

PyroGenesis Canada Inc.
Financial Statements
December 31, 2016 and 2015

PyroGenesis Canada Inc.

December 31, 2016 and 2015

Contents

Management's Responsibility

Independent Auditors' Report

Financial Statements

Statements of financial position 1

Statements of comprehensive loss 2

Statements of changes in shareholders' equity 3

Statements of cash flows 4

Notes to the financial statements 6 – 34

Management's Responsibility

To the Shareholders of PyroGenesis Canada Inc.

Management is responsible for the preparation and presentation of the accompanying financial statements, including responsibility for significant accounting judgments and estimates in accordance with International Financial Reporting Standards. This responsibility includes selecting appropriate accounting principles and methods, and making decisions affecting the measurement of transactions in which objective judgment is required.

The Board of Directors and Audit Committee are composed primarily of Directors who are neither management nor employees of the Company. The Board of Directors is responsible for overseeing management in the performance of its financial reporting responsibilities, and for approving the financial information included in the annual report. The Board fulfils these responsibilities by reviewing the financial information prepared by management and discussing relevant matters with management and the external auditor. The Audit Committee has the responsibility of meeting with management and the external auditors to discuss the internal controls over the financial reporting process, auditing matters and financial reporting issues. The Audit Committee is also responsible for recommending the appointment of the Company's external auditor.

KPMG LLP, an independent firm of Chartered Professional Accountants, is appointed by the shareholders to audit the financial statements and report directly to them; their report follows. The external auditor has full and free access to, and meets periodically and separately with, both the Audit Committee and management to discuss their audit findings.

April 28, 2017

[Signed by P. Peter Pascali]

P. Peter Pascali, Chief Executive Officer

[Signed by Alain Curleigh]

Alain Curleigh, Acting Chief Financial Officer



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INDEPENDENT AUDITORS' REPORT

To the Shareholders of PyroGenesis Canada Inc.

We have audited the accompanying financial statements of PyroGenesis Canada Inc., which comprise the statements of financial position as at December 31, 2016 and December 31, 2015, the statements of comprehensive loss, changes in shareholders' equity and cash flows for the years then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these 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 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 financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the 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 financial statements.

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



Page 2

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of PyroGenesis Canada Inc. as at December 31, 2016 and December 31, 2015, and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards.

Emphasis of Matter

Without modifying our opinion, we draw attention to Note 1(b) in the financial statements which indicates that PyroGenesis Canada Inc. has incurred operating losses and negative cash flows from operations, has an accumulated deficit and that its operations are dependent on obtaining additional financing. These conditions, along with other matters as set forth in Note 1(b) in the financial statements, indicate the existence of a material uncertainty that may cast significant doubt about PyroGenesis Canada Inc.'s ability to continue as a going concern.

A handwritten signature in black ink that reads 'KPMG LLP' with a horizontal line underneath.

April 28, 2017

Montréal, Canada

PyroGenesis Canada Inc.

Statements of Financial Position

As at December 31,	2016 \$	2015 \$
Assets		
<i>Current assets</i>		
Cash	385,257	767,368
Accounts receivable [note 6]	422,816	359,185
Costs and profits in excess of billings on uncompleted contracts [note 7]	475,994	72,865
Investment tax credits receivable	430,491	608,369
Prepaid expenses	254,405	319,233
Inventories	-	994,015
Sales tax receivable	-	222,151
Total current assets	1,968,963	3,343,186
<i>Non-current assets</i>		
Deposits and investments [note 8]	436,730	107,530
Property plant and equipment [note 9]	843,238	513,771
Costs and profits in excess of billings on uncompleted contracts [note 7]	-	1,760,222
Intangible assets [note 10]	-	1,396,675
Total assets	3,248,931	7,121,384
Liabilities		
<i>Current liabilities</i>		
Accounts payable and accrued liabilities [note 11]	1,446,728	2,056,881
Loans [note 13]	620,766	472,166
Billings in excess of costs and profits on uncompleted contracts [note 12]	1,980,822	648,044
Total current liabilities	4,048,316	3,177,091
<i>Non-current liabilities</i>		
Convertible debentures [note 14]	3,605,897	3,328,722
Total liabilities	7,654,213	6,505,813
Shareholders' equity (deficiency) [note 15]		
Common shares	25,442,906	24,044,772
Warrants reserve	901,211	734,004
Contributed surplus	5,679,580	5,313,555
Equity portion of convertible debentures [note 14]	572,582	572,582
Other equity	24,844	24,844
Deficit	(37,026,405)	(30,074,186)
Total equity (deficiency)	(4,405,282)	615,571
Total liabilities and equity (deficiency)	3,248,931	7,121,384

Going concern disclosure, related party transactions, contingent liability, commitments [notes 1, 18, 20, and 24]

Approved on behalf of the Board:

[Signed by P. Peter Pascali] _____ P. Peter Pascali

[Signed by Alain Curleigh] _____ Alain Curleigh

PyroGenesis Canada Inc.

