Consolidated Financial Statements of

Biorem Inc.

December 31, 2017 and 2016

Biorem Inc.

December 31, 2017 and 2016

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Independent Auditors' Report

To the Shareholders of BIOREM Inc.:

We have audited the accompanying consolidated financial statements of BIOREM Inc. and its subsidiaries, which comprise the consolidated statements of financial position as at December 31, 2017 and 2016, and the consolidated statements of operations, comprehensive earnings, changes in shareholders' equity, and cash flows for the years then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of BIOREM Inc. and its subsidiaries as at December 31, 2017 and 2016 and their financial performance, the results of their operations, and their cash flows for the years then ended in accordance with International Financial Reporting Standards.

MNP LLP

Chartered Professional Accountants

Licensed Public Accountants

Mississauga, Ontario

March 22, 2018

MNP

Biorem Inc.

Consolidated statements of financial position
December 31, 2017 and 2016

In Canadian dollars	Note	2017	2016
		$	$
Assets			
Current assets			
Cash and cash equivalents	**10**	3,568,447	1,118,297
Restricted cash and cash equivalents	**10**	-	528,023
Accounts receivable	**11**	8,010,558	7,124,365
Unbilled revenue	**4**	2,622,411	1,762,979
Inventories	**12**	705,198	464,315
Prepaid expenses and deposits		674,710	213,825
Investment tax credits recoverable		-	27,023
		15,581,324	11,238,827
Non-current assets			
Equipment and leasehold improvements	**13**	80,459	104,548
Total assets		15,661,783	11,343,375
Liabilities and shareholders' equity			
Current liabilities			
Accounts payable		4,012,166	2,963,576
Accrued liabilities		1,345,046	711,949
Provisions	**14**	463,728	504,052
Unearned revenue	**4**	2,541,532	2,571,279
Current portion of long-term debt	**16**	-	2,165,571
		8,362,472	8,916,427
Shareholders' equity			
Common shares	**17**	17,204,855	13,789,081
Share purchase warrants	**17**	-	51,351
Contributed surplus		1,950,818	2,368,659
Accumulated other comprehensive income		582,812	187,147
Deficit		(12,439,174)	(13,969,290)
Total shareholders' equity		7,299,311	2,426,948
Commitments	**21**		
Contingency	**15**		
Total liabilities and shareholders' equity		15,661,783	11,343,375

See accompanying notes to consolidated financial statements.

Approved on behalf of the Board of Directors of Biorem Inc:

Signed	" "	Signed	" "
Director	Anthony Ennis	Director	Brian Herner

Biorem Inc.
Consolidated statements of operations
Years ended December 31, 2017 and 2016

In Canadian dollars	Notes	2017	2016
		$	$
Revenue	**4**	22,558,270	15,896,146
Cost of goods sold	**12**	16,287,858	11,788,751
Gross profit		6,270,412	4,107,395
Expenses (income)			
Sales and marketing		2,164,868	1,882,514
Research and development		393,974	387,278
General and administration		2,141,004	1,369,725
Other expense (income)	**6**	42,026	(357,047)
Total operating expenses		4,741,872	3,282,470
Earnings from operations		1,528,540	824,925
Finance costs	**7**	(1,576)	277,650
Net earnings		1,530,116	547,275
Earnings per share, basic	**9**	$ 0.04	$ 0.04
Earnings per share, diluted	**9**	$ 0.04	$ 0.02

See accompanying notes to consolidated financial statements.

Biorem Inc.

Consolidated statements of comprehensive earnings
Years ended December 31, 2017 and 2016

In Canadian dollars	Notes	2017	2016
		$	$
Net earnings		1,530,116	547,275
Other comprehensive earnings (loss)			
Item that will be not reclassified into profit or loss:			
Foreign currency translation differences on foreign operations		395,665	(120,286)
Total comprehensive earnings		1,925,781	426,989

See accompanying notes to consolidated financial statements.

Biorem Inc.

Consolidated statements of changes in shareholders' equity
Years ended December 31, 2017 and 2016

In Canadian dollars	Notes	Common shares	Share purchase warrants	Contributed surplus	Accumulated other comprehensive income(loss)	Deficit	Total
		$	$	$	$	$	$
Balance, as at December 31, 2015		13,723,800	54,146	2,364,591	307,433	(14,516,565)	1,933,405
Earnings for the year		-	-	-	-	547,275	547,275
Foreign currency translation differences on foreign operations		-	-	-	(120,286)	-	(120,286)
Total comprehensive earnings for the year		-	-	-	(120,286)	547,275	426,989
Conversion of debentures	**16**	37,989	-	-	-	-	37,989
Warrants exercised	**17**	27,292	(2,795)	-	-	-	24,497
Stock options exercised	**18**	-	-	-	-	-	-
Stock-based compensation	**18**	-	-	4,068	-	-	4,068
		65,281	(2,795)	4,068	-	-	66,554
Balance, as at December 31, 2016		13,789,081	51,351	2,368,659	187,147	(13,969,290)	2,426,948
Earnings for the year		-	-	-	-	1,530,116	1,530,116
Foreign currency translation differences on foreign operations		-	-	-	395,665	-	395,665
Total comprehensive earnings for the year		-	-	-	395,665	1,530,116	1,925,781
Conversion of debentures	**16**	2,624,142	-	(506,853)	-	-	2,117,289
Warrants exercised	**17**	758,728	(51,351)	-	-	-	707,377
Stock options exercised	**18**	32,904	-	(13,544)	-	-	19,360
Stock-based compensation	**18**	-	-	102,556	-	-	102,556
		3,415,774	(51,351)	(417,841)	-	-	2,946,582
Balance, as at December 31, 2017		17,204,855	-	1,950,818	582,812	(12,439,174)	7,299,311

See accompanying notes to the financial statements

Biorem Inc.

Consolidated statements of cash flows
Years ended December 31, 2017 and 2016

In Canadian dollars	Notes	2017	2016
		$	$
Operating activities			
Net earnings		1,530,116	547,275
Items not involving cash:			
Depreciation	**13**	35,234	50,969
Finance (income) costs	**7**	(1,576)	277,650
Stock based compensation	**18**	102,556	4,068
		1,666,330	879,962
Change in non-cash operating working capital			
Restricted cash and cash equivalents		528,023	187,144
Accounts receivable		(1,016,208)	(4,474,330)
Unbilled revenue		(975,599)	389,248
Inventories		(310,239)	233,086
Prepaid expenses and deposits		(492,951)	(62,723)
Investment tax credits recoverable		27,023	(27,023)
Accounts payable		1,183,824	1,191,608
Accrued liabilities		579,886	(441,271)
Provisions		(40,324)	133,023
Unearned revenue		23,486	1,366,095
Cash provided by (used in) operating activities		1,173,251	(625,181)
Investing activities			
Purchase of equipment	**13**	(14,338)	(11,960)
Cash provided by (used in) investing activities		(14,338)	(11,960)
Financing activities			
Repayment of 12.75% debenture	**16**	-	(885,000)
Repayment of 8% convertible debenture	**16**	-	(10,000)
Proceeds from issuance common shares on exercise of stock options and warrants	**17**	726,737	24,497
Legal fees related to conversion of convertible debentures		(42,640)	-
Interest (paid) received	**7**	1,576	(53,507)
Cash provided by (used in) financing activities		685,673	(924,010)
Foreign exchange gain (loss) on foreign denominated cash and cash equivalents		605,564	(45,595)
Increase (decrease) in cash and cash equivalents		2,450,150	(1,606,746)
Cash and cash equivalents, beginning of year		1,118,297	2,725,043
Cash and cash equivalents, end of year	**10**	3,568,447	1,118,297

See accompanying notes to consolidated financial statements.

1. General information

BIOREM Inc. ("BIOREM") is a company with its head office domiciled in Canada.

