

For the Year Ended December 31, 2021

Introduction

This Management Discussion and Analysis ("MD&A") provides information that management believes is relevant to an assessment and understanding of the Company's consolidated results of operations and financial condition. This discussion should be read in conjunction with the Consolidated Financial Statements for the years ended December 31, 2021 and 2020 and the accompanying notes, which are prepared in accordance with International Financial Reporting Standards or "IFRS". This discussion is based on information available to management as of March 28, 2022, unless otherwise indicated.

Unless otherwise indicated, all dollar amounts are expressed in Canadian dollars.

The core business of the Company is to provide advanced technology biological filters for removal of odors, volatile organic compounds (VOCs), hazardous air pollutants (HAPs) and for the conditioning of biogas renewable energy. With over 1,800 installed systems and over a decade of experience, the Company's groundbreaking biofilters are the technology of choice for wastewater treatment plants across North America. Additional information about the Company, including our most recently filed Annual Report, is available on SEDAR at www.sedar.com.

Forward Looking Statements

Certain statements in this report may contain "forward looking" statements that involve risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company or industry to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Words such as "may", "will", "expect", "believe", "plan", "intend", "should", "anticipate" and other similar terminology are used to identify forward looking statements. These statements reflect current assumptions and expectations regarding future events and operating performance and speak only as of the date of this MD&A, March 28, 2022. Forward looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to vary significantly from the results discussed in the forward looking statements, including, but not limited to, the factors discussed under "Risks and Uncertainties". Although the forward looking statements contained in this MD&A are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward looking statements. These forward looking statements are made as of the date of this MD&A and the Company assumes no obligation, except as required by law, to update any forward looking statements to reflect new events or circumstances.

Non-IFRS Measures

“EBITDA,” “Order Bookings,” “Order Backlog” and “Working capital” do not have any standardized meaning prescribed by IFRS and may not be comparable to measures presented by other companies.

EBITDA is used to denote earnings (loss) from operations before interest, income taxes, depreciation and amortization. This measure is important to the Company since it is used by potential investors and lenders to evaluate the ongoing cash generating capability of the Company and thus the amounts they are willing to invest and lend to the Company.

Order Bookings and Order Backlog are non-IFRS measures that the Company uses to evaluate its sales performance. Order Bookings are those binding contracts that the Company enters into during a fiscal year with a third party for the delivery of our products or services. As Order Bookings are received, the contract value (before any associated sales taxes) is included in the Order Backlog. The Order Backlog is reduced by the revenue that is recognized on each project and is also adjusted for foreign exchange changes in the period presented.

Overview

Biorem is a leading clean technology company that designs, manufactures and distributes a comprehensive line of high-efficiency emissions control systems used to eliminate odors, volatile organic compounds (VOCs) and hazardous air pollutants (HAPs). Biorem also offers Biogas Conditioning technologies specializing in biological treatment of hydrogen sulfide.

Biorem offers a selection of products that can be tailored to suit application specific requirements. Biorem ensures optimized long-term performance on every application by custom-designing systems to meet the individual needs of their clients.

Biorem has sales and manufacturing offices across North America and in China, a dedicated research facility, an analytical and microbial laboratory, a worldwide sales representative network, and a dedicated service and support division. As a result, Biorem has the resources available to ensure that projects are handled promptly and professionally from conception to completion.

The Company has more than 1,800 installed systems worldwide.

Selected Annual Information

	2021	2020	2019
Revenue	24,478,000	\$24,375,000	\$20,649,000
Net earnings (loss)	1,297,337	2,089,000	(1,302,000)
Total Assets	19,166,000	21,953,000	17,629,000
Shareholders' Equity	1,964,000	13,525,000	11,724,000
Earnings(loss)per share			
- basic	\$0.04	\$0.05	\$(0.03)
- diluted	\$0.04	\$0.05	\$(0.03)