Statements of Comprehensive Loss

Years ended December 31,	2016 \$	2015 \$
Revenue	5,222,133	6,242,003
Cost of sales and services other than undernoted write-offs <i>[note 17]</i>	4,448,031	5,948,164
Gross profit before undernoted write-offs	774,102	293,839
Write-off of inventories <i>[note 17(c)]</i>	994,015	-
Write-off of costs and profits in excess of billings on uncompleted contracts <i>[note 7]</i>	1,760,423	-
Gross profit (loss)	(1,980,336)	293,839
Expenses		
Selling, general and administrative <i>[note 17]</i>	4,320,862	4,648,473
Research and development	92,179	136,804
Net finance costs <i>[note 17]</i>	558,842	426,341
	4,971,883	5,211,618
Net loss and comprehensive loss	(6,952,219)	(4,917,779)
Basic and diluted loss per share	(0.07)	(0.06)
Weighted average number of common shares - basic and diluted	97,212,727	85,339,523

The accompanying notes form an integral part of the financial statements.

PyroGenesis Canada Inc.

Statements of Changes in Shareholders' Equity

Years ended December 31, 2016 and 2015

	Number of Class A common shares	Class A common share capital	Warrants reserve	Contributed surplus	Equity portion of convertible debentures	Other Equity	Deficit	Total
	\$	\$	\$	\$	\$	\$	\$	\$
Balance – December 31, 2015	93,666,729	24,044,772	734,004	5,313,555	572,582	24,844	(30,074,186)	615,571
Issuance of common shares <i>[note 15 (a) (i)]</i>	6,131,579	1,001,228	163,772	-	-	-	-	1,165,000
Shares issue cost <i>[note 15 (a) (i) (ii)]</i>	-	(11,684)	-	-	-	-	-	(11,684)
Broker warrants <i>[note 15 (a) (i)]</i>	-	(3,435)	3,435	-	-	-	-	-
Shares issued for accounts payable and a loan <i>[note 15 (a) (ii)]</i>	2,060,126	412,025	-	-	-	-	-	412,025
Share-based payments	-	-	-	366,025	-	-	-	366,025
Comprehensive loss during the year	-	-	-	-	-	-	(6,952,219)	(6,952,219)
Balance – December 31, 2016	101,858,434	25,442,906	901,211	5,679,580	572,582	24,844	(37,026,405)	(4,405,282)
Balance - December 31, 2014	84,796,729	22,712,406	2,669,104	2,628,305	-	24,844	(25,156,407)	2,878,252
Issuance of common shares	8,835,000	1,767,000	-	-	-	-	-	1,767,000
Shares issued upon exercise of options	35,000	26,618	-	(19,268)	-	-	-	7,350
Fair value of warrants	-	(375,488)	375,488	-	-	-	-	-
Expired warrants	-	-	(2,376,868)	2,376,868	-	-	-	-
Broker warrants	-	(66,280)	66,280	-	-	-	-	-
Brokers' fees - cash payment	-	(18,200)	-	-	-	-	-	(18,200)
Equity portion of convertible debentures	-	-	-	-	572,582	-	-	572,582
Agent fees	-	(9,585)	-	-	-	-	-	(9,585)
Legal fees	-	8,301	-	-	-	-	-	8,301
Share-based payments	-	-	-	327,650	-	-	-	327,650
Comprehensive loss during the year	-	-	-	-	-	-	(4,917,779)	(4,917,779)
Balance – December 31, 2015	93,666,729	24,044,772	734,004	5,313,555	572,582	24,844	(30,074,186)	615,571

The accompanying notes form an integral part of the financial statements.

PyroGenesis Canada Inc.

Statements of Cash Flows

Years ended December 31,	2016	2015
	\$	\$
Cash flows provided by (used in)		
Operating activities		
Net loss	(6,952,219)	(4,917,779)
Adjustments for:		
Share-based payments	366,025	327,650
Depreciation on property plant and equipment [note 9]	127,405	163,727
Amortization of intangible assets [note 10]	1,396,675	1,397,074
Write-off of inventory	994,015	
Write-off of costs and profits in excess of billings on uncompleted contracts	1,760,423	-
Finance costs [note 17]	639,542	426,341
Change in fair value of investments [note 17]	(25,540)	-
Gain on disposal of investments [note 17]	(55,160)	-
Other	(36,000)	-
	(1,784,834)	(2,602,987)
Net change in non-cash operating working capital items [note 16]	774,294	(475,712)
Interest paid	(362,367)	(363,225)
	(1,372,907)	(3,441,924)
Investing activity		
Purchase of property plant and equipment [note 9]	(452,520)	(32,935)
Purchase of investments	(13,500)	-
Proceeds from disposal of investments	65,000	-
	(401,020)	(32,935)
Financing activities		
Proceeds from issuance of loans	1,037,000	-
Repayment of loans	(738,400)	(832,626)
Proceeds from issuance of common shares	1,104,900	1,767,000
Share issue costs	(11,684)	(19,484)
Proceeds from issuance of convertible debentures	-	3,245,000
Proceeds from issuance of common shares upon exercise of option	-	7,350
Costs related to issuance of convertible debentures	-	(287,196)
	1,391,816	3,880,044
Increase (decrease) in cash	(382,111)	405,185
Cash - beginning of year	767,368	362,183
Cash - end of year	385,257	767,368

PyroGenesis Canada Inc.

