidiary of Northstar, and the net proceeds received by the Company from the government grant will be used to further design, construct and commission the Empower Calgary Facility. ERA's funding approval is subject to timely written confirmation from Northstar that all other sources of funding for the Empower Calgary Facility have been secured, as well as the successful negotiation of a contribution agreement with ERA on terms satisfactory to ERA.

- On February 14, 2023, Northstar announced that it received notice from the Canadian Patent Office ("CPO") that its patent application has been approved for fast track due to Northstar's green technology.

- On February 24, 2023, Northstar announced that its wholly owned subsidiary Empower Environmental Solutions Calgary Ltd. signed a long-term 15-year lease agreement with Mook Group of Companies for an industrial-zoned property of 3.98 acres located in Rocky View County, as the site for the Company's planned scale-up facility in Calgary. The lease is for an initial term of 15 years, with two extension options of five years each. All municipal permits have been received to proceed with construction, collection of asphalt shingles and production.

- On February 28, 2023, Northstar closed $625,000 in a non-brokered private placement of non-transferable unsecured convertible debentures. The Convertible Debentures bear an interest of 10% per year, paid semi-annually in arrears, and mature 36 months from the date of issue.

- On March 2, 2023, Northstar announced the execution of a definitive take-or-pay offtake agreement with McAsphalt for 100% of liquid asphalt production from its Empower Calgary Facility. The key commercial terms of the Offtake Agreement are unchanged from the binding term sheet announced by the Company on October 6, 2022.

- On March 8, 2023, Northstar announced that numerous major domestic and international asphalt shingle and flat roofing manufacturers (the "Manufacturers") successfully completed their detailed research and development testing of Northstar's liquid asphalt for use in asphalt shingles and flat roofing systems. The Manufacturers will now commence product manufacturing and quality testing with Northstar's liquid asphalt. Manufacturing testing will test both the suitability of Northstar's liquid asphalt in the Manufacturers' production process, and the quality of the final products made using Northstar's liquid asphalt.

- On March 14, 2023, Northstar announced that it received an environmental awareness award from Waste Management Association of British Columbia.

Q2 2023

- On April 19, 2023, Northstar announced that it closed a non-brokered private placement of 18,195,367 units of the Company at a purchase price of $0.15 per unit for aggregate gross proceeds of $2,729,305. Each unit consists of one common share of the Company and one common share purchase warrant of the Company, with each warrant entitling the holder thereof to acquire one additional common share at an exercise price of $0.20 per warrant share for a period of 36 months following the closing date of the private placement. As part of the transaction, 511,819 broker warrants were issued at a price of $0.20 with an expiry of 3 years.

- On April 20, 2023, Northstar announced updated preliminary economics, an updated internal capital estimate (following the initial independent capital estimate completed by BBA as part of the FEED announced in March 2022), and provided corporate update on funding progression for the Empower Calgary Facility.

- On May 11, 2023, Northstar provided an update on site development work at the Empower Calgary Facility, stating that the Landlord was progressing well with preparing the land for construction, and also released an updated investor presentation.

- On May 30, 2023, Northstar announced the completion of milestones required to commence detailed engineering.

- On June 15, 2023, Northstar announced the execution of a non-binding term sheet for $8.75 million in senior secured project-level non-revolving debt with Business Development Bank of Canada ("BDC"). The loan term is 15 years, with a potential for a 2-year interest only payment period, and a fixed 5-year rate payable monthly, with the possibility of rate reduction after 1 year of successful plant operation. The financing is subject to a one-time fee of $43,750 (which has been already paid by the Company) and an annual fee of $1,000.

PERFORMANCE SUMMARY

The following is a summary of the significant events and transactions that occurred during the period ended June 30, 2023 and for the previous period to the report date hereof:

(a) During the three months ended June 30, 2023
- the Company spent $29,407 on acquisitions of plant equipment.
- the Company spent $244,313 in research and development expenses.
- Empower repaid $30,350 in loan repayments.
- The Company closed a non-brokered private placement of 18,195,367 units for aggregate proceeds of $2,729,305. Each unit consisted of one common share of the Company and one common share purchase warrant of the Company with each warrant entitling the holder thereof to acquire one additional common share at an exercise price of $0.20 per warrant for a period of 36 months following the closing date of the private placement. As part of the transaction, 511,819 broker warrants were issued at a price of $0.20 with an expiry of three years and a value of $56,305, and finders fees of $76,773 were paid.
- Issued 514,111 common shares for equity settled PSUs and RSUs that vested on June 23, 2023.

(b) During the three months ended March 31, 2023
- the Company spent $60,083 on acquisitions of plant equipment.
- the Company spent $329,254 in research and development expenses.
- Empower repaid $30,425 in loan repayments.
- The Company closed $625,000 non-brokered private placement of unsecured convertible debentures. The Convertible Debentures bear an interest of 10% per year, paid semi-annually in arrears, and mature 36 months from the date of issue.