The address of BIOREM's registered office is 7496 Wellington Road 34, Puslinch, Ontario. The Company's common shares are listed on the TSX Venture Exchange and trade under the symbol BRM.V. The consolidated financial statements of BIOREM comprise BIOREM and its subsidiaries (together referred to as "the Company"). The Company is primarily involved in the manufacturing of a comprehensive line of high efficiency air pollution control systems that are used to eliminate odorous and harmful contaminants.

2. Basis of presentation

a) Statement of compliance

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

The consolidated financial statements were approved by the Board of Directors and authorized for issuance on March 22, 2018.

b) Basis of measurement

These consolidated financial statements have been prepared on the historical cost basis of accounting, with the exception of financial instruments classified as fair value through profit and loss, and share based payments, both of which are measured at fair value.

c) Functional and presentation currency

The functional currency of BIOREM and its subsidiaries is the currency of their primary economic environment. These consolidated financial statements are presented in Canadian dollars, which is BIOREM's functional currency. The functional currency of BIOREM's subsidiary located in the United States is the US dollar and the functional currency of BIOREM's subsidiaries located in China is the Chinese renminbi.

d) Use of estimates and judgments

The preparation of the consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

i) Critical judgments in applying accounting policies

The following are the critical judgments, apart from those involving estimations, that management has made in the process of applying the Company's accounting policies and that have the most significant effects on the amounts recognized in the consolidated financial statements.

Indicators of impairment

IAS 36, *Impairment of assets*, requires management to assess the carrying values of the Company's non-financial assets, excluding inventory, at each reporting period and determine whether indicators of impairment exist. The determination of the existence of indicators of impairment requires judgment. Management also exercises judgment to determine whether there are factors that would indicate a cash generating unit ("CGU") is impaired. Some indicators of impairment that management may consider include changes in the current and expected future use of the asset, external valuations of the asset, and obsolescence or physical damage to the asset.

2. Basis of presentation (continued)

d) Use of estimates and judgements (continued)

ii) *Key sources of estimation uncertainty*

The following are the key sources of estimation uncertainty at the end of the reporting period that have a significant risk of causing a material adjustment to the consolidated financial statements within the next twelve months.

Estimation of contract costs

The Company recognizes revenue on its construction contracts using the percentage-of-completion method, under which contract revenue is recognized in proportion to the contract costs incurred in relation to the total costs estimated to complete the contract, as indicated in note 3(b). The determination of estimated costs to complete contracts requires management to make estimates regarding future material and labour costs. Differences between actual contract costs incurred and estimated contract costs could materially affect the timing of the recognition of contract revenues.

Determination of recoverable amount of equipment and leasehold improvements

Under IAS 36, Impairment of Assets, when indicators of impairment of the Company's non-financial assets, excluding inventory, exist, management is required to estimate the recoverable amount of the asset, as discussed in note 3(i). The determination of the recoverable amount of the asset involves estimates of the future cash flows attributable to the asset, the time-value of money, the life of the asset and/or the fair value of the asset. Differences between the actual amounts of these variables and the estimated amounts could materially affect the consolidated financial statements, both in determining the existence of any impairment and in determining the amount of any impairment.

Determination of useful lives and residual values of long-lived assets

The Company's leasehold improvements and equipment are depreciated or amortized to their residual values over their estimated useful lives. On an annual basis, management assesses the estimated useful lives and the residual values of these long-lived assets to determine whether they are still appropriate. In the determination of useful lives, management may consider changes in the current and expected use of the asset, changes to the asset's physical condition, or the acquisition of new assets which render existing assets obsolete. In the determination of residual values, management may consider changes in the asset's physical condition, its anticipated use, and external valuations of the asset. Differences between these estimates and the actual lives and residual values of the Company's long-lived assets could materially affect both the timing and amounts of depreciation and amortization expense.

Provisions

The Company recognizes provisions relating to warranties and termination benefits. As indicated in note 3(k), the determination of the warranty provision is based on historical warranty data, the time-value of money, as well as management's assessment of specific warranty claims, if any. Termination benefits are measured based on management's assessment of the merits of the claim and ultimate estimated settlement cost. Estimates are also made regarding the timing of the cash outflows relating to any termination benefits and warranty claims. Differences between the timing and amount of estimated expenses relating to these claims could differ materially from the actual expenses incurred.

3. Significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these consolidated financial statements, unless otherwise indicated. The accounting policies have been consistently applied by the Company's subsidiaries.

a) Basis of consolidation

Subsidiaries are entities controlled by the Company. The financial statements of subsidiaries (which are wholly owned by the Company) are included in the consolidated financial statements from the date that control commences until the date that control ceases. Accordingly, the consolidated financial statements include the accounts of Biorem Technologies Inc., Biorem Environmental Inc., Biorem Hong Kong, Biorem (Beijing) Environmental Technologies Company Limited and Tianjin Biqing Environmental Technology Co., Ltd in addition to those of BIOREM. All significant inter-company transactions and balances have been eliminated.

b) Revenue recognition

The Company generates revenues from the sale of standard products, from construction projects for specialized products and from services for repairs and maintenance.

Revenue is measured at the fair value of the consideration received or receivable, net of returns and trade discounts.

i) Standard products

Revenue for standard products is recognized when persuasive evidence of an arrangement exists, usually in the form of an executed sales agreement, the significant risks and rewards of ownership have been transferred to the buyer, recovery of the consideration is probable, the associated costs and possible return of products can be estimated reliably, there is no continuing management involvement with the products, and the amount of revenue can be measured reliably. The timing of the transfers of risks and rewards of ownership varies depending on the individual terms of the contract of sale but are primarily on the delivery of the product to the end user.

ii) Construction contracts

The Company derives revenue from construction contracts which require performance over a time span which may extend beyond one or more accounting periods. The Company recognizes revenue on construction contracts using the percentage-of-completion method, based on costs incurred relative to the estimated total contract costs.

Contract revenue includes the initial amount agreed in the contract plus any variations in contract estimated reliably, contract revenue is recognized in profit or loss in proportion to the stage of completion of the contract. Contract costs are expensed as incurred. Contract costs include all amounts that relate directly to the specific contract, are attributable to contract activity, and are specifically chargeable to the customer under the terms of the contract.

The stage of completion of a contract is determined by reference to actual costs of work performed and estimates of remaining work to be completed. When the outcome of a construction contract cannot be estimated reliably, contract revenue is recognized only to the extent of contract costs incurred that are likely to be recoverable. An expected loss on a contract is recognized immediately in profit or loss.

On an ongoing basis, the estimated total costs for construction contracts are revised based on the information available at the end of the reporting period. Changes in estimated total costs are reflected in the percentage of completion calculation of applicable projects in the same period as the change in estimate occurs.

Unbilled revenue represents revenue earned in excess of amounts billed on uncompleted contracts.

Unearned revenue represents the excess of amounts billed to customers over revenue earned on uncompleted contracts.