Operating Results

Revenue	2021	2020	Percent Change
	\$24,478,000	\$24,375,000	.4%

Revenue by Geography

	2021	2020	2019
Canada	11,728,000	\$8,178,000	\$3,119,000
United States	10,473,000	12,606,000	13,787,000
China	1,234,000	3,417,000	2,762,000
Other international	1,043,000	174,000	981,000
Total Revenue	24,478,000	24,375,000	20,649,000

Biorem's core market is the North American municipal odour control market with international distribution established in China, Middle East, Americas and South Africa as well as opportunistically in other jurisdictions. Project delivery mix varies from period to period, however overall the Company relies heavily on the American and Canadian markets to generate revenue. The geographic mix in the current Order Backlog of the Company is consistent with the geographic mix for 2021 shown in the above table.

A number of factors contribute to variations in the Company's period over period results: customer scheduling and delivery of our products, the Company's mix of product and service offerings, the currency in which the revenue is earned and the timing of revenue recognition.

2021 revenue of \$24.5 million increased only slightly above the \$24.4 million recorded in 2020. There was a \$3.6 million increase in revenue from Canadian based projects and a \$2.2 million decrease in revenues from China. Revenues were heavily skewed to the fourth quarter of 2021 due to customer scheduling requirements.

In 2021 sixty percent of revenue was derived from eleven customers while in 2020 forty four percent of revenues came from twelve customers.

Order Bookings	2021	2020	Percent Change
	\$17,000,000	\$27,000,000	(37)%

Order Bookings can vary considerably from period to period, due to both the size of the contracts won and the timing of the awarding of the contracts. Bookings in 2021 totaled \$17 million and were \$10.0 million lower than the Company's 2020 bookings. Bookings in 2021 were received fairly evenly over the four quarters averaging \$4 million per quarter. The decline in 2021 bookings was largely due to the timing of contract awards and to a decline in bookings from mainland China. In the first quarter of 2022 the Company's bookings totaled over \$10 million. 2020 bookings came from Canada, the United States and China in roughly the same proportion as 2020 reported revenues.

Order Backlog	2021	2020	Percent Change
	\$24,930,000	\$31,000,000	(19.6)%

The Company's Order Backlog at December 31, 2021 declined to \$25 million from \$31 million on December 31, 2020. Order Backlog can vary significantly from period to period both due to the timing of the receipt of contracts and due to the completion date of the projects under contract. The order backlog was reduced significantly in Q4 with the delivery of \$10.8 million of project value.

Due to customer scheduling, the Company cannot provide guidance as to the quarters when the Order Backlog will be converted into revenue. In a normal economic environment management would expect that the majority of the Order Backlog at December 31, 2021 would be realized as revenue by the end of fiscal 2022.

Gross Profit	2021	2020	Percent Change
	\$6,236,000	\$7,017,000	(11.1)%

Costs of goods sold is comprised of 2 main components; direct material costs that are in direct proportion to revenue recognized, and the cost of operations which includes engineering and project management costs that are relatively fixed.

Gross profit in 2021 decreased by \$780,000 to \$6.2 million compared to \$7.0 million of gross profit recorded in 2020.

This decrease in gross profit for the year was largely due to the increase in material and freight costs in 2021.

As a percentage of revenue, gross profit in 2021 was 25.5% compared to 28.8% in 2020. Gross profit before the fixed costs of engineering and project management as a percentage of revenue was 40% compared to 44% in 2020. The overall 11.1% decrease in gross profit was comprised of a 17% decrease in gross profits from projects and a 75% increase in gross profit from service revenue as well as a decrease in warranty expense in the year. Project management and engineering costs represented 14.3% of revenue in 2020 compared to 15.0% in 2020.

Sales and Marketing	2021	2020	Percent Change
		\$2,098,000	\$1,962,000

The Company's sales and marketing expenses are composed of two significant categories; variable selling expenses and sales department expenses.

Variable selling costs represent commissions that are paid to both internal sales employees and external manufacturer representatives. These expenses are recognized over the course of the related contract. Sales Department expenditures relate primarily to departmental salaries and advertising expenses.