Selected Annual Information

	Year Ended December 31, 2022	Year Ended December 31, 2021	Year Ended December 31, 2020
Loss and comprehensive loss	$ 8,200,936	$ 7,207,912	$ 6,596,793
Basic and diluted loss per share	0.08	0.08	0..16
Total assets	6,829,057	12,374,613	4,859,762
Total liabilities	4,044,550	3,102,023	2,503,071

SUMMARY OF QUARTERLY RESULTS

	June 30, 2023	March 31, 2023	December 31, 2022	September 30, 2022
Total assets	$ 6,703,697	$ 6,019,542	$ 6,829,057	$ 7,123,935
Property, plant and equipment	3,103,004	3,210,572	3,286,540	3,318,021
Working capital (deficit)	(305,037)	(1,428,964)	(419,585)	397,412
Shareholders' equity (deficit)	2,373,552	1,323,233	2,784,507	4,342,589
General and administrative expenses	1,509,714	1,462,207	1,906,416	1,430,191
Loss and comprehensive loss	(1,696,078)	(1,688,569)	(2,267,507)	(1,960,482)
Basic and diluted loss per share	(0.01)	(0.02)	(0.03)	(0.02)

	June 30, 2022	March 31, 2022	December 30, 2021	September 30, 2021
Total assets	$ 8,532,713	$ 10,180,750	$ 12,374,613	$ 14,281,219
Property, plant and equipment	3,329,674	3,235,492	3,205,404	2,893,593
Working capital (deficit)	1,739,915	3,661,725	5,492,200	7,835,056
Shareholders' equity	5,697,220	7,510,032	9,272,590	11,467,820
General and administrative expenses	1,664,057	1,769,094	1,715,220	1,793,040
Loss and comprehensive loss	(1,940,007)	(2,032,940)	(2,320,211)	(1,904,360)
Basic and diluted loss per share	(0.02)	(0.02)	(0.02)	(0.02)

Results of Operations

The following discussion addresses the operating results and financial condition of the Company for the three months ended June 30, 2023, compared with the three months ended June 30, 2022.
For the three-month period ended June 30, 2023:

Loss and comprehensive loss for the period

The Company had a loss and comprehensive loss for the three-month period ended June 30, 2023, of $1,696,078 (June 30, 2022 - $1,940,007). The net decrease of $243,929 in the loss and comprehensive loss for the three-month period ended June 30, 2023 compared to the three-month period ended June 30, 2022 was mainly due to an increase of $56,801 in Revenue, a decrease of $154,343 in General and Administrative expenses, a decrease in Research and Development expenses of $45,735, a decrease in Other items of 12,950 mainly consisting of foreign exchange gains and interest income. The changes in Revenue, General and Administrative, Research and Development expenses, and Other income are noted below.

Revenue

During the three-month period ended June 30, 2023, the Company reported revenue of $56,801 (June 30, 2022 – NIL). This is due to the Company starting to collect shingles in 2023 and receiving tipping fees in exchange, as well as receiving income from recycling the metal and wood waste received in the shingle bins.

Other income

During the three-month period ended June 30, 2023, the Company reported interest income of $2,910 (June 30, 2022 - $4,306), other income of $NIL (June 30, 2022 – $9,301) and a foreign exchange loss of $1,762 (June 30, 2022 – gain of $491), compared to the three-month period ended June 30, 2022. The interest income is due from a net investment in sublease and reported separately from the interest expense of $2,769 on the lease liability, the other income is from a Hydro rebate at the Delta Pilot Facility, and the exchange loss is on US currency purchases.

Research and development expenses ("R&D")

During the three-month period ended June 30, 2023, the Company reported R&D of $244,313 compared to $290,048 for the three-month period ended June 30, 2022. The items that caused the $45,735 decrease is noted in the following:

In comparison to the three-month period ended June 30, 2022:

- Contract consulting fees of $116,118 (June 30, 2022 - $127,263) decreased by $11,145 due to the Company using less consultants than in the prior year.
- Repairs and maintenance of $44,876 (June 30, 2022 - $1,366) increased by $43,510 due to some major repairs done on certain pieces of equipment.
- Site materials of $83,319 (June 30, 2022 - $161,419) decreased by $78,100 mainly due to equipment rentals that were sent back to the vendor that were no longer needed, a decrease in chemicals and supplies due to production ceasing.

General and administrative expenses

General and administrative expenses of $1,509,714 (June 30, 2022 - $1,664,057) are primarily comprised of advertising and promotion, bank charges & interest, consulting fees, depreciation, insurance, IT & communications, office expenses, professional fees, rent and utilities, share-based compensation, transfer agent and regulatory fees, travel, and wages & benefits. The net decrease was $154,343 compared to the three-month period ended June 30, 2022. Items that caused the net decrease are noted in the following:

In comparison to the three-month period ended June 30, 2022:

