

**For the Year Ended December 31, 2012**

**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 operation and financial condition. This discussion should be read in conjunction with the Consolidated Financial Statements for the year ended December 31, 2012 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 April 19<sup>th</sup>, 2013, 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) and hazardous air pollutants (HAPs) and for the conditioning of biogas renewable energy. With over 700 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](http://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. 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, foreign exchange gains and losses, depreciation and amortization. Adjusted EBITDA, which includes additional adjustments for items like loss on remeasurement of debenture, should not be construed as a substitute for net earnings determined in accordance with IFRS. 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. A reconciliation of Adjusted EBITDA to total Company earnings is contained in the MD&A when this measure is being used.

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 air 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 any one of their 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 700 installed systems worldwide.

The Company continued to improve its operations and project delivery systems in the past quarter and concentrated on sales which would contribute higher margins, specifically choosing

to decline projects with low margins. This approach helped strengthen the Company's financial position over the final quarter and contributed to increasing margins. Total Order Bookings in 2012 finished at over \$18.9 million with Q4 2012 providing Order Bookings of \$3.8 million with gross margins at or above 2012 average gross margin levels.

## Selected Annual Information

	2012	2011	2010
Revenue	15,418,000	\$12,045,000	\$17,360,000
Net Income (Loss)	(830,000)	(3,369,000)	(3,063,000)
Total Assets	9,780,000	10,368,000	14,125,000
Current portion LTD	1,220,000	1,750,000	1,833,000
Long-Term Debt (LTD)	2,368,000	-	-
Loss per Share	(0.07)	(0.28)	(0.26)

In 2012 the Company achieved a 28% increase in revenues over 2011 and a 30% increase in gross margin.

During the year the Company closed financings totaling \$2.3 million.

## Operating Results

Revenue	2012	2011	Percent Change
	\$15,418,000	\$12,045,000	28.0

### Revenue by Geography

	2012	2011	2010
Canada	\$3,399,000	\$ 3,536,000	\$ 6,998,000
United States	7,240,000	6,903,000	7,893,000
China	1,062,000	335,000	-
International	3,717,000	1,271,000	2,469,000
Total Revenue	\$15,418,000	\$12,045,000	\$17,360,000

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 quarter to quarter however overall the Company relies heavily on the American and Canadian markets to generate revenue. The project mix in the current Order Backlog of the Company is consistent with the geographic mix shown in the above table for 2012.

A number of factors contribute to variations in the Company's quarterly 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.

Revenue in 2012 increased by 28% compared to 2011 due to an increase in international projects completed, particularly in China which accounted for \$1,062,000 of the Company's 2012 revenue. The increase in revenue from China in 2012 is a direct result of the Company's establishment of manufacturing and sales offices there in 2011 and a dedicated business development effort in 2011 and 2012.

<b>Order Bookings</b>	2012	2011	Percent Change
	\$18,878,000	\$16,300,000	15.8

Order Bookings can vary considerably from quarter to quarter, due to both the size of the contracts won and the timing of the awarding of the contracts.

<b>Order Backlog</b>	2012	2011	Percent Change
	\$17,767,000	\$13,989,000	27.0

The Company's Order Backlog at December 31, 2012 increased by \$3.8 million to \$17.8 million from the same measurement date a year ago. 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. Due to customer scheduling, the Company cannot provide guidance as to the quarters when the Order Backlog will be converted into revenue. However, Management's current estimate is that the majority of the Order Backlog at December 31, 2012 will be realized as revenue by the end of fiscal 2013.

<b>Gross Margin</b>	2012	2011	Percent Change
	3,726,000	2,869,000	29.9

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 margin of \$3.7 million in 2012 was \$857,000 greater than the gross margin recorded in 2011. As a percentage of revenue gross margin in 2012 was comparable to the 2011 results at 24%. However on a quarterly basis during 2012 there was significant improvement in the gross margin percentage increasing from 11.6% in Q1 to 35.1% in Q4. This steady increase in gross margins throughout 2012 can be attributed to two main factors. The first factor impacting the growing gross margins is the securing of revenue projects in 2012 with pricing that had significantly higher gross margins than projects accepted in 2011.