Statements of Cash Flows (continued)

Years ended December 31,	2016	2015
	\$	\$
Supplemental cash flows disclosure		
Non-cash transactions:		
Issuance of broker warrants <i>[note 15]</i>	3,435	-
Issuance of common shares for settlement of accounts payable and a loan <i>[note 15]</i>	412,025	-
Other receivable in relation to shares issued	60,100	-
Accounts receivable settled with other assets instead of cash	-	50,000
Issuance of convertible debentures in partial settlement of balance of sale <i>[note 15]</i>	-	755,000
Investments received for payment on an uncompleted contract	300,000	-

The accompanying notes form an integral part of the financial statements.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

1. Nature of operations and going concern disclosure

(a) Nature of operations

PyroGenesis Canada Inc. (the "Company"), incorporated under the laws of the Canada Business Corporations Act, was formed on July 11, 2011. The Company owns patents of advanced waste treatment systems technology and designs, develops, manufactures and commercialises advanced plasma processes and systems. The Company is domiciled at 1744 William Street, Suite 200, Montreal, Quebec. The Company is publicly traded on the TSX Venture Exchange under the Symbol "PYR". During 2015, the Company received approval to trade on the OTCQB in the USA under the symbol "PYRNF".

(b) Going concern

These financial statements have been prepared on the going concern basis, which presumes that the Company will be able to realize its assets and discharge its liabilities in the normal course of business for the foreseeable future.

The Company is subject to a number of risks and uncertainty associated with the successful development of its products and with the financing requirements of its operations. The achievement of profitable operations is dependent upon future events, including successful development and introduction of new products to its family of products, and obtaining adequate financing.

The Company has incurred, in the last several years, operating losses and negative cash flows from operations, resulting in an accumulated deficit of \$37,026,406 as at December 31, 2016. Furthermore, as at December 31, 2016, the Company's current liabilities and expected level of expense for the next twelve months exceed cash on hand of \$385,257. The Company currently has no committed sources of financing available. The Company has relied upon external financings to fund its operations in the past, primarily through the issuance of equity, debt, and convertible debentures, as well as from investment tax credits.

The Company's business plan is dependent upon raising additional funds to finance operations within and beyond the next twelve months. While the Company has been successful in securing financing in the past, raising additional funds is dependent on a number of factors outside the Company's control, and as such there is no assurance that it will be able to do so in the future. If the Company is unable to obtain sufficient additional financing, it may have to curtail operations and development activities, any of which could harm the business, financial condition and results of operations.

These conditions indicate the existence of a material uncertainty that may cast significant doubt about the Company's ability to continue operating as a going concern and realise its assets and settle its liabilities and commitments in the normal course of business.

These financial statements have been prepared on a going concern basis and do not include any adjustments to the amounts and classifications of the assets and liabilities that might be necessary should the Company be unable to achieve its plan and continue in business. If the going concern assumption were not appropriate for these financial statements then adjustments would be necessary to the carrying value of assets and liabilities, the reported expenses and the statements of financial position classifications used. Such adjustments could be material.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

2. Basis of preparation

(a) Statement of compliance:

These financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). These financial statements were approved and authorized for issuance by the Board of Directors on April 28, 2017.

(b) Functional and Presentation Currency

These financial statements are presented in Canadian dollars, which is the Company's functional currency.

(c) Basis of measurement

These financial statements have been prepared on the historical cost basis except for investments which are accounted for at fair value.

3. Significant accounting policies

(a) Revenue recognition

Revenue is recognized to the extent that it is probable that the economic benefits will flow to the Company and the revenue can be reliably measured. Revenue is measured at the fair value of the consideration received, excluding sales taxes.

Revenues relating to long term contracts are recognized as the work is performed using the percentage-of-completion method. The degree of completion is assessed based on the proportion of total costs incurred to date, compared to total costs anticipated to provide the service and other deliverables required under the entire contract. Provisions are made for the entire amount of expected losses, if any, in the period in which they are first determinable. Estimates are required to determine anticipated costs and revenues on long-term contracts. Anticipated revenues on contracts may include future revenues from claims or unapproved change orders, if such additional revenues can be reliably estimated and it is considered probable that they will be recovered.

Revenue related to engineering services, which are not long term contracts, are recognized as the services are performed.

Revenue from the sale of other property is recognized when the entity has transferred to the buyer the significant risks and rewards of ownership of the property, and the entity retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the property sold.

Revenue from the Company's different agreements is assessed in order to determine whether they contain separately identifiable components. When separation is required, the consideration received or receivable is allocated amongst the separate components based on the relative fair values of each component. When the fair value of the delivered component is not reliably measurable, then revenue is allocated based on the difference between the total arrangement consideration and the fair value of the undelivered item. The applicable revenue recognition criteria are applied to each of the separate components. Otherwise, the applicable revenue recognition criteria are applied to the combined components as a whole.