- Advertising and promotion of $63,831 (June 30, 2022 - $134,288) decreased by $70,457 as the Company focused on decreasing its monthly burn rate.
- Bank charges and interest of $139,270 (June 30, 2022 - $57,353) increased by $81,917. Accretion interest on new leases on the premises and acquisition of the Northstar lease account for a decrease of $11,687, interest expense on convertible debentures accounts for $51,625 increase, accretion interest on the convertible debenture accounts for an increase of $43,905, an increase in bank charge of $412 due to credit card fees on shingle collection tipping fees, and a decrease of other interest of $2,338 which relates the interest and interest accretion on the equipment loan.
- Consulting of $77,612 (June 30, 2022 - $57,550) increased by $20,062 due to the Company reducing and ending consulting contracts existing in the prior period to cut costs, offset by extra consulting fees in the current year related to Northstar's efforts to fund the Empower Calgary Facility.
- Depreciation of $252,074 (June 30, 2021 - $278,989) decreased by $26,915 mainly due to a lower undepreciated equipment value.
- Insurance of $26,741 (June 30, 2022 - $35,015) decreased by $8,274 due to the renewal rates for Directors & Officers ("D&O") and property and plant liability insurance.
- IT and Communications of $19,627 (June 30, 2022 - $70,568) decreased by $50,941 due to the Company incurring ERP consulting fees in the previous year.
- Office and miscellaneous of $897 (June 30, 2022 - $8,050) decreased by $7,153 due to a decrease in subscription dues & licences of $170, a decrease in postage of $610, a decrease in general office supplies of $2,228 and a decrease in employee health & safety training of $4,145.
- Operating costs of $19,276 (June 30, 2022 – $NIL) increased by $19,276 as these costs relate to the disposal of garbage received in the shingle bins. The Company only started receiving shingles in February 2023, therefore did not incur any costs in the previous year.
- Professional fees of $193,674 (June 30, 2022 - $234,236) decreased by $40,562. Legal fees decreased by $5,556 as the Company hired in-house counsel for corporate matters, accounting fees decreased by $47,180 due to the Company having a Director of Finance in the prior year, and professional fees increased by $12,174 due to an increased cost of the SR&ED returns in the current year.
- Rent and utilities of $48,033 (June 30, 2022 - $85,524 decreased by $37,791 due to an increase in the Delta lease payments which accounted for an increase of $2,096, a decrease in rent payments due to the Calgary head office being terminated at the end of March 2023 which accounted for $13,200, utilities decreased by $28,297, and ground maintenance increased by $1,610.
- Share-based compensation of $100,718 (June 30, 2022 - $129,323) decreased by $28,605 due to the vesting of the stock options restricted stock units, and performance stock units on historical issuances.

- Transfer agent and regulatory fees of $34,711 (June 30, 2022 - $11,288) increased by $23,423 mainly due to the TSXV fees related to the April 19 2023 equity financing.
- Travel of $33,834 (June 30, 2022 - $62,211) decreased by $28,377 as the Company stopped all unessential travel to decrease its burn rate.
- Wages and benefits of $499,416 (June 30, 2022 - $499,362) increased by $54.

For the six-month period ended June 30, 2023:

Loss and comprehensive loss for the period

The Company had a loss and comprehensive loss for the six-month period ended June 30, 2023, of $3,384,647 (June 30, 2022 - $3,972,763). The net decrease of $588,116 in the loss and comprehensive loss for the six-month period ended June 30, 2023 compared to the six-month period ended June 30, 2022 was mainly due to an increase of $78,206 in Revenue, a decrease of $461,046 in General and Administrative expenses, an increase in Research and Development expenses of $10,656, an increase in Other items of $6,136 mainly consisting of foreign exchange gains and interest income, and an change in income tax recovery of $53,384. The changes in Revenue, General and Administrative, Research and Development expenses, and Other income are noted below.

Revenue

During the six-month period ended June 30, 2023, the Company reported revenue of $78,206 (June 30, 2022 – NIL). This is due to the Company starting to collect shingles in 2023 and getting tipping fees in exchange as well as receiving income from recycling the metal and wood waste received in the shingle bins.

Other income

During the six-month period ended June 30, 2023, the Company reported interest income of $6,077 (June 30, 2022 - $11,245), other income of $24,901 (June 30, 2022 – $9,301) and a foreign exchange loss of $1,727 (June 30, 2022 – gain of $2,569), compared to the six-month period ended June 30, 2022. The interest income is due from a net investment in sublease and reported separately from the interest expense of $5,936 on the lease liability, the other income is from a Hydro rebate on at the Delta Pilot Facility, and the exchange loss is on US currency purchases.

Research and development expenses ("R&D")

During the six-month period ended June 30, 2023, the Company reported R&D of $573,567 compared to $562,911 for the six-month period ended June 30, 2022. The items that caused the $10,656 increase is noted in the following:

In comparison to the six-month period ended June 30, 2022:

- Contract consulting fees of $241,736 (June 30, 2022 - $262,460) decreased by $20,664 due to the Company using less consultants than in the prior year.
- Repairs and maintenance of $84,634 (June 30, 2022 - $4,838) increased by $79,796 due to some major repairs done on the rotochopper equipment and other large equipment, and some electrical work.
- Site materials of $247,197 (June 30, 2022 - $295,613) decreased by $48,416 mainly due to the return of certain equipment rentals and less supplies needed as production is minimized.