Total sales and marketing costs of \$2.1 million in 2021 were \$136,000 more than the \$2.0 million of expenditures incurred in 2020.

Sales and marketing activities in fiscal 2021 were comparable to the activities conducted in 2020 with reduced travel due to COVID-19 restrictions. The increased expenditures were attributable to contracted marketing services. Sales and marketing expenses in 2021 represented 8.6% of revenue compared to 8.0% in 2020. As a percentage of bookings, sales and marketing expense in 2021 were 12.3% compared to 7.3% in 2020.

Research and Development	2021	2020	Percent Change
		\$14,000	\$31,000

Research and Development expenses include research and development salaries, material and laboratory costs as well as subcontractor costs for the development of and installation of demonstration sites.

Other Expense (Income)	2021	2020	Percent Change
		\$239,000	\$(499,000)

Other expense (income) comprises foreign exchange gains, government assistance and investment tax credits.

Other expense in 2021 includes \$264,000 of foreign exchange losses on US dollar denominated assets held by Biorem Technologies Inc. compared to \$279,000 of foreign exchange gain realized in 2020. The Company received \$25,000 in the year from the CanExport program of the federal government for international marketing assistance.

In 2020 other income included \$295,962 in subsidies received from the Canada Emergency Wage Subsidy (CEWS) program. There were no COVID -19 relief subsidies applied for or received by the Company in 2021.

General and Administration	2021	2020	Percent Change
		\$1,816,000	\$2,805,000

General and administration expenses include administrative salaries, consulting, bad debt expense, occupancy costs, office supplies, regulatory and transfer fees, travel and corporate affairs.

General and administrative expenses in 2021 were lower by \$989,000 compared to 2020, primarily due to a \$417,000 reduction in bad debt expense recorded in the year and the collection of \$186,000 of accounts receivable that had previously been provided for.

As well, legal expenses were \$160,000 lower than in 2020 and director remuneration was \$50,000 lower.

Income Tax Expense	2021	2020
		\$737,000

The Company's expected income tax expense in both 2021 and 2020 was 26.5 % of earnings. A reduction in the amount of deferred tax asset recognized due to expiry of tax losses in 2021 increased 2021 tax expense to 36.2 % of earnings totaling \$737,000. The Company's deferred tax assets of \$1.8 million on December 31, 2021 comprise the tax effect of \$3.0 million of previously unrecognized tax losses, \$1.6 million unrecognized temporary differences and \$767,000 of unrecognized investment tax credits.

Summary of Quarterly Results

Thousands \$ Except share data	2021				2020			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Revenue	10,839	4,576	5,634	3,429	7,934	3,586	5,957	6,898
Gross profit	3,705	1,137	1,116	278	3,653	629	1,424	1,349
Net earnings (loss)	1,567	(115)	266	(421)	1,133	155	338	463
EPS (loss) - basic	0.046	(0.003)	0.007	(0.01)	0.029	0.004	0.009	0.012

A number of factors contribute to variations in the Company's quarterly results: customer scheduling and delivery of our products and services, the Company's mix of product and service offerings, the currency in which the revenue is earned and the timing of revenue recognition.

Fourth Quarter 2021

Revenue in the fourth quarter of 2021 was \$10.8 million compared to \$4.6 million in the previous quarter and \$7.9 million in the fourth quarter of 2020. The significant increase in the 2021 fourth quarter revenues compared to the previous quarters was largely due to differences in project delivery time lines in the quarters and to some project delivery delays in the prior quarters. Orders booked in the quarter totaled \$4.0 million.

Gross profit of \$3.7 million in the fourth quarter amounted to 34.2% of revenue, which was significantly higher than the 24.8 % gross profit margin in the previous quarter but lower than the 46% achieved in the same quarter the prior year. The increased margin was the result of the higher revenues recorded in the quarter without any increase in engineering or project management overhead costs.