3. Significant accounting policies (continued)

b) Revenue recognition (continued)

iii) Services

Revenue relating to services rendered is recognized in profit or loss when the service is provided.

c) Foreign currency

i) Foreign currency transactions

Monetary assets and liabilities denominated in foreign currencies at the reporting date are translated into Canadian dollars at rates of exchange in effect at that date. Non-monetary assets and liabilities arising from transactions denominated in foreign currencies are translated at the historical exchange rate. Revenues and expenses denominated in a foreign currency are translated at the monthly average exchange rate which approximates the historical exchange rate on the date of the transaction. Adjustments to the Canadian dollar equivalent of foreign denominated monetary assets and liabilities due to the impact of exchange rate changes are recognized in other income in the statement of operations at each reporting period.

ii) Foreign operations

On consolidation, assets and liabilities of BIOREM's subsidiaries are translated into the Canadian dollar at the exchange rate on the reporting date. The income and expenses of foreign operations are translated to Canadian dollars using average exchange rates for the month during which the transactions occurred. Foreign currency differences arising on the translation of foreign operations are recognized and presented in other comprehensive earnings (loss).

d) Financial instruments

The Company aggregates its financial instruments into classes based on their nature and characteristics. The Company has classified its financial instruments as follows:

- Cash and cash equivalents are classified as loans and receivables
- Restricted cash and cash equivalents are classified as loans and receivables
- Accounts receivable are classified as loans and receivables
- Accounts payable and accrued liabilities are classified as other liabilities
- Long-term and short-term debt are classified as other liabilities
- Derivative financial instruments are classified as fair value through profit or loss.

e) Financial assets and financial liabilities

Financial assets and financial liabilities are initially recognized at fair value plus directly attributable transaction costs, unless the transaction costs relate to financial instruments classified as fair value through profit or loss, in which case they are expensed immediately. Subsequent measurement is determined based on initial classification.

The Company uses trade date accounting for regular-way purchases and sales of financial assets.

i) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Subsequent to initial measurement, loans and receivables are carried at amortized cost using the effective interest method less any impairment losses. Allowances for doubtful receivables represent the Company's estimates of losses that could arise from the failure or inability of customers to make payments when due. Loans and receivables are further classified as current or non-current depending on whether these will be realized within twelve months after the balance sheet date or beyond.

3. Significant accounting policies (continued)

e) Financial assets and financial liabilities (continued)

ii) Other liabilities

Subsequent to initial measurement, other liabilities are measured at amortized cost using the effective interest method.

iii) Fair value through profit or loss

A financial instrument is classified as fair value through profit or loss if it is held for trading or is designated as such on initial recognition.

iv) Derivative financial instruments

From time to time, the Company enters into forward foreign exchange contracts to hedge its exposure to changes in foreign exchange rates. The Company records all of its forward contracts at fair value, with changes in fair value recorded in other income in the statement of operations.

v) Fair value

The fair value of a financial instrument is the amount of consideration that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act. The fair value of a financial instrument on initial recognition is the transaction price, which is the fair value of the consideration given or received. Subsequent to initial recognition, the fair values of financial instruments that are quoted in active markets are based on bid prices for financial assets held and offer prices for financial liabilities. When independent prices are not available, fair values are determined by using valuation techniques that refer to observable market data.

vi) 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 as the difference between the proceeds received or receivable from issuance of the instrument, and the amount determined to represent 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, and any gains and losses relating to the financial liability are recognized in profit or loss.

f) Inventories

Inventories are measured at the lower of cost and net realizable value. The cost of inventories is based on the weighted average and includes expenditures incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing condition. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses. When circumstances which previously caused inventories to be written down to its net realizable value no longer exist, the previous impairment is reversed.

g) Equipment and leasehold improvements

Equipment and leasehold improvements are measured at cost less accumulated depreciation, applicable government assistance or investment tax credits, and any recognized impairment loss.

Cost includes expenditures that are directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the assets to a working condition for their intended use, the costs of dismantling and removing the items and restoring the site on which they are located, and borrowing costs on qualifying assets.

3. Significant accounting policies (continued)

g) Equipment and leasehold improvements (continued)

Purchased software that is integral to the functionality of the related equipment is capitalized as part of that equipment.

Depreciation is recognized so as to write off the cost of assets less their residual values over their useful lives on the following bases:

Asset	Basis	Rate
Research and production equipment	Declining balance	20%
Office equipment	Straight-line or declining balance	3 years or 20%
Leasehold improvements	Straight-line	lesser of term of lease and useful life

Depreciation methods, useful lives and residual values are reviewed at each financial year end and adjusted if appropriate.

The gain or loss arising on the disposal or retirement of an asset is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognized in income at the time of disposal.

h) Intangible assets

i) Research and development

Expenditures on research activities are recognized as expenses in the period in which they are incurred.

An internally-generated intangible asset arising from the Company's development is recognized only if all of the following conditions are met:

- an asset is created that can be identified
- the product or process is technically and commercially feasible
- it is probable that the asset created will generate future economic benefits
- the Company intends to and has sufficient resources to complete development and to use or sell the asset
- the development cost of the asset can be measured reliably.

To date no development expenditures have been capitalized.

ii) Other intangible assets

Patents and trademarks are measured initially at cost and are amortized on a straight-line basis to their estimated residual values. Technology and customer lists represent assets that were acquired by the Company and measured initially at cost and are amortized on a straight-line basis to their estimated residual values. These intangible assets are amortized on a straight-line basis over ten years, representing their estimated useful lives.

Amortization methods, useful lives and residual values are reviewed at each financial year end and adjusted, if appropriate.

3. Significant accounting policies (continued)

i) Impairment of non-financial assets

The carrying amounts of the Company's non-financial assets, other than inventories, are reviewed at each reporting date to determine if there is any indication of impairment. If such indication exists, then 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 ("CGU") exceeds its estimated recoverable amount.

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU.

The Company's corporate assets do not generate separate cash inflows and are utilized by more than one CGU. Corporate assets are allocated to CGUs on a reasonable and consistent basis and tested for impairment as part of the testing of the CGU to which the corporate asset is allocated.

Assets that suffer an impairment are tested for possible reversal of the impairment at each reporting date.

j) Leases

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases are recognized in profit or loss on a straight-line basis over the term of the lease. Lease incentives received are recognized as an integral part of the total lease expense, over the term of the lease.

k) Provisions

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that the Company will be required to settle that obligation and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. Provisions are determined by discounting the cash flows estimated to settle the obligation at a pre-tax rate that reflects current market assessment of the time value of money and risks specific to the Company. The unwinding of the discount is recognized as finance cost.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

A provision for warranties is recognized when the underlying products or services are sold. The provision is based on historical warranty data and a weighting of all possible outcomes against their associated probabilities.

l) Stock options

The grant-date fair value of share-based payment awards granted to employees is recognized as an employee expense, with a corresponding increase in contributed surplus, over the period that the employees unconditionally become entitled to the awards. The amount recognized as an expense is adjusted to reflect the number of awards for which the related service and non-market vesting conditions are expected to be met, such that the amount ultimately recognized as an expense is based on the number of awards that meet the related service and non-market performance conditions at the vesting date.

3. Significant accounting policies (continued)

m) Government grants

Government grants are not recognized until there is reasonable assurance that the Company will comply with the conditions attaching to them and that the grants will be received.

The benefit of a government loan at a below-market rate of interest is treated as a government grant, measured as the difference between proceeds received and the fair value of the loan based on prevailing market interest rates.

Government grants whose primary condition is that the Company should purchase, construct or otherwise acquire non-current assets are treated as a reduction of the plant and equipment costs.

Other government grants are recognized as other income over the periods necessary to correspond with the costs for which they are intended to compensate, on a systematic basis. Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Company with no future related costs are recognized in profit or loss in the period in which they become receivable.

n) Finance costs

Finance costs comprise interest expense on borrowings, accretion of provisions and accretion of warrant and transaction costs netted against the Company's debenture, that are not directly attributable to the acquisition, construction or production of a qualifying asset, are recognized in profit or loss using the effective interest method.

o) Earnings (loss) per share

The Company presents basic and diluted earnings (loss) per share data for its common shares. Basic earnings (loss) per share is calculated by dividing the earnings (loss) attributable to common shareholders of the Company by the weighted average number of common shares outstanding during the period. Diluted earnings (loss) per share is determined by adjusting the earnings (loss) attributable to common shareholders and the weighted average number of common shares outstanding adjusted for the effects of all dilutive potential common shares, which comprise warrants and stock options granted to employees and convertible debentures. The number of additional shares is calculated by assuming that outstanding warrants, share options and convertible debentures were exercised and that proceeds from such exercises along with the unamortized stock based compensation were used to acquire common shares at the average market price during the reporting period.

p) Income tax

Income tax expense comprises current and deferred tax. Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantially enacted at the reporting date, and any adjustment to tax payable in respect of previous years. Deferred tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date. A deferred tax asset is recognized for unused tax losses, tax credits and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which they can be utilized.

q) Operating segments

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker. The chief decision maker is responsible for allocating resources and assessing the performance of the operating segments and has been identified as the Senior Leadership Team that makes strategic decisions. The Company operates and reports its results as one operating segment.