General and administrative expenses

General and administrative expenses of $2,971,921 (June 30, 2022 - $3,432,967) are primarily comprised of advertising and promotion, bank charges & interest, consulting fees, depreciation, insurance, IT & communications, office expenses, professional fees, rent and utilities, share-based compensation, transfer agent and regulatory fees, travel, and wages & benefits. The net decrease was $461,046 compared to the six-month period ended June 30, 2022. Items that caused the net decrease are noted in the following:

In comparison to the six-month period ended June 30, 2022:

- Advertising and promotion of $138,016 (June 30, 2022 - $415,672) decreased by $277,656 as the Company focused on decreasing its monthly burn rate.
- Bank charges and interest of $257,248 (June 30, 2022 - $116,291) increased by $140,957. Accretion interest on new leases on the premises and acquisition of the Northstar lease account for a decrease of $22,933, interest expense on convertible debentures accounts for $88,600 increase, accretion interest on the convertible debenture accounts for an increase of $74,967, and an increase of bank charge and other interest of $323.
- Consulting of $135,162 (June 30, 2022 - $174,350) decreased by $39,188 due to the Company reducing consulting fees or ending consulting contracts to minimize monthly spend.
- Depreciation of $503,222 (June 30, 2021 - $501,727) increased by $1,495 based on the depreciation calculations of its processing equipment at the Empower Pilot Facility.
- Insurance of $53,481 (June 30, 2022 - $71,275) decreased by $17,794 due to the renewal rates for D&O and property and plant liability insurance.
- IT and Communications of $50,325 (June 30, 2022 - $105,563) decreased by $55,238 due to the Company incurring ERP consulting fees in the previous year.
- Office and miscellaneous of $21,822 (June 30, 2022 - $31,269) decreased by $9,447 due to a decrease in donations of $2,000, an increase in subscription dues & licences of $7,797, a decrease in postage of $2,731, a decrease in general office supplies of $6,413 and a decrease in employee health & safety training of $6,100.
- Operating costs of $26,533 (June 30, 2022 - $NIL) increased by $26,533 as these costs relate to the disposal of garbage received in the shingle bins. The Company only started receiving shingles in February 2023, therefore did not incur any costs in the previous year.
- Professional fees of $269,830 (June 30, 2022 - $343,488) decreased by $73,658. Legal fees decreased by $16,504 as the Company hired in-house counsel for corporate matters, accounting fees decreased by $61,689 due to the Company having a Director of Finance in the prior year, and professional fees increased by $4,535 due to increased costs in the preparation of the SR&ED claims
- Rent and utilities of $173,380 (June 30, 2022 - $161,879) increased by $11,501 due to an increase in the Delta lease payments which accounted for an increase of $8,877, a decrease in rent payments due to the Calgary head office being terminated at the end of March 2023 which accounted for $12,550, utilities increased by $13,156, and ground maintenance increased by $2,018.
- Share-based compensation of $211,452 (June 30, 2022 - $399,519) decreased by $188,067 due to the vesting of the stock options restricted stock units, and performance stock units on historical issuances.
- Transfer agent and regulatory fees of $47,117 (June 30, 2022 - $40,821) increased by $6,296 mainly due to the TSXV fees associated with the April 19, 2023 equity financing, offset by the timing of the renewal of the OTC Markets application fee which occurred in Q1 of the prior year but was renewed again in December 2022 rather than January 2023.
- Travel of $60,790 (June 30, 2022 - $126,394) decreased by $65,604 as the Company stopped all unessential travel to decrease its burn rate.
- Wages and benefits of $1,023,543 (June 30, 2022 - $944,719) increased by $78,824 as the Company hired an additional executive staff member during 2022 Q1, and certain staff members received a pay increase and bonus.

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 reprocessing 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 reprocessing of asphalt shingles and the extraction and recovery of asphalt, fiber and aggregate 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 $15,000,000 in capital resources on its processing equipment and R&D in the next twelve months.

Currently, the Company's overhead expenses are averaging approximately $350,000 per month on a consolidated basis (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 August 2022, the Company issued 1,250,000 shares to Renewable U in a non-brokered private placement for a subscription price of $0.40 per share.

On October 3, 2022, the Company issued 625,000 shares to Renewable in a non-brokered private placement at a price of $0.40 per Common Share for gross proceeds of $250,000.

On December 15, 2022, the Company issued $1,440,000 in a non-brokered private placement of unsecured Convertible Debentures.

On February 28, 2023, the Company issued $625,000 in a non-brokered private placement of unsecured Convertible Debentures.

On April 19, 2023, the Company issued 18,195,367 Common Shares in a non-brokered private placement.

As at June 30, 2023, the Company had a working capital deficit of $305,037 compared to a working capital deficit of $419,585 as at December 31, 2022. As at June 30, 2023, the Company had cash of $1,543,285 compared to $1,114,166 as at December 31, 2022.

Net cash used in operating activities for the period ended June 30, 2023 was $2,237,598 compared to $2,817,222 for the period ended June 30, 2022, consisting primarily of the operating loss for the period and the change in non-cash items.