(b) Foreign currency translation

Foreign currency balances are translated at year-end exchange rates for monetary items and at historical rates for non-monetary items. Revenues and expenses are translated using average exchange rates prevailing at the time of the transaction. Translation gains or losses are included in the determination of comprehensive loss.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

3. Significant accounting policies (continued)

(c) Financial instruments

i) Initial recognition

A financial instrument is any contract that gives rise to a financial asset of one party and a financial liability or equity instrument of another party. Financial assets and financial liabilities are recognized on the statements of financial position when the Company becomes a party to the contractual provisions of the instrument. On initial recognition, all financial instruments must be measured at fair value which 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. Subsequent to initial recognition, the measurement of financial instruments is dependent on the purpose for which the financial assets were acquired or issued, their characteristics and the Company's designation of such instruments.

ii) Subsequent measurement

Financial assets

Cash and accounts receivable are classified by the Company as loans and receivables and are measured at amortized cost using the effective interest rate method. Interest income calculated using the effective interest rate method is recorded as finance income in the period in which it arises.

Gains and losses are recognized in the statements of comprehensive loss when these assets are impaired or derecognized.

Investments are designated at fair value through profit and loss upon initial recognition and are measured at fair value with all gain and losses included in the net income in the period in which they arise.

Financial liabilities

Accounts payable and accrued liabilities, loans and convertible debentures, are classified by the Company as other liabilities and are measured at amortized cost using the effective interest method. Interest expense is recorded as finance expense in the year.

(d) Impairment of financial assets

At each reporting date the carrying amounts of financial assets, other than those to be measured at fair value through profit or loss, are assessed to determine whether there is objective, significant evidence of impairment (e.g. a debtor is facing serious financial difficulties, or there is a substantial change in the technological, economic, legal or market environment of the debtor). For equity instruments, a significant or prolonged decline in fair value is objective evidence for a possible impairment. The Company has defined criteria for the significance and duration of a decline in fair value.

The amount of the impairment loss on loans and receivables is measured as the difference between the carrying amount of the asset and the present value of estimated future cash flows (excluding expected future credit losses that have not been incurred), discounted at the original effective interest rate of the financial asset. The amount of the impairment loss is recognized in profit or loss. If, in a subsequent reporting period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed and recognized in profit or loss. The impairment loss on loans and receivables is recorded using an allowance account. The decision to account for credit risk using an allowance account or by directly reducing the receivable depends on the estimated probability of the loss of receivables. When receivables are assessed as uncollectible, the impaired asset is derecognized.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

3. Significant accounting policies (continued)

(e) Inventories

Inventories were composed of specialized high-tech equipment held for resale and are valued at the lower of cost and net realizable value. Cost is determined on an individual basis by the specific identification method. Cost comprises all costs of purchases, costs of conversion and other costs incurred in bringing inventories to their present location and condition. Net realizable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and selling costs.

(f) Deferred taxes

i) Current tax

Current tax assets and liabilities for the current and prior years are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted by the statements of financial position date.

ii) Deferred tax

Deferred tax is provided using the liability method, providing for temporary differences between the tax bases of assets and liabilities and their carrying amounts in the financial statements. The temporary difference is not provided for if it arises from the initial recognition of goodwill or the initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. The amount of deferred tax provided is based on the expected manner of realization or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the financial position reporting date and whose implementation is expected over the period in which the deferred tax is realized or recovered. A deferred tax asset is recognized only to the extent that it is probable that future taxable profits will be available against which the asset can be used.

Deferred tax assets and liabilities are presented as non-current. Assets and liabilities are offset where the entity has a legally enforceable right to offset current tax assets and liabilities or deferred tax assets and liabilities, and the respective assets and liabilities relate to income taxes levied by the same taxation authority on the same taxable entity or different taxable entities which intend to settle the liabilities and assets on a net basis.

(g) Loss per share

The Company presents basic loss per share data for its common shares. Basic loss per share is computed by dividing net loss by the weighted average number of common shares outstanding during the year. Diluted loss per share is computed similarly to basic earnings per share, except that the weighted average number of shares outstanding is increased to include shares from the assumed exercise of stock options and warrants, if dilutive. The number of additional shares is calculated by assuming that outstanding share options and warrants were exercised and that the proceeds from such exercises were used to acquire common shares at the average market price during the year. For the years ended December 31, 2016 and 2015, potential shares from all outstanding options and warrants have been excluded from the calculation of diluted loss per share as their inclusion is considered anti-dilutive in periods when a loss is incurred.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

3. Significant accounting policies (continued)

(h) Property and equipment

Property and equipment are measured at cost less accumulated depreciation and accumulated impairment losses if applicable. Cost includes expenditures that are directly attributable to the acquisition of the asset.

When major parts of an item of property and equipment have different useful lives, they are accounted for separately.

Property and equipment are depreciated from the acquisition date or at the date of substantial completion.

Depreciation is calculated using the following method and rates:

Computer hardware	declining balance	45%
Computer software	declining balance	50%
Machinery and equipment	declining balance	20%
Automobile	declining balance	30%
Leasehold improvements	straight line over the lesser of 5 years or the term of the lease	

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

(i) Impairment - non-financial assets

The carrying amounts of the Company's non-financial assets are assessed at each reporting date to determine whether there is an indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

The recoverable amount of an asset or cash-generating unit (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. Assets that cannot be tested individually are grouped into the smallest independent group of assets that generate cash inflows from continuing use. For the purposes of testing non-financial assets for impairment, management has identified one CGU since the Company operates as one segment.