The second factor contributing to the higher gross margin in 2012 is related to the fixed component of the cost of goods sold. Cost of goods sold comprises direct material costs and operations costs such as engineering and project management. Operations costs in 2012 were \$2.0 million representing 12.9% of revenue compared to \$1.7 million in 2011 representing 14.1% of revenue.

Adjusted EBITDA	2012	2011	Percent Change
	\$157,000	\$(2,367,000)	107

The increase in 2012 Adjusted EBITDA versus 2011 was primarily the result of a higher gross margin earned in 2012 of \$3,726,000 compared to \$2,869,000 in 2011, an increase of \$857,000 and a reduction of sales and marketing, general and administration, and research and development costs (net of government assistance) in the amount of \$1,638,000. A reconciliation of Adjusted EBITDA to net loss is provided below.

*Reconciliation of Adjusted EBITDA to Net Loss*

	2012	2011
Net loss	(830,000)	(3,369,000)
Add (deduct)		
Depreciation and amortization	523,000	556,000
Loss (gain) on foreign exchange	11,000	(57,000)
Accretion of deferred financing and warrant costs	89,000	84,000
Loss on re-measurement of debenture	-	157,000
Interest expense	364,000	262,000
Adjusted EBITDA	157,000	(2,367,000)

Sales and Marketing	2012	2011	Percent Change
	\$1,602,000	\$2,617,000	(38.8)

The Company's Sales and Marketing expenses are composed of two significant categories; variable selling costs and Sales Department expenditures.

Variable selling costs represent amounts that are paid to both internal sales employees and external manufacturer representatives. These costs are incurred when the project revenue is recognized. Sales Department expenditures relate primarily to departmental salaries and advertising expenses.

Total sales and marketing costs in 2012 were \$1,015,000 below those incurred in 2011 due mainly to cost restructuring of the sales department in late 2011 and early 2012. In addition sales commissions were lower in 2012 by \$157,620 compared to 2011 due to increased direct sales to customers which do not involve commission payments to manufacturer sales representatives.

As a percentage of revenue, sales and marketing costs were 10.4% in 2012 compared to 21.7% in 2011. This significant decrease was due to the increase in revenues of \$3,373,000 and the decline in sales and marketing costs of \$1,015,000.

Research and Development	2012	2011	Percent Change
	\$771,000	\$1,072,000	(28.1)

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

Research and development expenses in 2012 were reduced significantly compared to the same period in 2011, as the initial activities that commenced in 2010 into the development of advanced biofiltration methods have been concluded and successfully been converted into commercial products.

Government Assistance	2012	2011	Percent Change
	\$287,000	\$768,000	(62.6)

Government Assistance is used to help fund the Company's Research and Development expenditures. The Government Assistance relates to several programs which are offered by the Canadian Federal and Ontario Provincial governments. The assistance from these programs can fluctuate on a yearly basis depending on the activity that takes place during the year and the terms of the assistance programs.

The Company applies for Government Assistance under the Scientific Research and Experimental Development program at each taxation year end and records the refundable portion of the tax credits as amounts recoverable during each period. Management uses its past experience when preparing the estimated amounts recoverable and the scientific research and experimental development credits achieved in the past have been consistent with those previously claimed.

The Company has been approved for financial assistance in the form of forgivable loans with the Ministry of Research and Innovation. In 2012 the Company has recorded \$136,532 (2011-\$382,700) related to a forgivable loan to support the Company's development and demonstration of a potential long-term solution for the treatment of volatile organic compounds. In 2011 the Company recorded \$125,564 as other income under another loan to support the Company's development and demonstration of a potential long-term solution for sewage treatment plant odour control. This project was completed in 2011 and the loan was forgiven in September 2011.

General and Administration	2012	2011	Percent Change
	\$2,003,000	\$2,848,000	(29.7)

General and Administration expenditures include administrative salaries, consulting, occupancy costs, office supplies, regulatory and transfer fees, travel and corporate affairs.

The 29% decrease in general and administration costs in 2012 compared to 2011 is due to reduced salaries and a reduction in travel expenses as a consequence of the Company's cost restructuring carried out in the first quarter of 2012.