Net cash used in investing activities for the period ended June 30, 2023, was $136,409 compared to $518,858 used in investing activities during the period ended June 30, 2022. The change consisted of cash used for the acquisition of property, plant and equipment of $67,929 (June 30, 2022 - $503,815), the acquisition of intangible assets of $8,480 (June 30, 2022 $NIL), and refundable deposits paid $60,000 (June 30, 2022 - $15,043).
Net cash increase in financing activities for the period ended June 30, 2023 was 2,803,126 compared to a deficit of $309,217 during the period ended June 30, 2022 which consisted of $618,900 (June 30, 2022 $NIL) from convertible debentures, $72,000 (June 30, 2022 - $NIL) in interest payments on convertible debentures, $2,652,532 (June 30, 2022 - $NIL) from proceeds from issuance of common shares, $43,750 (June 30, 2022 - $NIL) in deferred costs, $60,775 (June 30, 2022 - $30,000) in loan repayments, and $291,781 (June 30, 2022 - $279,217) in lease repayment on IFRS-16 leased premises.

OFF-BALANCE SHEET ARRANGEMENTS

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

RELATED PARTY TRANSACTIONS

(a) As at June 30, 2023, accounts payable and accrued liabilities include $762,466 (December 31, 2022 - $754,656) owing to companies with certain directors in common and companies controlled by certain directors and officers or former directors. The amounts are unsecured, non-interest bearing and due on demand.

(b) Key management personnel include those persons having authority and responsibility for planning, directing and controlling the activities of the Company as a whole. During the years presented the Company paid or accrued the following key management personnel compensation to directors, officers, and/or companies controlled by directors and officers and/or companies with certain directors in common:

	Three Months Ended June 30, 2023	Three Months Ended June 30, 2022	Six Months Ended June 30, 2023	Six Months Ended June 30, 2022
Advertising, marketing and promotion	$ 2,500	$ 26,900	$ 33,750	$ 53,800
Consulting fees	-	12,000	-	36,000
Professional fees	-	44,000	-	80,000
Wages, bonuses and benefits	411,931	245,000	656,931	470,385
Share-based payment	53,005	75,198	134,464	275,773
	$ 467,436	$ 403,098	$ 825,145	$ 915,958

During the year ended December 31, 2021, the Company acquired equipment in the amount of $270,000 plus GST and PST from a company controlled by a former director of a wholly owned subsidiary of the Company. See Note 6 for additional disclosure.

(c) On February 15, 2023 $50,000 (December 15, 2022, $360,000) was received in convertible debenture proceeds by officers or directors of the Company. On February 28, 2023, an additional $50,000 was received in convertible debentures by a director of the Company.

(d) As at June 30, 2023, prepaids includes $15,000 (December 31, 2022 - $45,000) to a company controlled by a director.

COMMITMENTS

The Company renegotiated a new lease for the Empower Pilot Facility in Delta, BC 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.

Northstar's wholly owned subsidiary, Empower Environmental Solutions Calgary Ltd., negotiated a new lease for the planned scale up facility in Rocky View County, near Calgary, Alberta effective July 1, 2023 for an initial term of 15-years with an option to extend for two additional 5 year terms. The basic annual rents are as follows:

- from July 1, 2023 to June 30, 2028 - $346,516 per annum
- from July 1, 2028 to June 30, 2033 - $381,168 per annum, and
- from July 1, 2033 to June 31, 2038 - $419,284 per annum

Estimated additional rents are approximately $120,000 per annum.

The Company negotiated a definitive take-or-pay binding offtake agreement with Colas Canada's subsidiary McAsphalt Industries for 100% of liquid asphalt production from its Empower Calgary Facility. The key commercial terms of the Offtake Agreement are:

- o **Term:** an initial five-year term with automatic three-year renewal options, unless either party provides 180 days written notice of its intention not to renew
- o **Pricing:** The agreed terms of the sale price of liquid asphalt is confidential due to commercial sensitivity reasons, but pricing is market based and includes the market index, a quality and locational differential, and a sustainability premium
- o **Risk Management:** Risk management pricing is incorporated into the pricing mechanism and other

sharing mechanisms to allow best risk allocation for the benefit of both parties and ultimately the project.

- **Third Party sales:** Northstar and McAsphalt will have the ability to enter into third party sales agreements for the liquid asphalt product produced from the Empower Calgary Facility. The detailed terms of any third-party agreement are confidential.
- **Life-Cycle Analysis:** Northstar and McAsphalt will work together to develop a life-cycle analysis for Northstar's proprietary clean technology.
- **Environmental Credits:** Northstar and McAsphalt will work together on the development of a protocol to create environmental credits. Should environmental credits be created, the sustainability premium will be calculated based on the joint contribution to the protocol development.