An impairment loss is recognized if the carrying amount of an asset or its CGU exceeds its recoverable amount. Impairment losses are recognized in the statement of comprehensive loss. Impairment losses recognized in respect of the CGU are allocated first to reduce the carrying amount of goodwill allocated to the units, and then to reduce the carrying amounts on a pro-rata basis of the other assets in the unit.

Impairment losses recognized in prior periods are assessed at each reporting date as to whether there are any indications that the previously recognized losses may no longer exist or may be decreased. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years.

(j) Government assistance and investment tax credits

Investment tax credits are comprised of scientific research and experimental development tax credits. Government assistance and investment tax credits are recognized when there is reasonable assurance of their recovery and recorded as a reduction of the related expense or cost of the asset acquired, as applicable. Investment tax credits are subject to the customary approvals by the pertinent tax authorities. Adjustments required, if any, are reflected in the year when such assessments are received.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

3. Significant accounting policies (continued)

(k) Intangible assets

Acquired intangible assets are measured at cost on initial recognition. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses.

Intangible assets with finite lives are amortized over the useful life of the asset and assessed for impairment whenever there is an indication of impairment. Amortization expense on the intangible assets with finite lives is recognized in the statements of comprehensive loss.

The estimated useful life of the licenses acquired is between 5 and 10 years. Amortization is calculated on a straight line basis over the life of the asset.

Intangible assets represented the value of licenses.

(l) Research and development costs

Research costs are charged to comprehensive loss in the year they are incurred, net of related investment tax credits. Development costs are charged to comprehensive loss in the year they are incurred net of related investment tax credits unless they meet specific criteria related to technical, market and financial feasibility in order to be recognized as an intangible asset:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- its intention to complete and its ability to use or sell the asset;
- how the asset will generate future economic benefits;
- the availability of resources to complete the asset; and
- the ability to measure reliably the expenditure during development.

Amortization of the asset begins when development is complete. During the period of development, the asset is tested annually for impairment.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

3. Significant accounting policies (continued)

(m) Compound instruments

The component parts of compound instruments (convertible debentures) issued by the Company are classified separately as financial liabilities and equity, in accordance with the substance of the contractual arrangements and the definitions of a financial liability and equity instrument. The conversion option that will be settled by the exchange of a fixed amount of cash or another financial asset for a fixed number of the Company's own equity instruments is an equity instrument. At the date of issue, the fair value of the liability component is estimated using the prevailing market interest rate for similar non-convertible instruments. This amount is recorded as a liability on an amortized cost basis using the effective interest method until extinguished upon conversion, or at the instrument's maturity date. The conversion option classified as equity is determined by deducting the amount of liability component from the fair value of the compound instrument as a whole. This is recognized and included in equity and is not subsequently remeasured. In addition, the conversion option classified as equity will remain in equity until the conversion option is exercised, in which case, the balance recognized as equity will be transferred to common shares.

When the conversion option remains unexercised at the maturity date of the convertible debentures, the balance recognized in equity will be transferred to contributed surplus. No gain or loss is recognized in profit or loss upon conversion or expiration of the conversion option. Transaction costs that relate to the issue of the convertible debentures are allocated to the liability and equity components in proportion to the allocation of the gross proceeds. Transaction costs relating to the equity component are recognized directly in equity. Transaction costs relating to the liability component are included in the carrying amount of the liability component and are amortized using the effective interest method.

(n) Employee benefits

Share-based payments

The Company applies a fair value based method of accounting to all share-based payments. Employee and director stock options are measured at their fair value of each tranche on the grant date and recognized in its respective vesting period. Non-employee stock options are measured based on the service provided to the reporting date and at their then-current fair values. The cost of stock options is presented as share-based payment expense when applicable. On the exercise of stock options, share capital is credited for the consideration received and for the fair value amounts previously credited to contributed surplus. The Company uses the Black-Scholes option-pricing model to estimate the fair value of share-based payments.

Deferred profit sharing plan

The Company established a yearly Deferred Profit Sharing Plan ("DPSP") for all eligible employees who have materially and significantly contributed to the prosperity and profits of the Company. The significance of any contribution of any employee to the prosperity and profits of the Company for purposes of eligibility in the DPSP is determined by the Board of Directors of the Company upon such relevant information as the Board, in its sole discretion, may find relevant. All related persons to the Company are excluded from participating in the DPSP.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

3. Significant accounting policies (continued)

(n) Employee benefits (continued)

Deferred profit sharing plan (continued)

For all eligible employees, the Company is required to contribute to the DPSP out of the profits of the Company. The amount of the Company's contribution will be such amount which, in the opinion of its Board of Directors, is warranted by the profits and overall financial position of the Company. During the year, the Company contributed \$Nil to the DPSP. Obligations for contributions to the DPSP are recognized as an employee benefit expense in the statement of comprehensive loss in the periods during which services are rendered by employees.

Short-term employee benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided.

A liability is recognised for the amount expected to be paid under the short-term incentive plan if the Company has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee, and the obligation can be estimated reliably.

4. Significant accounting judgments, estimates and assumptions

The preparation of financial statements requires management to make judgments, estimates and assumptions based on currently available information that affect the reported amounts of assets, liabilities and contingent assets and liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting period. Estimates and judgments are continuously evaluated and are based on management's experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. However, actual results could differ from those estimated. By their very nature, these estimates are subject to measurement uncertainty and the effect of any changes in estimates on the financial statements of future periods could be material.