3. Significant accounting policies (continued)

r) Cash and cash equivalents

Cash and cash equivalents consist of cash on hand and short-term deposits with original maturities of less than three months.

s) Statements of cash flows

Cash paid for interest is presented as a financing activity.

t) Investment tax credits

The Company applies for investment tax credits relating to qualified expenditures under available government incentive programs including the Scientific Research and Experimental Development program. The benefit of investment tax credits is recognized when the applicable eligible expenditures generating the investment tax credits are incurred and are recorded as other income. Investment tax credits related to the acquisition of equipment are deducted from the costs of the related assets.

u) New accounting pronouncements not yet adopted

The International Accounting Standards Board has issued the following Standards, Interpretations and amendments to Standards that are not yet effective and while considered relevant to the Company have not yet been adopted by the Company and the Company is currently assessing the impact of these new standards.

Financial Instruments

IFRS 9 is applicable retrospectively in accordance with IAS 8, Accounting Policies, Changes in Accounting Estimates and Errors, subject to certain exemptions and exceptions. In general, the main changes introduced by IFRS 9 are related to the classification and measurement of financial assets, the introduction of a new impairment model based on expected credit losses (rather than incurred losses as per IAS 39, Financial Instruments: Recognition and Measurement) and hedge accounting. Although the methodology related to the classification of financial assets will change, the Company expects that most of its financial assets currently classified as “loans and receivables” and measured at amortized cost (approximately $8 million as at December 31, 2017) will be classified as “financial assets subsequently measured at amortized cost”. Excluding the potential impact from the change in the impairment model applicable to these financial assets, which is currently being analyzed (see below), the Company does not expect any significant impact on their measurement. The Company does not expect any significant impact from the classification of its financial liabilities.

The Company is currently evaluating the impact of determining the amount of impairment of certain financial assets based on the expected credit loss model. While the Company had approximately $727,000 of allowance for doubtful accounts on its trade receivables as at December 31, 2017, most of this allowance was related to commercial reasons, such as balances being disputed or subject to negotiation, rather than credit risk. The Company also has reserves on its contract in progress amounts, but most of these reserves are also due to commercial reasons rather than credit risk.

Upon adoption of IFRS 9, the Company expects to apply the exemption from the requirement to restate comparative information. Therefore, differences between the previous carrying amounts and the carrying amounts at the date of initial application, if any, will be recognized in the opening balance of retained earnings or other components of equity, as appropriate, as at January 1, 2018.

The Company is currently assessing the impact of the change on its financial systems, internal controls and policies and procedures related to the adoption of IFRS 9.

Revenues from Contracts with Customers

IFRS 15 introduces a 5-step model to revenue recognition on contracts with customers. Such model requires the Company to: 1) identify the contract with the customer; 2) identify the performance obligations related to that contract; 3) determine the transaction price of the contract; 4) allocate such transaction price between the performance obligations; and 5) recognize revenue when (or as) performance obligation is satisfied. In addition to recognition and measurement, IFRS 15 also provides new requirements on presentation and disclosures.

3. Significant accounting policies (continued)

u) New accounting pronouncements not yet adopted (continued)

Transition considerations

IFRS 15 can be applied using one of the following two methods: retrospectively to each prior reporting period presented in accordance with IAS 8, Accounting Policies, Changes in Accounting Estimates and Errors, or retrospectively with the cumulative effect of initially applying IFRS 15 recognized in opening retained earnings at the date of initial application (the “modified retrospective method”). The Company decided to adopt IFRS 15 using the modified retrospective method, with recognition of transitional adjustments in retained earnings on the date of initial application (January 1, 2018), without restatement of comparative figures.

IFRS 15 provides for certain optional practical expedients, including upon the initial adoption of the standard. The Company intends to apply the following practical expedients upon adoption of IFRS 15 on January 1, 2018:

PRACTICAL EXPEDIENT	DESCRIPTION
Completed contract	The Company will apply IFRS 15 retrospectively only to contracts that are not completed contracts as at January 1, 2018.(see Note 4)
Contract modifications	The Company will not apply IFRS 15 retrospectively to contract modifications that occurred before January 1, 2018.

Quantification of impact

The adoption of IFRS 15 by the Company is likely to have minimal impact on the Company’s consolidated financial statements. The following items represent the possible impact areas for the Company on transition to IFRS 15:

Change orders and claims

Change orders and claims, referred to as contract modifications are currently recognized as per guidance provided in IAS 11, Construction Contracts (“IAS 11”). Under such guidance, revenue can be recognized on contract modifications only when certain conditions are met, including the fact that it is probable the customer will approve the modification and the amount of revenue arising from such contract modifications. IFRS 15 also provides guidance on the recognition of revenue from contract modifications. Such guidance is based, among other factors, on the fact that the contract modification is approved and it is highly probable that a significant reversal in the amount of cumulative revenue recognized on such contract modifications will not occur when the uncertainty is subsequently resolved. Given that under IAS 11, the Company has only recognized contract modifications that have been approved by customers the new higher level of probability to be applied under IFRS 15 will have no impact on revenue recognition by the Company.

Measure of anticipated revenues and determination of progress

Under IFRS 15, the amount of anticipated revenue used when determining the amount of revenue to be recognized must be based on contracts with legally enforceable rights and obligations. The Company only recognizes revenue from contracts with legally enforceable rights and obligations so the adoption of IFRS 15 will have no significant impact on retained earnings or the amount of future reported revenues.

IFRS 15 requires that assurance-type warranty costs to be excluded from the measure of progress of projects for which revenue is recognized over time using a cost input method. The Company currently accounts for its assurance-type warranty costs as costs independent and subsequent to project completion and revenue recognition. As a result, the Company carries a provision for such expected warranty costs in accordance with IAS 37, Provisions, Contingent Liabilities and Contingent Assets, based on the advancement of the projects. Consequently it is not expected that the adoption of IFRS 15 will significantly impact the way the Company determines warranty provision.

3. Significant accounting policies (continued)

u) New accounting pronouncements not yet adopted (continued)

Presentation and disclosures

The Company does not anticipate any change in presentation or disclosure will be required with the adoption of IFRS 15.

Procedures and controls

The Company does not anticipate that any significant changes in procedures or controls will be necessary to meet the requirements of IFRS 15.

4. Revenue

	2017	2016
	$	$
Standard products and services	1,077,902	953,054
Construction contracts	21,480,368	14,943,092
	22,558,270	15,896,146

Costs and estimated earnings on uncompleted contracts

	2017	2016
	$	$
Costs incurred on uncompleted contracts	21,631,850	19,543,579
Estimated earnings on uncompleted contracts, net of recognized losses	14,549,697	11,952,460
	36,181,547	31,496,039
Less: billings to date	(36,100,668)	(32,304,339)
	80,879	(808,300)
Unbilled revenue	2,622,411	1,762,979
Unearned revenue	(2,541,532)	(2,571,279)
	80,879	(808,300)

5. Segmented information

The Company attributes revenues to geographical regions based on the domicile of its customers.

Management has determined that the Company operates in one dominant industry segment, which involves the manufacture and sale of high efficiency air pollution control systems.