LOANS PAYABLE

	Equipment Loan
Loans payable:	
Balance – December 31, 2021	**$ 239,015**
Accrued interest	2,363
Repayment of loan and interest	(92,363)
Interest accretion on low interest loan	18,946
Balance – December 31, 2022	**167,961**
Less current portion	(121,250)
Long term portion	**$ 46,711**
Balance – December 31, 2022	**167,961**
Accrued interest	775
Repayment of loan	(60,775)
Interest accretion on low interest loan	6,458
Balance – June 30, 2023	**114,419**
Less current portion	(114,419)
Long term portion	**$ -**

Equipment loan:

The Company acquired $270,000 of equipment from a company controlled by a former officer and current employee 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 June 30, 2023 was $114,419 (December 31, 2022 - $167,961).

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.

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 or convertible debt, enter into strategic partnerships, and/or 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, the Company will need to raise funds through future share issuances, issue new debt, secure government grants, dispose of assets, or enter into strategic partnerships.

There have been no changes to the Company's approach to capital management during the period ended June 30, 2023. 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.

Liquidity and 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 $2,373,552.

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 June 30, 2023. 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 at June 30, 2023, the Company had $1,543,285 in cash to settle current liabilities of $2,002,295 and as such, management believes it has exposure to liquidity risk.

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.

Force Majeure Events

The Company's operations may be adversely impacted by factors that are beyond the Company's control including pandemics, natural disasters, terrorism, labour disruptions, outbreaks of war, and other forms of economic, health or political disruptions. Such factors may not be foreseeable and may significantly adversely affect global economic conditions, including inflation, supply chain, global shipping, and currency volatility. While many of the restrictions imposed during the COVID-19 pandemic are now being eased globally, the Company's business may still be impacted through lingering or renewed effects of the pandemic, including through supply chain, financial constraints of its customers and suppliers, increasing costs, and difficulty attracting skilled labor, with a result that it may not be able to build, own and operate its Empower Pilot Facility and/or the Empower Calgary Facility within the anticipated timeframe or on budget. In some cases, such delays may result in liquidated damages, and may adversely affect the Company's operations.

The Russia-Ukraine war has drastically reduced capacity for Ukraine to supply goods and raw materials, such as steel. The sanctions imposed on Russia have also led to the reduced availability of Russian-produced steel and other products.

Climate change has increased the incidence of natural disasters caused by weather and climate extremes including heatwaves, droughts, forest fires, atmospheric rivers, torrential downpours and flooding.

Future incidents could significantly adversely affect the Company's operations either directly, or by affecting the businesses of its suppliers or customers. Other events and factors that are beyond the Company's control but that may have a significant adverse effect on the Company's operations include but are not limited to strikes and labour disruptions affecting the Company's suppliers or customers, and global political instabilities such as the outbreak of war, discussed below under "Macroeconomic and Geopolitical Risks and Uncertainties".

While the Company works to mitigate the effects of these uncontrollable events, there is no assurance that they will be effective in doing so in future, particularly when multiple events coincide, and they may negatively impact the Company's operations and profitability.

Unexpected Disruptions Affecting Projects and Operations

The Company's current and future operations can sometimes be subject to delays for a variety of reasons, including labour slowdowns, construction delays unrelated to the Company's products, technological malfunctions, defective materials, or workplace safety. Such delays may delay the recognition of revenue, discourage customers from doing business with the Company, and may hurt the Company's reputation, affecting future sales prospects. The Company may lose sales and may not be able to replace those sales at an acceptable margin or at all. There can be no assurance that such delays will be overcome in a timely manner and to the satisfaction of the customer.

Furthermore, the Company enters into agreements which, consistent with industry standards, may include liquidated damages or termination provisions which may allow customers to claim amounts or terminate and not proceed with proposed projects.

Macroeconomic and Geopolitical Risks and Uncertainties

Macroeconomic and geopolitical risks and uncertainties may have a material adverse impact on the Company's operations. The Company procures a portion of its supplies and equipment from global suppliers. Economic, legal and political conditions globally could adversely affect the Company's ability to conclude sales and procure and timely deliver products. These factors may significantly adversely affect the availability and costs of raw materials and equipment, contribute to inflation and cause currency fluctuations, and cause market volatility, all of which could significantly impact the Company's revenues and profitability and its ability to raise capital as needed.

The Russia-Ukraine war and its related economic and political sanctions on global fuel sources has exacerbated an already challenged global shipping environment and supply chain challenges, for example. These conditions are beyond the Company's control and there can be no assurances that any mitigating actions by the Company or the Company's suppliers will be effective.

Sourcing Equipment

The continuation of global transportation and logistics challenges may have a negative impact on the Company's ability to timely source products and capital equipment. To the Company's knowledge, none of the Company's suppliers or customers have entered into bankruptcy due to the COVID-19 pandemic, natural disaster or other adverse supply chain effects. The Company's purchasing plan identifies alternative sources of supply for equipment suppliers and product fabricators that are essential to the Company's business operations. In 2022, the global supply chain, which was already disrupted by the COVID-19 pandemic, was further impacted by the Russia-Ukraine war. The prices for goods and services continued to increase due to worldwide inflation. The Company is subject to a continued risk resulting from the COVID-19 pandemic, the war in Ukraine and other risks affecting the global supply chain.