In the process of applying the Company's accounting policies, management has made the following judgments, estimates, and assumptions which have the most significant effect on the amounts recognized in the financial statements.

Judgments

Going concern

Information about critical judgements in applying accounting policies that have the most significant effect on the amounts recognised in the financial statements relates to the assessment of the Company's ability to continue as a going concern [note 1 (b)].

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

4. Significant accounting judgments, estimates and assumptions (continued)

Assumptions and estimates

Information about assumptions and estimation uncertainty with a significant risk of resulting in material adjustments to the carrying amounts of assets and liabilities within the next financial year relate to the following:

Assessment of impairment of property and equipment

At each reporting date, the Company reviews the carrying amounts of its property and equipment to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. For impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or cash generating units ("CGUs"). The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. Value in use is based on the estimated future cash flows, 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. An impairment loss is recognised if the carrying amount of an asset or CGU exceeds its recoverable amount. Impairment losses are recognised in profit or loss.

An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

Revenue recognition

The percentage-of-completion method requires the use of estimates to determine the recorded amount of revenues, costs in excess of billings and billings in excess of costs and profits on uncompleted contracts.

The determination of anticipated revenues includes the contractually agreed revenue and may also involve estimates of future revenues from claims and unapproved change orders if such additional revenues can be reliably estimated and it is considered probable that they will be recovered. A change order results from a change to the scope of the work to be performed compared to the original contract that was signed. An example of such contract variation could be a change in the specifications or design of the project, whereby costs related to such variation might be incurred prior to the client's formal contract amendment signature. A claim represents an amount expected to be collected from the client or a third party as reimbursement for costs incurred that are not part of the original contract. In both cases, management's judgments are required in determining the probability that additional revenue will be recovered from these variations and in determining the measurement of the amount to be recovered.

The determination of anticipated costs for completing a contract is based on estimates that can be affected by a variety of factors, including the cost of materials, labour and sub-contractors, as well as potential claims from customers and subcontractors.

As risks and uncertainties are different for each project, the sources of variations between anticipated costs and actual costs incurred will also vary by project. The determination of estimates is based on the Company's business practices as well as its historical experience. Estimates are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised.

Given this estimation process, it is possible that changes in future conditions could cause a material change in the recognized amount of revenues and costs and profits in excess of billings on uncompleted contracts and accrued expenses.

Agreements that contain multiple deliverables require the use of judgment to determine whether they contain separately identifiable components and to allocate the consideration received to each component.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

4. Significant accounting judgments, estimates and assumptions (continued)

Stock-based payments

The Company uses the fair value method of valuing compensation expense associated with the Company's stock option plan. Estimating fair value requires determining the most appropriate valuation model for a grant of equity instruments, which is dependent on the terms and conditions of the grant. This also requires determining the most appropriate inputs to the valuation model including the expected life of the option, volatility, expected forfeitures and distribution yield. The assumptions and models are discussed in note 15.

Useful lives of property and equipment

The Company estimates the useful lives of property and equipment based on the period over which the assets are expected to be available for use. The estimated useful lives of property and equipment are reviewed periodically and are updated if expectations differ from previous estimates due to physical wear and tear and legal or other limits on the use of the relevant assets. In addition, the estimation of the useful lives of property and equipment are based on management's experience with similar assets. It is possible, however, that future results of operations could be materially affected by changes in the estimates brought about by changes in factors mentioned above. The amounts and timing of recorded expenses for any period would be affected by changes in these factors and circumstances. Useful lives, depreciation rates and residual values are reviewed at least annually.

Assessment of investment tax credits

The investment tax credits are estimated by management based on quantitative and qualitative analysis and interpretation of various government programmes, related restrictions, limitations, definitions, and eligibility conditions. Management involves its technical staff and external specialists in determining if the expenditures meet the requirements of the different tax credit claims.

5. Adopted and future accounting policies

(a) New standards, interpretations and amendments adopted on January 1st, 2016

On January 1, 2016, the Company adopted the following new or amended IFRS standards and Interpretations of IFRS ("Interpretations") that are mandatory for application from that date.

IAS 1 Presentation of Financial Statements

The Company adopted these amendments for the annual period beginning on January 1, 2016. The adoption of these amendments did not have a material impact on the Company's consolidated financial statements.

(b) Recent accounting pronouncements and amendments not yet effective

The Company has not yet applied the following new or amended IFRS standards and interpretations that have been issued as at December 31, 2016 but are not yet effective. The Company does not plan to early adopt any of these new or amended standards and interpretations.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

5. Adopted and future accounting policies (continued)

IFRS 15 Revenue from Contracts with Customers

On May 28, 2014 the IASB issued IFRS 15 *Revenue from Contracts with Customers*. The new standard is effective for annual periods beginning on or after January 1, 2018. Earlier application is permitted. IFRS 15 will replace IAS 11 *Construction Contracts*, IAS 18 *Revenue*, IFRIC 13 *Customer Loyalty Programmes*, IFRIC 15 *Agreements for the Construction of Real Estate*, IFRIC 18 *Transfer of Assets from Customers*, and SIC 31 *Revenue – Barter Transactions Involving Advertising Services*.