General and administrative expenses during the quarter totaled \$585,000 which were slightly higher than the previous quarter but \$1.1 million lower than general and administrative expenses recorded in Q4 of 2020. In Q4 of 2020 \$674,000 of valuation provisions were recorded for the potential uncollectibility of certain accounts receivable and unbilled amounts. Sales and marketing expenses in the quarter were \$656,000 which was \$174,000 higher than the previous quarter and \$156,000 higher than sales and marketing expenditures in the fourth quarter of 2020. The increase in sales and market costs in the quarter was due to increased commission expense and \$47,000 of contracted marketing services.

Liquidity

The Company finances its operations and capital expenditures through cash generated from operations and equity and debt financings.

2021 Cash flow

Cash and cash equivalents	December 2021	December 2020	Percent Change
	\$4,471,000	\$8,869,000	(49.6)%

Cash and cash equivalents decreased by \$4,398,000 to \$4.5 million at December 31, 2021 from \$8.9 million on December 31, 2020. The primary reason for the decrease in cash held at the end of the year was the use of \$7.0 million to repurchase common shares. Approximately 35% of the Company's cash held on December 31, 2021 is denominated in Canadian dollars and 41% in US dollars compared to approximately 40% in Canadian dollars and 43% in US dollars at December 31, 2020.

The change in cash for the year is due to net cash flows from operating, investing and financing activities as follows:

	2021	2020
Cash provided by (used in) operating activities	\$3,776,000	\$3,335,000
Cash provided by (used in) investing activities	(76,000)	(342,000)
Cash provided by (used in) financing activities	(7,555,000)	(200,000)
Foreign exchange gain (loss) on foreign cash	(543,000)	(393,000)
Net increase (decrease) in cash	\$(4,398,000)	\$2,400,000

Cash provided by operating activities - Earnings from operating activities during the year generated \$3.8 million of cash. Earnings generated \$2.1 million of cash and a reduction of non-cash operating working capital generated an additional \$1.7 million in cash. In particular, \$3.2 million of cash was generated from an increase in accounts payable, \$320,000 million from an increase in accrued liabilities. Cash generated from decreases in working capital items were partially offset by \$2.3 million of cash used to fund an increase in unbilled revenue and a \$185,000 increase in accounts receivable.

Cash used in investing activities – The Company used \$76,000 of cash during the year to acquire new manufacturing equipment and leasehold improvements.

Cash provided by financing activities – During the year \$1.0 million of cash was secured from the proceeds of an operating loan and \$4.0 million secured from a term loan. Additional cash proceeds of \$85,000 were obtained on the exercise of stock options. \$12.4 million of cash was used to purchase for cancellation 23,434,121 outstanding common shares of the Company. \$239,000 of cash was used to pay lease obligations as they became due.

Liquidity Risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they are due. The Board of Directors reviews and approves the Company's operating and capital budgets, as well as any material transactions out of the ordinary course of business including proposals on major investments. The Company manages liquidity risk by maintaining adequate reserves, banking facilities and by continuously monitoring forecasts and actual cash flows and matching the maturity profiles of financial assets and liabilities.

The Company's objectives of managing liquidity risk are to forecast the liquidity position as accurately as possible and to maintain sufficient resources to pursue its growth strategy. The Company's financial liabilities include accounts payable and accrued liabilities, unearned revenue and contract advances as well as long and short term debt.

The Company's net current assets (liabilities) are summarized below.

	2021	2020
Cash	\$4,471,000	\$8,869,000
Working capital	2,935,000	10,458,000
Unused operating loan	\$1,990,000	-

(1) Working capital represents total current assets less total current liabilities.

A maturity analysis as at December 31, 2020 of the Company's financial liabilities based on gross, undiscounted cash flows is presented below. The maturity analysis is based on the earliest date that liabilities may be due.