## Summary of Quarterly Results

CDN thousand \$	2012				2011			
Except share data	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Revenue	4,386	4,892	2,873	3,267	3,448	963	3,901	3,732
Gross margin	1,539	1,318	489	380	533	(57)	1,027	1,366
Net earnings (loss)	315	77	(680)	(544)	(1,196)	(1,501)	(496)	(19)
EPS (loss)	0.02	0.01	(0.06)	(0.04)	(0.12)	(0.12)	(0.04)	0.0

A number of factors contribute to variations in the Company's quarterly 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.

### Fourth Quarter 2012

Revenue in the fourth quarter of 2012 was \$4.4 million compared to \$3.4 million in the fourth quarter of 2011. The increase in revenue was attributable to the Company's improved financial structure and operating effectiveness that allowed the completion of more projects in the quarter. As well there was a large international project that was begun and completed in the fourth quarter of 2012 for which there was not a comparable project in the fourth quarter of 2011.

The gross margin amount and gross margin percentage improved in each of the last three consecutive quarters of 2012.

Gross margin for the quarter ending December 31, 2012 was 35.1% compared to 26.9 % for the previous quarter ended September 30, 2012 and 15.5% for the three months ended December 31, 2011. The higher gross margin recorded during the fourth quarter compared to the third quarter and the same period in the prior year was due to improved operational efficiencies within the Company and to the completion of projects with higher gross margins .

The fixed component of cost of goods sold which includes engineering and project management averages \$470,000 per quarter and there were no significant variations during the 4<sup>th</sup> quarter of 2012.

The net earnings of \$315,000 for the fourth quarter of 2012 included a charge of \$20,000 to increase the allowance for doubtful debts, a \$22,000 provision for inventory obsolescence and a \$73,000 write down of research and production equipment to their estimated net realizable value.

## Liquidity

### 2012 Cash flow

Cash and cash equivalents	2012	2011	Percent Change
	\$1,901,000	\$924,000	105.7

Cash and cash equivalents increased by \$977,000 to \$1.9 million as at December 31, 2012 from \$924,000 as at December 31, 2011. The majority of the Company's cash is denominated in US dollars as at December 31, 2012.

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

	2012	2011
Cash provided by (used in) operating activities	(\$530,000)	\$1,558,000
Cash provided by used in investing activities	549,000	(964,000)
Cash provided by (used in) financing activities	1,010,000	(512,000)
Net Increase in cash	\$977,000	\$93,000

**Cash provided by (used in) operating activities** – During 2012, operating activities before changes in non-cash operating working capital provided \$195,000 in cash and a reduction in accounts receivable contributed \$996,000 in cash from operating activities. These operating sources of cash were offset by cash used to fund an increase in inventory of \$340,000, unbilled revenue of \$193,000 and a decrease in provisions and accounts payable and accrued liabilities of \$192,000 and \$951,000 respectively. In 2011, \$2,283,000 of cash was used in operating activities before changes in non-cash operating working capital. A reduction in the number and value of projects under construction in the fourth quarter of 2011 resulted in changes in non-cash operating working capital providing \$3,841,000 of cash for the year.

**Cash provided by investing activities** - During 2012 the Company used \$6,000 to purchase equipment compared to \$295,000 used to purchase equipment in 2011. In 2011 the Company deposited \$652,000 of cash to provide security for a letter of credit issued as a security bond to a customer. This \$652,000 was released to the Company in 2012 upon successful completion of the project for which the security bond was provided.

**Cash provided by (used in) financing activities** - The Company received proceeds of \$1,775,000 from the issuance of 8% convertible debentures and 6,922,692 common share purchase warrants during the year ended December 31, 2012. As part of the convertible debentures issuance 4,545 common share purchase warrants were issued for every \$1,000 of debentures purchased. \$88,000 in transaction costs were incurred for this financing.

During the year ended December 31, 2012 the Company used \$240,000 to pay a portion of the outstanding balance of its debenture liability compared to a repayment of \$250,000 in the same period in 2011 and \$649,000 was used to repay short-term debt with no similar payment in the year ended December 31, 2011.

During the year ended December 31, 2012 the Company used \$288,000 to pay interest on its' debenture payable, compared to \$262,000 used in the same period in 2011.