The standard contains a single model that applies to contracts with customers and two approaches to recognising revenue: at a point in time or over time. The model features a contract-based five-step analysis of transactions to determine whether, how much and when revenue is recognized. New estimates and judgmental thresholds have been introduced, which may affect the amount and/or timing of revenue recognized.

The new standard applies to contracts with customers. It does not apply to insurance contracts, financial instruments or lease contracts, which fall in the scope of other IFRSs. The Company intends to adopt IFRS 15 in its financial statements for the annual period beginning on January 1, 2018. The extent of the impact of adoption of the standard has not yet been determined.

IFRS 9 Financial Instruments

On July 24, 2014 the IASB issued the complete IFRS 9 (IFRS 9 (2014)).

The mandatory effective date of IFRS 9 is for annual periods beginning on or after January 1, 2018 and must be applied retrospectively with some exemptions. Early adoption is permitted. The restatement of prior periods is not required and is only permitted if information is available without the use of hindsight.

IFRS 9 (2014) introduces new requirements for the classification and measurement of financial assets. Under IFRS 9 (2014), financial assets are classified and measured based on the business model in which they are held and the characteristics of their contractual cash flows. The standard introduces additional changes relating to financial liabilities.

It also amends the impairment model by introducing a new 'expected credit loss' model for calculating impairment.

IFRS 9 (2014) also includes a new general hedge accounting standard which aligns hedge accounting more closely with risk management. This new standard does not fundamentally change the types of hedging relationships or the requirement to measure and recognize ineffectiveness, however it will provide more hedging strategies that are used for risk management to qualify for hedge accounting and introduce more judgment to assess the effectiveness of a hedging relationship.

Special transitional requirements have been set for the application of the new general hedging model.

The Company intends to adopt IFRS 9 (2014) in its financial statements for the annual period beginning on January 1, 2018. The extent of the impact of adoption of the standard has not yet been determined.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

5. Adopted and future accounting policies (continued)

IFRS 16 Leases

On January 13, 2016, the IASB issued IFRS 16 *Leases*.

The new standard is effective for annual periods beginning on or after January 1, 2019. Earlier application is permitted for entities that apply IFRS 15 Revenue from Contracts with Customers at or before the date of initial adoption of IFRS 16. IFRS 16 will replace IAS 17 Leases.

This standard introduces a single lessee accounting model and requires a lessee to recognize assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. A lessee is required to recognize a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments.

This standard substantially carries forward the lessor accounting requirements of IAS 17, while requiring enhanced disclosures to be provided by lessors.

Other areas of the lease accounting model have been impacted, including the definition of a lease. Transitional provisions have been provided.

The Company intends to adopt IFRS 16 in its financial statements for the annual period beginning on January 1, 2019. The extent of the impact of adoption of the standard has not yet been determined.

IAS 7 Statement of cash flows

In January 2016, the IASB issued Amendments to IAS 7 An entity shall provide disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes. The Company intends to apply those amendments on the effective date being for annual periods beginning on January 1, 2017.

6. Accounts receivable

Details of accounts receivable were as follows:

	2016	2015
	\$	\$
1 – 30 days	324,371	143,316
30 – 60 days	38,307	145,213
61 – 90 days	-	-
Greater than 90 days	-	70,656
Total	362,678	359,185
Other receivable (1)	60,138	-
	422,816	359,185

There is no allowance for doubtful accounts recorded as at December 31, 2016 and 2015.

(1) Amount relates to a share subscription, which was received immediately after year end.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

7. Costs and profits in excess of billings on uncompleted contracts

As at December 31, 2016, the Company had three uncompleted contracts with total billings of \$1,179,034 which were less than total costs incurred and had recognized cumulative revenue of \$1,655,028 since those projects began. This compares with three contracts with total billings of \$708,892 which were less than total costs incurred and had recognized cumulative revenue of \$781,757 as at December 31, 2015.

As at December 31, 2016, the Company wrote-off \$1,760,423 of costs in excess of billings on an uncompleted contract resulting from a pending resolution of differences that arose in December 2015 between the Company and the customer regarding the technical specifications of this contract since Management does not expect that these costs will be recovered.

8. Deposits and investments

	2016	2015
	\$	\$
Deposits	57,530	57,530
Investments	379,200	50,000
	436,730	107,530

Investments comprise shares in a quoted public company of which \$300,000 was received as a progress payment on an uncompleted contract (2015 - \$50,000 service revenue). In 2016, the Company recorded a gain on the change in fair value of those investments \$25,540 (2015 - \$nil)