The Company's revenue and capital assets breaks down geographically as follows:

	Revenue		Capital assets (1)	
	2017	2016	2017	2016
	$	$	$	$
Canada	5,487,767	6,896,770	38,122	55,654
United States	14,168,828	5,030,941	25,150	32,445
China	1,065,988	686,872	17,187	16,449
Other international	1,835,687	3,281,563	-	-
Total	22,558,270	15,896,146	80,459	104,548

(1) Includes equipment and leasehold improvements.

In 2017, four customers accounted for 34% of total revenue (2016 – two customers accounted for 28% of total revenue). Three customers accounted for 48% of accounts receivable at December 31, 2017 (2016 - one customer accounted for 31%).

6. Other expense (income)

	2017	2016
	$	$
Foreign exchange loss (gain)	129,766	(152,597)
Government funding	(31,300)	(175,315)
Investment tax credits	(56,440)	(29,135)
	42,026	(357,047)

Investment tax credits

The Company is eligible for Federal investment tax credits at a rate of 20% of qualifying scientific research and experimental development expenditures conducted in Canada, in addition to investment tax credits or deductions available from provincial jurisdictions. Federal investment tax credits are only available to the Company to be applied against future income taxes payable and, accordingly, no recognition of Federal amounts has been reflected in the statement of financial position.

Government funding

The Company receives funding from the Natural Sciences and Engineering Research Council ("NSERC") for the employment of university students in research. The Company recorded $27,000 as other during the year (2016- $28,220).

The Company has been approved for funding through the Industrial Research Assistance Program (IRAP). The funding is to support the Company's research into advanced biological technologies for the control of odour and volatile organic compounds. The Company receives contributions of 50% of the eligible costs. The Company has recorded $4,300 as other income during the year (2016 - $147,095).

7. Finance costs

	2017	2016
	$	$
Short term interest	(1,576)	(10,292)
Long-term debt interest	-	287,942
	(1,576)	277,650

8. Income taxes

a) Income tax recognized in net earnings

	2017	2016
	$	$
Net earnings	1,530,116	547,275
Income tax expense calculated at 26.5% (2016 - 26.5%)	405,480	145,028
Change in tax rates	373,023	-
Effect of tax rate differential in foreign operations	422	58,943
Effect of expenses that are not deductible in determining taxable profit	28,554	4,367
Effect of losses (utilized) carried forward	(807,479)	(208,338)
Income tax expense recognized in net earnings	-	-

b) Unrecognized deferred tax assets

	2017	2016
	$	$
Tax assets		
Benefit of tax losses to be carried forward	367,000	1,338,000
Scientific research and experimental development expenditures available in future years	2,363,000	2,064,000
Provisions not yet deducted for tax	547,000	832,000
Capital assets - difference in accounting book value and undepreciated tax capital cost	180,000	318,000
	3,457,000	4,552,000

8. Income taxes (continued)

c) Income tax losses

As at December 31, 2017, the Company has income tax losses available to reduce future years' taxable income, which expire as follows:

	Canada	U.S.	Total
	$	$	$
2028	-	56,000	56,000
2029	-	96,000	96,000
2030	-	65,000	65,000
2031	-	413,000	413,000
2032	-	106,000	106,000
2034	565,000	-	565,000
Indefinite	3,451,000	-	3,451,000
	4,016,000	736,000	4,752,000

In addition, the Company has Canadian investment tax credits available to be applied against future income taxes payable in the amount of approximately $1,725,000 which expire as follows:

2024	133,000
2025	261,000
2026	148,000
2027	207,000
2028	261,000
2029	161,000
2030	224,000
2031	68,000
2032	61,000
2033	86,000
2034	38,000
2035	39,000
2036	38,000
	1,725,000

9. Earnings per share

	2017	2016
Basic earnings per share	$ 0.04	$ 0.04
Calculated as:		
Net earnings	$ 1,530,116	$ 547,275
Weighted average number of shares outstanding	38,035,406	15,391,098
Diluted earnings per share	$ 0.04	$ 0.02
Calculated as:		
Net earnings	$ 1,530,116	$ 547,275
Interest on convertible debentures	-	227,664
Diluted earnings	$ 1,530,116	$ 774,939
Reconciliation of weighted average diluted shares outstanding:		
Weighted average common shares outstanding	38,494,374	15,391,098
Share options	554,418	20,667
Special warrants	-	2,762,916
Dilutive shares on conversion of convertible debentures	-	17,254,654
Weighted average number of shares outstanding used to calculate diluted earnings per share	39,048,792	35,429,335

10. Cash and cash equivalents

	$	$
Cash and cash equivalents:		
Cash	3,568,447	1,118,297
Restricted cash and cash equivalents:		
Short-term investments	-	528,023
	3,568,447	1,646,320

Restricted short-term investments of $528,023 in 2016 were related to a performance bond. The performance bond was released in 2017.

The restricted short–term investments were not available for general use by the Company.

11. Accounts receivable

The aging of the trade receivables net of allowance as at December 31 was as follows:

	2017		2016	
	$		$	
0-30 days	2,832,330	35%	2,959,966	42%
31-60 days	3,191,818	40%	1,422,234	20%
61-90 days	592,865	7%	1,071,006	15%
91-120 days	354,723	4%	956,702	13%
Over 120 days	1,038,822	13%	714,457	10%
	8,010,558	100%	7,124,365	100%

Accounts receivable in the amount of $897,887 (2016 - $437,031) (net of allowance for doubtful debts) relate to holdbacks associated with project completion and commissioning.

The gross amount due from customers for construction contracts at December 31, 2017 is $7,902,369 (2016 - $7,033,531).

Allowance for doubtful debts	2017	2016
	$	$
Balance at beginning of the year	673,544	856,619
Impairment losses recognized	103,370	201,322
Amounts written off during the year as uncollectible	(50,000)	(184,440)
Amounts recovered during the year	-	(199,957)
	726,914	673,544

In determining the recoverability of a trade receivable, the Company considers any change in the credit quality of the trade receivable from the date credit was initially granted up to the end of the reporting period.

12. Inventories

	2017	2016
	$	$
Raw materials	70,350	43,283
Finished goods	634,848	421,032
	705,198	464,315

The total amount of inventories included in cost of goods sold for the year was $12,430,442 (2016 - $8,448,605).

The cost of inventories recognized as an expense includes $nil (2014 - $nil) in respect of write-downs of inventories to net realizable value.

13. Equipment and leasehold improvements

	Research & production equipment	Office equipment	Leasehold improvements	Total
	$	$	$	$
Cost				
At December 31, 2015	1,532,053	714,342	356,140	2,602,535
Additions	11,960	-	-	11,960
Disposals	-	-	-	-
Exchange differences	(16,666)	(3,620)	(625)	(20,911)
At December 31, 2016	1,527,347	710,722	355,515	2,593,584
Additions	14,338	-	-	14,338
Disposals	-	-	-	-
Exchange differences	(37,498)	(8,144)	(1,407)	(47,049)
At December 31, 2017	1,504,187	702,578	354,108	2,560,873
Accumulated depreciation				
At December 31, 2015	1,472,656	633,181	348,989	2,454,826
Charge for the year	29,842	18,638	2,489	50,969
Disposals	-	-	-	-
Exchange differences	(13,246)	(2,888)	(625)	(16,759)
At December 31, 2016	1,489,252	648,931	350,853	2,489,036
Charge for the year	25,253	7,492	2,489	35,234
Disposals	-	-	-	-
Exchange differences	(35,132)	(7,317)	(1,407)	(43,856)
At December 31, 2017	1,479,373	649,106	351,935	2,480,414
Carrying amount				
At December 31, 2016	38,095	61,791	4,662	104,548
At December 31, 2017	24,814	53,472	2,173	80,459

Depreciation of $21,412 (2016 - $40,503) has been recognized in cost of goods sold, $3,373 (2016 - $3,339) has been recognized in research and development expenses and $10,449 (2016 - $7,127) has been recognized in general and administration expenses.