	Carrying Amount	Contractual Cash Flow	Less than 1 month	1-3 months	3 months to 1 year	1+ years	Total
	\$	\$	\$	\$	\$	\$	\$
2021							
Accounts payable	5,065,853	5,065,853	5,065,853	-	-	-	5,065,853
Accrued liabilities	2,512,982	2,512,982	2,102,882	410,100	-	-	2,512,982
Interest bearing loans	5,010,000	5,621,161	58,226	109,786	494,037	4,959,112	5,621,161
Lease liabilities	655,603	828,480	18,198	36,396	163,782	610,104	828,480
	<u>13,244,438</u>	<u>14,028,476</u>	<u>7,245,159</u>	<u>556,282</u>	<u>657,819</u>	<u>5,569,216</u>	<u>14,028,476</u>
2020							
Accounts payable	1,808,644	1,808,644	1,808,644	-	-	-	1,808,644
Accrued liabilities	2,593,508	2,593,508	2,593,508	-	-	-	2,593,508
Lease liabilities	828,174	1,266,589	16,582	33,164	149,238	1,067,605	1,266,589
	<u>5,230,326</u>	<u>5,668,741</u>	<u>4,418,734</u>	<u>33,164</u>	<u>149,238</u>	<u>1,067,605</u>	<u>5,668,741</u>

Capital Resources

The Company currently does not have any undrawn debt facilities. The Company does not have any significant capital expenditure projects underway or forecasted in 2021.

Financial instruments

At December 31, 2021 the Company held no forward exchange contracts.

Commitments

Commitments include operating leases for office equipment and facilities, bank guarantees, and performance bonds issued on our behalf by financial institutions in connection with facility leases and contracts with public sector customers. Aside from the aforementioned, the Company does not have any other business arrangements or any equity interests in unconsolidated companies that would have a significant effect on its assets and liabilities as at December 31, 2021.

Off-Balance Sheet Arrangements

As a general practice, the Company does not enter into off-balance sheet financing arrangements. Except for operating leases and letters of credit, all commitments are reflected on the balance sheet.

Transactions with Related Parties

The Company did not have any material related party transactions during the year ended December 31, 2021.

Outstanding Share Data

	December 31 2021	December 31 2020
Common shares	15,477,437	38,661,558
Employee stock options (1)	3,085,000	3,355,000
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	18,562,437	42,016,558

(1) Assumes 100% conversion of outstanding options

There have been no material changes to the Company's outstanding share data from December 31, 2021 to the date of this MD&A.

Significant Accounting Policies and Estimates

The preparation of these consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, expenses and related contingent assets and liabilities. On an on-going basis, management evaluates the estimates including those related to long-term revenue contracts, intangible assets, bad debts, warranty obligations and income taxes. The estimates are based on historical experience and on various other factors that are believed to be reasonable in the circumstances. Actual results may differ from these estimates. The following critical accounting policies include those which involve management's more significant judgments and estimates:

- a) Revenue recognition: The Company derives revenue from long-term contracts which require performance over a time span which may extend beyond one or more accounting periods. The Company recognizes revenue on long-term contracts using the percentage-of-completion method, based on costs incurred relative to the estimated total contract costs. Management has concluded that costs incurred are the best available measure of progress toward completion of these contracts. Estimated total direct contract costs is subjective and requires the use of our best judgments based upon the information we have available at that point in time. Management's estimate of total direct contract costs has a direct impact on the revenue recognized by the Company. Changes in estimates are reflected in the period in which they are made and would affect revenue and cost of sales and unbilled or unearned revenue.

The Company also provides for estimated losses on incomplete contracts in the period in which such losses are determined.

- b) Deferred income taxes: Deferred income tax assets are recognized for the future income tax consequences attributable to temporary differences between the financial statement carrying value of assets and liabilities and their respective tax bases. Deferred income tax assets and liabilities are measured using enacted income tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The calculation of current and deferred income taxes requires management to make estimates and assumptions and to exercise a certain amount of judgment. The income tax bases of assets and liabilities are based upon the interpretation of income tax legislation across various jurisdictions. The deferred income tax assets and liabilities are also impacted by expectations about future operating results and the timing for reversal of temporary differences as well as possible audits of tax filings by the regulatory authorities. In accessing the realizability of deferred income tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is

dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax assets, projected future taxable income and tax planning strategies in making this assessment. The Company has recorded \$1,855,000 of deferred tax assets as at December 31, 2021.