The Company also received proceeds of \$500,000 during the year ended December 31, 2012 under an amendment to its existing 12.75 % debenture agreement compared to no similar proceeds during the same period in 2011.

### **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 capital, 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 liabilities include accounts payable and accrued liabilities, and unearned revenue as well as long and short term debt.

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

	<u>2012</u>	<u>2011</u>
Cash	\$1,901,000	\$924,000
Restricted cash	597,000	1,152,000
Working capital	1,420,000	(584,000)
Short term debt	-	(649,000)
Current portion long term debt	1,220,000	(1,750,000)
Net current assets (liabilities)	1,420,000	(584,000)

At December 31, 2012, restricted cash includes \$500,000 in cash which has been deposited as collateral for a letter of credit issued to an insurance company under the terms of a performance bond and US\$97,000 for a letter of credit issued to a customer for a performance guarantee. This cash is not available for general use by the Company.

A maturity analysis as at December 31, 2012 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
	\$	\$	\$	\$	\$	\$	\$
2012							
Accounts payable	2,916,624	2,916,624	2,916,624				2,916,624
Accrued liabilities	1,024,184	1,024,184	1,024,184				1,024,184
Current portion LTD	1,220,000	1,220,000		380,000	840,000		1,220,000
Long term debt	2,368,029	3,040,994		59,500	115,706	2,865,788	3,040,994
	<u>7,528,837</u>	<u>8,201,802</u>	<u>3,940,808</u>	<u>439,500</u>	<u>955,706</u>	<u>2,865,788</u>	<u>8,201,802</u>
2011							
Accounts payable	2,984,040	2,984,040	2,984,040	-	-	-	2,984,040
Accrued liabilities	1,907,231	1,907,231	1,907,231	-	-	-	1,907,231
Short-term debt	648,591	698,991	9,600	28,800	660,591	-	698,991
Current portion LTD	1,750,000	1,750,000	1,750,000	-	-	-	1,750,000
	<u>7,289,862</u>	<u>7,340,262</u>	<u>6,650,871</u>	<u>28,800</u>	<u>660,591</u>	<u>-</u>	<u>7,340,262</u>

During the year, the Company determined that in addition to cash flow expected from operations, it required additional financing to fund its working capital.

On May 4, and June 4, 2012, the Company issued 8% convertible secured subordinated debentures for gross proceeds of \$659,000. The debentures have a maturity date two years from the date of issuance and are convertible into fully paid and non-assessable common shares of the Company at the option of the holder at any time over their term at a price of \$0.178 per common share. The debentures can be prepaid in full at any time by the Company upon giving holders 15 days notice of prepayment.

In conjunction with the issue of the debentures 1,850,472 common share purchase warrants were issued. Each warrant entitles the holder to purchase one common share at a price of \$0.178 per share for a period of two years from issuance.

On July 25, and August 16 2012 the Company issued 8% convertible secured subordinated debentures for gross proceeds of \$1,116,000. The debentures have a maturity date of two years from the date of issuance and are convertible into fully paid and non-assessable common shares of the Company at the option of the holder at any time over their term at a price of \$0.11 per common share. The debentures can be prepaid in full at any time by the Company upon giving holders 15 days notice of prepayment.

In conjunction with the issue of the debentures 5,072,220 common share purchase warrants were issued. Each warrant entitles the holder to purchase one common share at a price of \$0.11 per share for a period of two years from issuance.

On April 30, 2012, the Company obtained an amendment to the existing 12.75% debenture agreement amending the repayment terms and the financial covenants. The Company also obtained a waiver of the covenant breaches at both December 31, 2011 and March 31, 2012 effectively waiving the debenture holder's rights under the debenture in respect of any non-compliance with such covenants. The 12.75% debenture is repayable in monthly installments of \$60,000 plus interest commencing September 30, 2012 with the balance of \$550,000 due on May 5, 2014. The Company must maintain an unrestricted cash balance of \$400,000 at the end of each quarter and a minimum tangible net worth of negative \$350,000 at September 30, 2012 and negative \$250,000 thereafter. The Company must maintain at the end of each quarter a sum of unrestricted cash and accounts receivable that is equal to at least twice the outstanding debenture balance.