14. Provisions

Warranty	2017	2016
	$	$
Balance, beginning of year	504,052	379,411
Provisions used during the year	(65,999)	(95,258)
Provisions made during the year	25,675	219,899
	463,728	504,052

15. Contingency

The Company along with multiple other defendants is subject to a claim for $12 million for damages related to an explosion at a waste water treatment plant in Ontario in 2014. The Company believes that the allegations contained in the statement of claim are without merit and plans to vigorously defend itself. No reliable estimate of any contingency can be made at this time, consequently no provision has been made for this claim.

From time to time, the Company is subject to legal proceedings and claims arising in the ordinary course of business. Management is of the opinion, based upon information presently available, that it is unlikely that any such liability, to the extent not provided for by insurance or otherwise, would have a material adverse effect in relation to the Company's consolidated financial position, liquidity, or results of operations.

16. Long-term debt

	2017	2016
	$	$
8% convertible debentures Series 1	-	700,370
8% convertible debentures Series 2	-	1,465,201
	-	2,165,571
Less: Current Portion	-	(2,165,571)
Long-term debt	-	-

a) 8% convertible debentures

Series 1

On May 4, and June 4, 2012, the Company issued 8% convertible secured subordinated debentures (the "Debentures") for combined proceeds of $659,000. The Debentures had a maturity date of two years from the date of issuance and were 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 could be prepaid in full at any time without penalty by the Company upon giving holders 15 days' notice of prepayment. Interest on the Debentures accrues at a rate of 8% per annum and is payable at maturity. Due to the conversion feature, the Debentures were accounted for as compound financial instruments.

16. Long-term debt (continued)

a) 8% convertible debentures Series 1 (continued)

The convertible debentures contained an extension clause that allowed the Company to extend the maturity date of the convertible debentures by up to five years if holders of not less than 66 2/3% of the outstanding principal amount agree to such an extension. Similarly, the convertible debentures contained a conversion clause that requires all holders to convert their convertible debentures into common shares at the rates set out above, if holders of not less than 66 2/3% of the outstanding principal amount agree to such a conversion.

In conjunction with the issue of the Debentures, 1,850,472 common share purchase warrants were issued. Each warrant entitled the holder to purchase one common share at a price of $0.178 per share for a period of two years from issuance. (see note 17)

A discount rate of 15% was used to calculate the fair value of the liability portion of the Debentures with the difference between the fair value and proceeds being ascribed to the share purchase warrants and conversion feature, on a relative fair value basis. The difference between the contractual amount of the Debentures and the fair value of the liability portion of the Debentures was calculated to be $74,994 and has been recognized as share purchase warrants and contributed surplus issued within shareholders' equity for the amounts of $24,992 and $50,002 relating to the warrants and conversion feature respectively. The difference between the contractual amount of the debentures and the fair value of the liability portion of the Debentures were recognized as a finance cost with a corresponding increase in the carrying amount of the Debentures using the effective interest method over 24 months. Finance costs of $54,983 were recorded with the Debentures and were recognized as an expense using the effective interest method over 24 months.

On April 21, 2014 the holders of the Series 1 2012 convertible debentures agreed to extend the maturity date of the debentures to May 5, 2015. All other terms of the convertible debentures remained the same.

The net present value of the future cash flows under the extended term were greater than 10% different than the net present value of the remaining cash flows immediately prior to the extension consequently under IFRS the extension represents a significant modification to the original instrument and is therefore considered to be an extinguishment of debt and reissuance of new debt. A discount rate of 15% was used to calculate the fair value and the carrying value was ascribed to the conversion feature and recorded to contributed surplus.

On May 5, 2015 the holders of the Series 1 2012 convertible debentures agreed to extend the maturity date of the debentures to August 16, 2016. All other terms of the convertible debentures remained the same.

The net present value of the future cash flows under the extended term were less than 10% different than the net present value of the remaining cash flows immediately prior to the extension consequently under IFRS the extension did not represent a significant modification to the original instrument and is therefore not considered to be an extinguishment of debt and reissuance of new debt.

2016 Activities

On August 2, 2016 the maturity date of the Series 1 convertible debentures was extended to November 16, 2016.

On November 10, 2016 the maturity date of the Series 1 convertible debentures, was extended to December 16, 2016.

On December 6, 2016 the maturity date of the Series 1 convertible debentures, was extended to January 6, 2017.

2017 Activities

On January 5, 2017 the maturity date of the Series 1 convertible debentures, was extended to January 16, 2017.

On January 16, 2017 the maturity date of the Series 1 convertible debentures, was extended to January 30, 2017.

During the year debenture holders converted $510,000 (2016 – $9,000) of principal and $190,390 (2016 - $2,683) of accrued interest into 3,934,776 (2016 – 65,633) common shares.

16. Long-term debt (continued)

a) 8% convertible debentures (continued)

Series 2

On July 25, and August 16, 2012, the Company issued 8% convertible secured subordinated debentures (“Series 2”) for combined proceeds of $1,116,000. The Series 2 Debentures had 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 Series 2 Debentures could be prepaid in full at any time by the Company upon giving holders 15 days’ notice of prepayment. Interest on the Series 2 Debentures accrues at a rate of 8% per annum and is payable at maturity. Due to the conversion feature, the Series 2 Debentures were accounted for as compound financial instruments.

The Series 2 convertible debentures contained an extension clause that allowed the Company to extend the maturity date of the Series 2 convertible debentures by up to five years if holders of not less than 66 2/3% of the outstanding principal amount agree to such an extension. Similarly, the Series 2 convertible debentures contained a conversion clause that required all holders to convert their convertible debentures into common shares at the rates set out above, if holders of not less than 66 2/3% of the outstanding principal amount agree to such a conversion.

In conjunction with the issue of the Series 2 Debentures, 5,072,220 common share purchase warrants were issued. Each warrant entitled the holder to purchase one common share at a price of $0.11 per share for a period of two years from issuance. (See note 17)

A discount rate of 15% was used to calculate the fair value of the liability portion of the Series 2 Debentures with the difference between the fair value and proceeds being ascribed to the share purchase warrants and conversion feature. The difference between the contractual amount of the Series 2 Debentures and the fair value of the liability portion of the Series 2 Debentures was calculated to be $127,000 and was recognized as share purchase warrants and contributed surplus issued within shareholders’ equity for the amounts of $42,331 and $84,669 relating to the warrants and conversion factor respectively. The difference between the contractual amount of the Series 2 Debentures and the fair value of the liability portion of the Series 2 Debentures were recognized as a finance cost with a corresponding increase in the carrying amount of the Series 2 Debentures using the effective interest method over 24 months. Finance costs of $32,744 were recorded with the Series 2 Debentures and were recognized as an expense using the effective interest method over 24 months.

On July 25, 2014 the holders of the Series 2 2012 convertible debentures agreed to extend the maturity date of the debentures to August 16, 2016. All other terms of the convertible debentures remained the same.

The net present value of the future cash flows under the extended term were greater than 10% different than the net present value of the remaining cash flows immediately prior to the extension consequently under IFRS the extension represents a significant modification to the original instrument and is therefore considered to be an extinguishment of debt and reissuance of new debt. A discount rate of 15% was used to calculate the fair value and the carrying value was ascribed to the conversion feature and recorded to contributed surplus.

2016 Activities

On August 2, 2016 the maturity date of the Series 2 convertible debentures was extended to November 16, 2016.

On November 10, 2016 the maturity date of the Series 2 convertible debentures, was extended to December 16, 2016.

On December 6, 2016 the maturity date of the Series 2 convertible debentures, was extended to January 6, 2017.