- c) Investment tax credits: In the normal course of operations, the Company's Scientific Research & Experimental Development (SR&ED) expense claims are subject to review by federal and provincial government authorities. Reviews of certain of the Company's SR&ED claims are incomplete at December 31, 2020 and as such, amounts disclosed may be subject to change, pending the outcome of such reviews.
- d) Warranty obligations: Management routinely assesses and adjusts for its anticipated warranty costs based on experience and estimates of the potential warranty obligations for its installations.
- e) Expected credit losses: Management routinely reviews accounts receivable and sets up a reserve for expected credit losses. This is an estimate since some of the reserved accounts may be collected and we may subsequently find that some accounts currently deemed collectible become uncollectible. As well, the estimated present value of future cash flows associated with the outstanding accounts receivable is determined and an impairment loss is recognized for the difference between this amount and the carrying amount as follows: the carrying amount of the asset is reduced to estimated present value of the future cash flows associated with the asset, discounted at the financial asset's original effective interest rate, either directly or through the use of an allowance account and the resulting loss is recognized in the consolidated statement of operations for the period. In a subsequent period, if the amount of the impairment loss related to financial assets measured at amortized cost decreases, the previously recognized impairment loss is reversed through the consolidated statement of operations to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortized cost would have been had the impairment not been recognized. The assumptions used for this estimate, which are based on the Company's historical collection history, are presented in Note 10 to the financial statements.
- f) Long lived assets: Management reviews the carrying value of long lived assets including plant and equipment and amortizable intangible assets for impairment to determine if the carrying value of an asset may not be recoverable due to changes in the current and expected future use of the asset, external valuations of the asset, and the obsolescence or physical damage to the asset. If such indicators of impairment exist, the asset's recoverable amount is estimated. An impairment loss is recognized if the carrying amount of an asset or its related cash generating unit exceeds its estimated recoverable amount.
- g) Compound financial instruments: The financial liability component of a compound financial instrument is recognized initially at the fair value of a similar liability that does not have an

equity conversion option. The equity component, representing the holders' option to convert into common shares, is recognized initially at fair value determined as the excess of the face value of the compound financial instrument and the fair value of the liability component. Any directly attributable transaction costs are allocated to the liability and equity components in proportion to their initial carrying amounts. Subsequent to initial recognition, the liability component of a compound financial instrument is measured at amortized cost using the effective interest method. The equity component of a compound financial instrument is included within contributed surplus and is not re-measured subsequent to initial recognition.

Interest, as well as any gains and losses relating to the financial liability are recognized in profit or loss.

- h) Leases: At the inception of a contract, to determine if it contains a lease, the Company assesses whether it conveys the right to control and obtain substantially all of the economic benefits of an identified asset, for a period of time, in exchange for consideration. Where a contract contains a lease, the Company recognizes a right-of-use asset and a lease liability at the commencement date of the lease. The right-of-use asset is measured at cost less any accumulated depreciation and impairment losses and may be adjusted for any remeasurement of the lease liability. Cost is the amount of the initial lease liability plus any initial direct costs incurred and any lease payments made at or before the commencement date less any incentives received. The right-of-use assets are included in the cost of property and equipment on the statement of financial position. They are depreciated, in accordance with the Company's existing accounting policy, over the shorter of the term of the lease or the life of the asset. The lease liability is initially measured at the present value of future lease payments discounted at the interest rate implicit in the contract. If the implicit rate cannot be determined, the incremental borrowing rate over a similar term and with similar security for the funds necessary to obtain an asset of similar value in a similar economic environment is used.