On July 24, 2012 the Company entered into an amending agreement to receive an incremental \$500,000 advance under the terms of the debenture, of which is \$100,000 is repayable January 27, 2013 and the balance at the rate of \$50,000 monthly commencing February 28, 2013.

In the normal course of business, Management will continue to look to other sources of funding including items such as project financing and accounts receivable factoring. Management is also continuing to improve the efficiency of all aspects of the Company's operations to ensure the most effective use of its' working capital. Through these activities, along with expected cash flow from operations, Management believes that it will obtain adequate sources of funds to meet its liabilities as they come due, however there is no certainty that these strategies will be successful.

## **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 2013.

## **Financial instruments**

At December 31, 2012 the Company held no forward exchange contracts. The Company plans to evaluate the use of forward exchange contracts in the future.

## **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, 2012.

## 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 twelve months ended December 31, 2012.

## Outstanding Share Data

as at		April 19, 2013	
Common shares		12,989,062	
Employee stock options		1,195,000	
Special warrants		8,076,538	
		22,260,600	
Convertible debentures		13,847,702	
<b>Total</b>		<b>36,108,302</b>	

## Significant Accounting Policies and Estimates

The preparation of the Company's 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 provisions 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 affect 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. We believe 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. Our estimate of total direct contract costs has a direct impact on the revenue we recognize. If our current estimates of total direct contract costs turns out to be higher or lower than our previous estimates, we would have over or under recognized revenue from the previous period. We also provide for estimated losses on incomplete contracts in the period in which such losses are determined. Changes in our estimates are reflected in the period in which they are made and would affect our revenue and cost and estimated earnings in excess of billings.
- 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 future 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 not recorded deferred tax assets as at December 31, 2012. The amount of the deferred tax asset could change materially in the near term based on future taxable income during the carry forward period.
- 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, 2012 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) Bad debt expense: Management routinely reviews accounts receivable and sets up a reserve for bad debts on a customer-by-customer basis. 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.
- 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 from the estimated future cash flows expected to result from its use and eventual disposition. Any change in estimate which causes the undiscounted expected future cash flows to be less than the carrying value, would result in an impairment loss being recognized equal to the amount by which the carrying value of the asset exceeds the fair value of the asset.
- 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.

## Outlook

Going forward, management is optimistic that the market is beginning to recover with new Order Bookings in Q1, 2013 exceeding \$5.2 million. With strong 2012 Q4 results and a healthy backlog in place, the Company has entered the 2013 fiscal year in a strong position. The Company remains susceptible to quarterly swings in revenue as project delivery schedules continue to be subject to actual project site conditions and unexpected delays. The Company therefore is expected to experience quarter to quarter fluctuations, but overall, financial performance is anticipated to be much improved in 2013 compared to 2012.

The Company continues to adjust its workforce for improved results by strengthening its management in China and adding a senior professional to the business development team.

Management anticipates that these incremental investments will continue the momentum for growth as the Company pursues wider market opportunities in China and Southeast Asia and for expansion of its Biogas and Industrial VOC projects.

## **Risks and Uncertainties**

The Company is exposed to risks of varying degrees of significance which could affect its ability to achieve its objectives of profitability and growth. The principal risks to which the Company is described below.

### *Sales Cycle*

Our long sales cycle may cause revenue fluctuations period over period – since our operating expenses are largely based on anticipated revenue trends and a significant portion of our 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, 2012 the Company's Order Backlog was \$17.8 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 our 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. To date, the Company has not had any significant bad debts in which a total write-off for an accounts receivable was necessary.

### *Reputation*

The reputation of the Company's technical expertise, high level of service and the lower life cycle cost of our 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 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. 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, sales order backlog and existing assets and liabilities denominated in currencies other than Canadian dollars. At December 31, 2012, the Company had US dollar denominated net monetary assets of \$2,409,000.

### *Stock Trading Volume is low*

The monthly average trading volume of the BIOREM common shares on the Toronto Venture Exchange was 59,300 shares in 2012. 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*

Substantial corporate resources are currently being expended on the development of 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. 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.

### *Liquidity risk*

At December 31, 2012 the Company had working capital of \$1,420,000.

Management believes it currently has sufficient liquidity to conduct the business but there is no assurance that future operating results or trade terms from suppliers will not adversely affect the Company's liquidity.