2017 Activities

On January 5, 2017 the maturity date of the Series 2 convertible debentures, was extended to January 16, 2017.

On January 16, 2017 the maturity date of the Series 2 convertible debentures, was extended to January 30, 2017.

During the year $Nil (2016 - $10,000) of debentures were repaid and holders converted $1,076,000 (2016 – $20,000) of principal and $383,538 (2016 – $6,306) of accrued interest into 13,268,528 (2016 - 239,143) common shares.

17. Issued capital

	2017		2016	
Common shares	#	$	#	$
Balance, beginning of year	15,680,894	13,789,081	15,169,046	13,723,800
Issued:				
Conversion of debentures	17,203,304	2,624,142	304,776	37,989
Exercise of options	67,000	32,904	-	-
Exercise of warrants	5,710,360	758,728	207,072	27,292
Balance, end of year	38,661,558	17,204,855	15,680,894	13,789,081

Common shares do not have a par value and carry one vote per share. There are an unlimited number of common shares authorized for issuance.

Share purchase warrants 2012 Series 1

In connection with the May 2012 issue of Series 1 8% convertible secured subordinated debentures, the Company issued 1,850,472 share purchase warrants which entitle the holder to purchase one common share at a price of $0.178 per share.

On May 5, 2015 in conjunction with the extension of the maturity date of the Series 1 convertible debentures, the expiry date of the 1,850,472 outstanding share purchase warrants that were issued in 2012 with the Series 1 convertible debentures as a unit, was extended to August 16, 2016.

On August 2, 2016 in conjunction with the extension of the maturity date of the Series 1 convertible debentures, the expiry date of the 1,165,360 outstanding share purchase warrants that were issued in 2012 with the Series 1 convertible debentures as a unit, was extended to November 16, 2016.

On November 10, 2016 in conjunction with the extension of the maturity date of the Series 1 convertible debentures, the expiry date of the 1,165,360 outstanding share purchase warrants that were issued in 2012 with the Series 1 convertible debentures as a unit, was extended to December 16, 2016.

On December 6, 2016 in conjunction with the extension of the maturity date of the Series 1 convertible debentures, the expiry date of the 1,165,360 outstanding share purchase warrants that were issued in 2012 with the Series 1 convertible debentures as a unit, was extended to January 6, 2017.

On January 5, 2017 in conjunction with the extension of the maturity date of the Series 1 convertible debentures, the expiry date of the 1,165,360 outstanding share purchase warrants that were issued in 2012 with the Series 1 convertible debentures as a unit, was extended to January 16, 2017.

During the year 1,165,360 (2016- 25,272) 2012 Series 1 share purchase warrants were exercised for common shares.

Share purchase warrants 2012 Series 2

In July 2012, the Company issued 5,072,220 share purchase warrants in connection with the issue of Series 2 8% convertible secured subordinated debentures. These share purchase warrants entitle the holder to purchase one common share at a price of $0.11 per share.

On July 25, 2014, in conjunction with the extension of the maturity date of the Series 2 convertible debentures, the expiry date of the 5,072,220 outstanding common share purchase warrants that were issued in 2012 with the Series 2 convertible debentures as a unit, was extended to August 16, 2016.

On August 2, 2016 in conjunction with the extension of the maturity date of the Series 2 convertible debentures, the expiry date of the 4,681,350 outstanding share purchase warrants that were issued in 2012 with the Series 2 convertible debentures as a unit, was extended to November 16, 2016.

On November 10, 2016 in conjunction with the extension of the maturity date of the Series 2 convertible debentures, the expiry date of the 4,681,350 outstanding share purchase warrants that were issued in 2012 with the Series 2 convertible debentures as a unit, was extended to December 16, 2016.

17. Issued capital (continued)

On December 6, 2016 in conjunction with the extension of the maturity date of the Series 2 convertible debentures, the expiry date of the 4,545,000 outstanding share purchase warrants that were issued in 2012 with the Series 2 convertible debentures as a unit, was extended to January 6, 2017.

On January 5, 2017 in conjunction with the extension of the maturity date of the Series 2 convertible debentures, the expiry date of the 4,545,000 outstanding share purchase warrants that were issued in 2012 with the Series 2 convertible debentures as a unit, was extended to January 16, 2017.

During the year 4,545,000 (2016 – 181,800) 2012 Series 2 share purchase warrants were exercised for common shares.

8% convertible debentures (note 16)

$659,000 8% convertible debentures Series 1 were issued in May 2012.

During the year $510,000 (2016-$9,000) of Series 1 convertible debentures plus accrued interest were converted to common shares.

$1,116,000 8% convertible debentures Series 2 were issued in July 2012.

During the year $1,076,000 (2016 - $20,000) of Series 2 convertible debentures plus accrued interest were converted to common shares. A total of $506,853 was reclassified from contributed surplus to share capital relating to the value allocated to the conversion feature. The Company incurred legal costs of $42,640 related to the issuance of the common shares on conversion of the debentures.

18. Stock-based compensation

The Company uses an equity settled employee share option plan to attract and retain key employees, senior executives and directors. Under the terms of the plan, which received shareholder approval, the aggregate number of shares reserved for issuance is fixed at 5,300,000. The maximum number of shares reserved for issuance pursuant to options granted to any one person is limited to 5% of the common shares outstanding at the time of the grant. The share option exercise price is the closing market price of the Company's common shares on the day prior to the date of the grant. Options granted under the plan may be exercised during a period not exceeding ten years from the date of the grant, subject to termination upon the option holder ceasing to be a director, senior executive or employee of the Company and have vesting periods of at least three years. Options issued under the plan are non-transferable.

a) Share options granted under the employee share option plan

As at December 31, 2017, executives and employees held options for 3,478,180 common shares (of which 2,253,712 were unvested), in aggregate, which expire over the period from May 20, 2018 to June 6, 2027. As at December 31, 2016, executives and employees held options for 457,000 common shares, in aggregate, which expire over the period from March 4, 2017 to July 13, 2026. Share options granted under the employee share option plan carry no rights to dividends and no voting rights.

i) The following table illustrates the significant assumptions underlying the Company's accounting for stock-based compensation:

Weighted average fair value of each option	0.19	0.25
Assumptions		
Weighted average share price	0.29	0.28
Weighted average exercise price	0.35	0.28
Expected volatility	60%	100%
Risk free interest rate	1%	1%
Expected life in years	10 years	10 years
Forfeiture rate	50%	18%
Expected dividend yield	0%	0%

Expected volatility was determined based on historical volatility over the expected life of the options.

18. Stock-based compensation (continued)

i) The following table summarizes the continuity of options issued under the plan:

	2017		2016	
	Number of options	Weighted average exercise price	Number of options	Weighted average exercise price
		$		$
Outstanding, beginning of year	457,000	0.62	447,000	0.76
Options forfeited	(26,320)	0.29	-	-
Options expired	(115,500)	1.25	(50,000)	1.50
Options exercised	(67,000)	0.31	-	-
Granted	3,230,000	0.35	60,000	0.28
Outstanding, end of year	3,478,180	0.35	457,000	0.62

ii) Options outstanding and exercisable at December 31, 2017:

Number outstanding	Exercise price	Remaining life in years	Number exercisable	average exercise price
	$			$
10,000	0.90	0.4	10,000	0.90
60,500	0.68	2.4	60,500	0.68
75,000	0.48	1.0	75,000	0.48
10,000	0.33	1.3	10,000	0.33
12,000	0.19	5.5	12,000	0.19
12,000	0.11	3.5	12,000	0.11
20,000	0.10	4.5	20,000	0.10
25,356	0.30	7.5	16,904	0.30
23,324	0.28	9.1	7,775	0.28
20,000	0.29	8.5	-	0.29
3,130,000	0.345	9.1	-	0.345
80,000	0.38	9.4	-	0.38
3,478,180	0.35	8.7	224,179	0.46

19. Employee benefits

	2017	2016
	$	$
Wages and salaries	3,376,069	2,772,298
Compulsory social security contributions	182,001	162,526
Contributions to defined contribution plans	200,225	183,122
Stock-based compensation	102,556	4,068
	3,860,851	3,122,014

20. Related party transactions

Compensation of key management personnel

The remuneration of directors and other members of key management, all of which was incurred in the normal course of operations during the year was as follows:

	2017	2016
	$	$
Short-term benefits	1,176,370	596,897
Stock-based compensation	64,380	4,068
	1,240,750	600,965

The remuneration of directors and key executives is determined by the remuneration committee having regard to the performance of individuals and market trends. Short-term benefits include salaries, and bonuses.