Fair Value Measurements Recognized in the Statement of Financial Position

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

	June 30, 2023	December 31, 2022
Financial assets at FVTPL (i)	$ 1,543,285	$ 1,114,166
Financial assets at amortized cost (ii)	$ 17,214	$ -
Financial liabilities at amortized cost (iii)	$ 2,922,657	$ 2,385,089

(i) Cash and investments
(ii) Trade receivables
(iii) Accounts payable and accrued liabilities and equity-based compensation payable and loans payable, and convertible debentures

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. There has been no change to the fair value hierarchy levels during the period.

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

OUTSTANDING SHARE DATA AS AT JUNE 30, 2023:

a) Authorized Share Capital:
Unlimited number of common shares without par value

b) Issued Share Capital:
126,710,381 common shares with a stated value of $28,137,041

c) Outstanding stock options:

Expiry Date	Exercise Price	Number of Options
December 15, 2024	$ 0.35	475,000
February 16, 2026	$ 0.35	2,500,000
June 12, 2026	$ 0.35	300,000
July 12, 2026	$ 0.35	2,100,000
December 15, 2026	$ 0.35	400,000
February 7, 2027	$ 0.35	200,000
April 19, 2027	$ 0.35	260,854
August 30, 2027	$ 0.35	20,000
March 2, 2028	$ 0.21	11,000
Outstanding		**6,266,854**
Exercisable		**5,763,201**

d) Outstanding share purchase warrants:

	Expiry Date	Exercise Price	Number of Warrants
	July 13, 2026	$ 0.279	4,596,268
Finders warrants	July 13, 2026	$ 0.279	406,249
	July 13, 2026	$ 0.465	490,615
Finders warrants	July 13, 2026	$ 0.465	204,457
Broker warrants	December 15, 2025	$ 0.350	157,200
Broker warrants	February 28, 2026	$ 0.350	24,000
	April 19, 2026	$ 0.200	18,195,367
Broker warrants	April 19, 2026	$ 0.200	511,819
Outstanding and exercisable			**24,585,975**

e) Issued Restricted Stock Units and Performance Stock Units:

	Vesting Date	Issued	Cash Settled	Stock settled
Restricted Stock Units	June 23, 2023	11,785	11,785	-
Restricted Stock Units	March 31, 2024	130,424	11,785	118,639
Restricted Stock Units	March 31, 2025	130,424	11,785	118,639
Maximum Performance Stock Units	June 23, 2023	256,663	256,663	-
Maximum Performance Stock Units	July 13, 2024	652,142	256,663	395,476
Maximum Performance Stock Units	July 13, 2025	652,142	256,663	395,476
Total Restricted Stock Units and Performance Stock Units		**1,833,580**	**805,350**	**1,028,230**

f) Shares held in escrow or pooling agreements: As of the date of this MD&A, there are currently 7,668,416 common shares, and 33,750 warrants held in escrow. In connection with the listing of the Common Shares for trading on the TSXV in July 2021, an aggregate of 17,040,927 Common Shares, and 75,000 Warrants were deposited in escrow with Computershare on June 18, 2021, of which 10% of such Common Shares were released from escrow on the date the Common Shares were listed on the TSXV, and 15% are to be release from escrow every six months thereafter, subject to the provisions provided for in NP 46-201.

SUBSEQUENT EVENTS

a) Northstar's wholly owned subsidiary, Empower Environmental Solutions Calgary Ltd., negotiated a new lease for the planned scale up facility in Rocky View County, near Calgary, Alberta effective July 1, 2023 for an initial term of 15-years with an option to extend for two additional 5 year terms. The basic annual rents are as follows:

- from July 1, 2023 to June 30, 2028 - $346,516 per annum
- from July 1, 2028 to June 30, 2033 - $381,168 per annum, and
- from July 1, 2033 to June 31, 2038 - $419,284 per annum

Estimated additional rents are approximately $120,000 per annum

b) On July 7, 2023, Northstar announced that it executed a binding credit agreement (the "Credit Agreement") with the Business Development Bank of Canada ("BDC") for $8.75 million in non-revolving project level debt (the "BDC Financing"). The Company intends to use the proceeds for the development and construction of its Empower Calgary Facility. The following is a summary of the material terms of the Credit Agreement:

- BDC will provide a senior secured loan of up to $8.75 million;
- 15-year repayment period, with a 2-year interest only payment period;
- Fixed 5-year interest rate of 8.35% payable monthly.
- Covenants: maintain Fixed Charge Coverage Ratio equal to or greater than 1.10:1.00

The BDC Financing is subject to a one-time fee of $43,750, which has already been paid by Northstar, and an annual fee of $1,000. In connection with the BDC Financing, the Company will pay a finder's fee to Independent Traders Group Inc. of $87,500 in cash and will issue up to $87,500 in common share purchase warrants exercisable at $0.35 per common share of the Company for a period of 24 months or up to 36 months subject to TSXV approval.