The lease payments include fixed payments less any incentives receivable, variable lease payments that depend on an index or rate and amounts expected to be paid under residual value guarantees. Where the lease contains an extension or purchase option, the costs associated with the option are included if it is reasonably expected to be exercised by the Company. Thereafter, the amount of the lease liability is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of the lease liability is remeasured to reflect any modifications to the contract terms. Lease liabilities are presented as a component of debt on the consolidated statement of financial position. The Company has elected not to recognize right-of-use assets and lease liabilities for contracts that have a lease term of 12 months or less or are for the use of low value assets. These contracts are recognized as an expense in the consolidated statement of loss and comprehensive loss in the period the cost is incurred. In addition, for certain asset classes, the Company has elected to treat both lease and non-lease components as a single lease component for the purposes of applying IFRS 16.

- i) Equity: Common stock issued by the company is classified as equity when there is no contractual obligation to transfer cash or other financial assets to the holder of the shares. Incremental costs directly attributable to the issue or repurchase of equity instruments are recognized in equity, net of tax.

Treasury shares are equity instruments repurchased by the Company which have not been canceled and are deducted from equity on the consolidated balance sheet, irrespective of the objective of the purchase. The Company acquires its own subordinate voting shares on the open market for its share-based payment awards. No gain or loss is recognized in the consolidated statement of earnings on the purchase, sale, issue or cancellation of treasury shares. Consideration paid or received is recognized directly in equity.

Dividends and other distributions to holders of the company's equity instruments are recognized directly in equity.

Outlook

Inflationary pressure and supply chain disruptions due to the ongoing global recovery from the COVID-19 pandemic are expected to continue well in to 2022. Further pressure is also anticipated due to geopolitical factors as a result of the European conflict. It is difficult to determine the extent that these factors will have on the profitability of the corporation in the coming months. To counter these uncertainties, management has expanded our distributed global supply chain and developed innovative engineering techniques for the design and fabrication of our equipment.

BIOREM enters the year with a healthy backlog of approximately \$25 millio. This combined with a strong sales pipeline will help to mitigate a number of these pressures.

Risks and Uncertainties

COVID-19

The Company faces risks related to health epidemics and other outbreaks of communicable diseases, which could significantly disrupt its operations and may materially and adversely affect its business and financial results.

At this time, it is unknown the extent of the impact the COVID-19 outbreak may have on the Company as this will depend on future developments that are highly uncertain and that cannot be predicted with confidence. These uncertainties arise from the inability to predict the occurrence and veracity of new variants and the duration of their outbreaks, including the duration of travel restrictions, business closures or disruptions, and quarantine/isolation measures that may be put, in place by Canada and other countries to fight the virus. While the extent of the impact is unknown, we anticipate this outbreak may cause supply chain disruptions, staff shortages, and increased material and shipping costs, all of which may impact the Company's business and financial condition.

Liquidity risk

At December 31, 2021 the Company had working capital of \$2,935,000 and an unused operating loan of \$1,990,000. Management believes the Company has sufficient working capital to meet all of its operational needs under any normal circumstances.

Interest rate risk

At December 31, 2021 the Company had \$1,010,000 of operating loan debt that was subject to a floating interest rate. A 2% increase in the prime lending rate would impact the Company's earnings before tax by \$20,200.

Sales Cycle

The Company's long sales cycle may cause revenue fluctuations period over period – since operating expenses are largely based on anticipated revenue trends and a significant portion of expenses are, and will continue to be, fixed, any delay in generating or recognizing revenues could negatively impact our business, operating results, financial condition or prospects.

Order Backlog

As of December 31, 2021 the Company's Order Backlog was \$24 million. However, the expected future revenue from the Company's Order Backlog may not be realized or, if realized, may not

result in net earnings. Projects could remain in Order Backlog for an extended period of time. In addition, project cancellations or scope adjustments may occur from time to time with respect to contracts reflected in the Company's Order Backlog. Cancellation or delay of contracts may have a material adverse effect on our financial status.

Delays or Defaults in customer payments affecting liquidity

Due to the nature of our contracts, at times we commit resources to projects prior to receiving payments from our customers in amounts sufficient to cover expenditures as they are incurred. Delays in customer payments may require us to make a working capital investment. If a customer defaults in making payments on a project to which we have devoted significant resources, it could have a material negative effect on our liquidity as well as the results from operations.