21. Commitments

The Company is a party to operating leases which relate to leases of a building, property and computer equipment with lease terms of between 1 and 5 years. The Company does not have an option to purchase the leased property at the expiry of the lease periods.

i) Payments recognized as an expense

	2017	2016
	$	$
Minimum lease payments	242,098	231,919

ii) Non-cancellable operating lease commitments

	2017	2016
	$	$
Not later than 1 year	198,886	135,772
Later than 1 year and not later than 5 years	168,121	223,222
	367,007	358,994

22. Financial instruments

a) Financial and capital risk management

The Company is exposed to risks of varying degrees of significance which could affect its ability to achieve its strategic objectives for growth. The main objectives of the Company's risk management process are to ensure that risks are properly identified and that the capital base is adequate in relation to those risks. The principal financial risks to which the Company is exposed are described below.

i) Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Company. Credit risk arises primarily from the Company’s cash and cash equivalents and trade receivables. The Company has adopted a policy of only dealing with creditworthy counterparties as a means of mitigating the risk of financial loss from defaults. The Company’s exposure is continuously monitored.

The Company’s objective of managing credit risk is to mitigate the credit losses incurred. Credit risk is mitigated by entering into contracts with stable, creditworthy parties. The Company measures credit risk by reviewing the aging of its receivables. Credit reviews are conducted as deemed necessary and take into account the third party’s financial position and past payment experience. The Company minimizes the credit risk of cash and cash equivalents and restricted cash by making deposits with only reputable entities that have high credit ratings assigned by national credit rating agencies. The Company’s credit risk and related risk management practice remain unchanged from the prior year.

The carrying amount of financial assets recorded in the consolidated financial statements represents the Company’s maximum exposure to credit risk. No collateral or credit enhancements are in place.

ii) Market risks

Foreign currency risk:

The Company’s functional and reporting currency is the Canadian dollar. Foreign currency risk is primarily related to the Company’s subsidiary in the US. US operations are conducted primarily in US dollars. The Company’s subsidiary in China conducts business in Chinese renminbi. For the Company’s foreign currency transactions, fluctuations in the respective exchange rates relative to the Canadian dollar will create volatility in the Company’s cash flows and the reported amounts of sales, cost of goods sold and general and administrative expenses on a period-to-period basis and compared with operating budgets and forecasts. The Company’s sales are primarily in Canadian and US dollars. The Company’s objective of managing foreign currency risk is to mitigate or eliminate the losses incurred. There have been no changes to the objective or the related risk exposure from the prior year.

At December 31, 2017 and 2016, the Company held no forward exchange contracts.

The carrying amounts of the Company’s foreign currency denominated monetary assets and monetary liabilities at the balance sheet date are as follows:

	Assets		Liabilities	
	2017	2016	2017	2016
	$	$	$	$
United States dollars	8,198,608	3,495,043	4,620,781	3,112,494
Chinese renminbi	1,510,911	1,390,274	740,856	456,224

22. Financial instruments (continued)

a) Financial and capital risk management (continued)

ii) Market risks (continued)

The following table details the Company's sensitivity to a 10% increase and decrease in the Canadian dollar against the United States dollar. The sensitivity analysis includes only outstanding foreign currency denominated monetary items and adjusts their translation at the period end for a 10% change in foreign currency rates. A positive number below indicates an increase in profit and other comprehensive income where the Canadian dollar strengthens 10% against the United States dollar. For a 10% weakening of the Canadian dollar against the United States dollar, there would be an equal and opposite impact on the profit and other comprehensive income, and the balances below would be negative.

	United States dollar impact	
	2017	2016
	$	$
Profit or loss	434,788	38,255
Other comprehensive income	4,240	3,245

iii) Interest rate risk

The Company is not exposed to short-term fluctuations in interest rates as the Company has no short-term borrowings or long-term debt. The Company's objective of managing interest rate risk is to mitigate interest rate fluctuations while securing financing with the most favourable terms possible. Interest rate risk is managed by negotiating the most favourable terms possible with the Company's lenders.

iv) Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. Ultimate responsibility for liquidity risk management rests with the Board of Directors, which has built an appropriate liquidity risk management framework for the management of the Company's short, medium and long-term funding and liquidity management requirements. 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 reserve borrowing facilities, 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. There have been no changes to the Company's objectives during the year. The Company's financial liabilities include accounts payable and accrued liabilities, unearned revenue and contract advances as well as debentures.

A maturity analysis as at December 31, 2017 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 although the Company expects some of its liabilities to be paid later than the earliest date on which the Company can be required to pay.

22. Financial instruments (continued)

a) Financial and capital risk management (continued)

iv) Liquidity risk (continued)

	Carrying Amount	Contractual Cash Flow	Less than 1 month	1-3 months	3 months to 1 year	1+ years	Total
	$	$	$	$	$	$	$
2017							
Accounts payable	4,012,166	4,012,166	4,012,166	-	-	-	4,012,166
Accrued liabilities	1,345,046	1,345,046	1,345,046	-	-	-	1,345,046
	5,357,212	5,357,212	5,357,212	-	-	-	5,357,212
2016							
Accounts payable	2,963,576	2,963,576	2,963,576	-	-	-	2,963,576
Accrued liabilities	711,949	711,949	711,949	-	-	-	711,949
Current portion LTD	2,165,571	2,171,131	2,171,131			-	2,171,131
Long-term debt	-		-	-			-
	5,841,096	5,846,656	5,846,656	-	-	-	5,846,656

v) Capital management risk

The policy of the Board of Directors is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business.

The capital structure is managed by evaluating shareholders’ equity and long-term debt of the Company.

Shareholders’ equity and long-term debt at end of the reporting period was as follows:

	2017	2016
	$	$
Shareholders' equity	7,299,311	2,426,948
Long-term debt including current portion	-	2,165,171
Total shareholders' equity and long-term debt	7,299,311	4,592,119

22. Financial instruments (continued)

b) Financial instruments

Categories and fair value of financial instruments

	2017		2016	
	Carrying amount	Fair value	Carrying amount	Fair value
	$	$	$	$
Financial assets				
Cash and cash equivalents	3,568,447	3,568,447	1,118,297	1,118,297
Restricted cash and cash equivalents	-	-	528,023	528,023
Accounts receivable	8,010,558	8,010,558	7,124,365	7,124,365
	11,579,005	11,579,005	8,770,685	8,770,685
Financial liabilities				
Accounts payable and accrued liabilities	5,357,212	5,357,212	3,675,525	3,675,525
Long term-debt including current portion	-	-	2,165,569	2,165,569
	5,357,212	5,357,212	5,841,094	5,841,094

The Company has determined that the fair value of its short-term financial assets and liabilities approximates their respective carrying amounts because of the short-term maturity of those instruments. The fair value of long-term debt has been determined using a discounted cash flow model based on discount rates ranging from 15.0% to 17.5 %, representing interest rates in effect as at the year-end date available to the Company for the same or similar debt instruments.

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