c) On July 31, 2023, Northstar announced that it's wholly owned subsidiary, Empower Environmental Solutions Ltd., and Emissions Reduction Alberta (ERA) had signed a contribution agreement whereby ERA will fund up to $7,088,856 for the development and construction of the Company's planned asphalt shingle reprocessing facility in Calgary, Alberta.

d) On July 31, 2023, Northstar completed an arm's length significant strategic investment with Allmine Paving LLC ("Allmine"), a party and subsidiary of TAMKO Building Products LLC ("TAMKO"), one of America's largest independent manufacturers of residential roofing shingles, commercial roofing products and waterproofing solutions. The Company closed a C$8,480,979.24 (US$6,424,984.27) non-brokered private placement (the "Private Placement") of preferred shares (each, a "Preferred Share") in the capital of the Company, as Phase 1 of TAMKO's strategic investment (the "Strategic Investment").

The Strategic Investment is intended to include two phases:

i. Phase 1: C$8,480,979.24 (US$6,424,984.27) of Preferred Shares; and
ii. Phase 2: Approximately C$4,720,000 (US$3,580,000) of unsecured three-year convertible debentures to be purchased in two tranches and conditional on the attainment of certain milestones as agreed upon by the parties:
   - Tranche 1: Approximately C$2,360,000 (US$1,790,000)
   - Tranche 2: Approximately C$2,360,000 (US$1,790,000)

The Company issued 29,244,756 Preferred Shares in the private placement at a price of C$0.29 per Preferred Share, for aggregate cash consideration of C$8,480,979.24 (US$6,424,984.27). The Company's Preferred Shares will not be listed on the TSX Venture Exchange. Each Preferred Share is convertible, at the sole option of its holder, at any time and from time to time, into one common share (each, a "Common Share") of the Company on a one-for-one basis and provides the holder with voting rights and dividend rights together and pari passu with the Common Shares on an "as-converted" basis. Upon closing of the Private Placement, TAMKO will, through its wholly owned subsidiary, hold approximately 18.75% of the Company's issued and outstanding Common Shares, assuming the full conversion of the Preferred Shares into Common Shares.

Strategic Alliance Memorandum of Understanding

The Company has also signed a non-binding Memorandum of Understanding (the "Strategic MOU") with TAMKO dated July 31, 2023, under which Northstar and TAMKO agreed to work together with respect to the initial Northstar US Facilities. Among other terms, during the exclusivity period under the Strategic MOU, TAMKO has agreed to enter into offtake agreements providing for the acquisition of a significant portion of the asphalt and aggregate produced by the Northstar US Facilities. The parties have agreed to work together to determine the location of each of the Northstar US Facilities.

Phase 2 Securities

As part of the Strategic Investment, and subject to the completion of certain milestones by the Company that are tied to milestones set out in the Emissions Reduction Alberta grant announced by the Company on February 13, 2023 and TSXV approval, TAMKO has agreed to purchase two separate tranches of C$2,360,000 (US$1,790,000) each, totalling C$4,720,000 (US$3,580,000), (the "Principal Amount") of unsecured convertible debentures (the "Convertible Debentures") with a three year term at 10% interest payable semi-annually in cash or payment-in-kind (subject to TSXV rules) and convertible into units of the Company (the "Units") for no additional consideration at a conversion price equal to the greater of (i) C$0.29 per Unit or (ii) the minimum price permitted by the policies of the TSXV.

Each Unit will consist of one Common Share in the capital of the Company and one-half of one non-transferable Common Share purchase warrant (each whole warrant, a "Warrant"). Each Warrant shall entitle the holder thereof to purchase one additional Common Share (each, a "Warrant Share") at a price of the greater of (i) C$0.50 per Warrant Share or (ii) the minimum price permitted by the policies of the TSXV, with such Convertible Debentures containing customary blockers and anti-dilution provisions, until the maturity date, which is 36 months from the date of issuance.

Investor Rights Agreement and Board of Directors Nomination

In connection with the Strategic Investment, Northstar entered into an investor rights agreement dated July 31, 2023, with Allmine and TAMKO (the "Investor Rights Agreement"), which grants certain rights to Allmine, including the right to appoint a director to the Company's board of directors, a right to participate in future equity offerings, a top up right in respect of outstanding convertible securities, subject to the terms of the Investor Rights Agreement. Allmine and TAMKO are also subject to certain standstill restrictions under the Investor Rights Agreement.

Use of Proceeds

Northstar intends to use the net proceeds of the Private Placement for the development and construction of the Company's Empower Calgary Facility, working capital, and general corporate purposes. All securities issued under the Private Placement are subject to a statutory hold period ending four months and one day from the closing date of the Private Placement. No bonuses, finders' fees or commissions were paid in connection with the Private Placement.

e) Following the announcement of the strategic equity investment from TAMKO Building Products LLC on July 31, 2023, the Company has subsequently terminated the non-binding letter of intent (the "LOI") with the undisclosed industrial customer previously announced by the Company on November 23, 2022. The unannounced counterparty of the LOI was not TAMKO and due to the exclusivity requirements of TAMKO's strategic investment, the Company was required to terminate the LOI with the Customer.