Reputation

The Company's reputation for technical expertise, high level of service and the lower life cycle cost of products compared to our competitors products is one of our most valuable business development assets. The loss of this reputation due to client dissatisfaction represents a risk to our ability to win additional business both from existing clients and from future clients.

Patents and Proprietary Right

The Company relies on a combination of patents, trademarks, trade secrets and knowledge to protect its proprietary technology and rights. There can be no assurance that the Company's patents will not be infringed upon, that the Company would have adequate remedies for any such infringement, or that its trade secrets will not otherwise become known or independently developed by its competitors. There can also be no assurance that any patents now or hereafter issued to, licensed by or applied for by the Company will be upheld, if challenged, or that the protections afforded thereby will not be circumvented by others.

Dependence on Subcontractors

The Company does not directly engage in field construction but relies on field construction subcontractors operating under the supervision of the Company's employees. The unavailability of field construction subcontractors, or a substantial increase in pricing by a significant number of these subcontractors could adversely affect the Company. In addition, failure of subcontractors to properly perform work that has been subcontracted to them could adversely affect the Company by increasing the costs to the Company of completing a project and by damaging the Company's reputation.

Product Liability

If there are defects in our systems or if significant reliability, quality or performance problems develop with respect to our systems, there may be a number of negative effects on our business. Our products are often installed in corrosive or flammable environments. The Company carries product liability insurance, which includes coverage for sudden or accidental pollution impact. It is possible that a customers' inability to comply with applicable pollution control laws or regulations stemming from failure or non-performance of the Company's products or systems may subject the Company to liability for any fines imposed upon such customer by regulatory authority or for damages asserted to have been incurred by any third party adversely affected.

Competition

Virtually all contracts for the Company's products are obtained through competitive bidding. Although the Company competes on technical expertise, reputation for service and lower life cycle cost, there can be no assurance that the Company will maintain its competitive position in its principal markets.

Fixed Price Contracts may result in losses

The Company's receipt of a fixed price contract as a consequence of being the successful bidder carries the inherent risk that the Company's actual performance cost may exceed the estimates upon which its bid was based. To the extent that contract performance costs exceed projected costs, the Company's profitability could be materially affected.

Foreign Exchange

The Company is subject to risk of exchange rate fluctuations related to anticipated revenues, Order Backlog and existing assets and liabilities denominated in currencies other than Canadian dollars. At December 31, 2021, the Company had US dollar denominated net monetary liabilities of \$1,152,000.

Stock Trading Volume is low

The monthly average trading volume of the BIOREM common shares on the Toronto Venture Exchange during 2021 was 424,000 shares. Due to the low trading volume the price of the common shares could be subject to wide price fluctuations in response to business development announcements, competitors, quarterly variations in operating results, and other events or factors.

Risk to Product Development

Corporate resources are currently being expended on the development of the new media technologies. These technologies are constantly in development and have not yet been fully commercialized. There can be no guarantee that the new media technology will achieve the performance criteria which the Company believes is necessary for it to be a successful product in

the market. In addition, there are risks associated with commercializing any product including the risk that full scale production may not be achieved at an acceptable cost level. Failure to successfully commercialize the new media technologies may materially and adversely affect the Company's financial condition and results of operations.

Acceptance of new products by the Market

Market risk exists for new products such as the new media. There is no assurance that new products will be accepted by the market, that desired volumes will be realized over the product life or that the product life will not be shorter than expected due to product obsolescence. New products that are launched by the Company's competitors may also have price or other advantages over the Company's products. In addition, new product offerings may also require more significant marketing and sales efforts to gain market acceptance.

Dependency on key personnel

The success of the Company is dependent upon the attraction and retention of highly skilled personnel in a number of key areas including management positions. The unexpected loss or departure of any of the Company's key officers or employees could have a material adverse effect on the future operations of the Company. The success of the Company's business will depend, in part, upon the Company's ability to attract and retain qualified personnel as they are needed. There can be no assurance that the Company will be able to engage the services of such personnel or retain its current personnel.