9. Property, plant and equipment

	Computer hardware	Computer software	Machinery and equipment	Automobile	Leasehold improvement	Asset under development ¹	Total
	\$	\$	\$	\$	\$	\$	\$
Cost							
Balance at December 31, 2014	197,520	236,998	1,567,981	21,912	67,903	-	2,092,314
Additions	5,899	10,127	1,597	-	15,312	-	32,935
Balance at December 31, 2015	203,419	247,125	1,569,578	21,912	83,215	-	2,125,249
Additions	768	-	-	-	-	456,104	456,872
Balance at December 31, 2016	204,187	247,125	1,569,578	21,912	83,215	456,104	2,582,121
Accumulated depreciation							
Balance at December 31, 2014	161,703	204,912	1,047,822	3,287	30,027	-	1,447,751
Depreciation	17,445	18,575	106,243	5,587	15,877	-	163,727
Balance at December 31, 2015	179,148	223,487	1,154,065	8,874	45,904	-	1,611,478
Depreciation	10,965	11,820	84,066	3,911	16,643	-	127,405
Balance at December 31, 2016	190,113	235,307	1,238,131	12,785	62,547	-	1,738,883
Carrying amounts							
Balance at December 31, 2015	24,271	23,638	415,513	13,038	37,311	-	513,771
Balance at December 31, 2016	14,074	11,818	331,447	9,127	20,668	456,104	843,238

¹ Amortization of the asset under development will begin when the asset is available or ready for use which is expected in the year ending December 31, 2017.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

10. Intangible assets

	\$
Cost	
Balance at December 31, 2014, 2015 and 2016	8,409,051
Accumulated amortization	
Balance at December 31, 2014	5,615,302
Amortization	1,397,074
Balance at December 31, 2015	7,012,376
Amortization	1,396,675
Balance at December 31, 2016	8,409,051
Carrying amounts	
Balance at December 31, 2015	1,396,675
Balance at December 31, 2016	-

11. Accounts payable and accrued liabilities

	2016 \$	2015 \$
Accounts payable trade	734,785	1,196,851
Accrued liabilities	545,018	625,818
Accounts payable - shareholder	126,237	161,933
Accounts payable - trust beneficially owned by a shareholder	40,688	72,279
	1,446,728	2,056,881

12. Billings in excess of costs and profits on uncompleted contracts

The amount to date of costs incurred and recognized profits less recognized losses for uncompleted contracts amounted to \$1,006,973 (2015 - \$2,865,970).

Payments received on uncompleted contracts were \$2,637,795 (2015 - \$3,464,010) in cash and \$300,000 (2015 - \$50,000) of other.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

13. Loans

	2016 \$	2015 \$
Balance of Sale - company under common control (i)	432,166	472,166
Term loans (ii)	188,600	-
Current portion of loans	620,766	472,166

(i) Balance of Sale – company under common control (“Balance of Sale”) arose from the purchase of the intangible assets in March 2011. Under the purchase under the amending agreement and additional amending agreements (the “purchase agreement”), the consideration is payable in monthly instalments of \$100,000 starting October 1, 2017. Under the amended terms of the agreement, the Balance of Sale does not carry any interest.

Following the purchase agreement, in the event of any change within the Company that would be considered material by the holder of the Balance of Sale, such as a significant financial development, any and all amounts outstanding will become immediately due and payable on the date of the material change.

Although instalment payments were to begin in October 2017, the Company made instalment payments during 2016 for a total amount of \$40,000 (2015 - \$440,000).

The unpaid amount of interest for the twelve months ended December 31, 2016 was added to the Balance of Sale in the amount of Nil (2015 - \$12,841).

(ii) Term loans are financing in the form of loans with respect to the Company’s scientific research and experimental development tax credit (“SR&ED Tax Credits”) The principal of the loans are subject to holdback to be disbursed upon reception of notice of assessment, with terms from 9 months and 12 months, bearing interest at 18% per annum and a one-time management fee of 5%. Pursuant to the financing, the Company granted R&D Capital Inc. a security interest and movable hypothec on all of its assets, with a first rank claim on the refundable portion of its SR&ED Tax Credits for each of the fiscal years ended December 31, 2014, 2015 and 2016.

In 2016, the amount available under the agreements totals \$746,600. During the period, the Company received \$637,000, net of management fees of \$31,850 and repaid an amount of \$448,400.

14. Convertible debentures

On March 30, 2015, the Company completed a \$4,000,000 unsecured and subordinated convertible debenture issue which matures in 3 years from the date of issuance and bears interest at 7.5% per annum, payable quarterly.

The convertible debentures are convertible into common shares of the Company at any time at the option of the holder at a conversion price of \$0.80 per common share, and upon giving effect to such conversion, all accrued and unpaid interest will be paid in full within 60 days. The Company may redeem the convertible debentures at any time prior to the maturity date by paying to the holder a redemption price equal to:

- (i) the entirety of the principal amount;
- (ii) any interest accrued thereon as of the redemption date; and
- (iii) any interest to be accrued (but not yet accrued as of the redemption date) thereon up until maturity date.

In the event that the average market price of the common shares over the course of the 20 trading days immediately preceding the date of the redemption notice is equal to or greater than \$1.20, then the redemption price shall be calculated as comprising (i) the entirety of the principal amount; and (ii) any interest accrued thereon as of the redemption date only.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

14. Convertible debentures (continued)

At the issuance date the convertible debentures were recorded as follows:

	\$
Debt component, net of transaction cost of \$242,905	3,140,222
Conversion option recognized in equity, net of transaction costs of \$44,291	572,582
Net proceeds	3,712,804

The debt component is being accreted using the effective interest rate method:

	2016 \$	2015 \$
Balance, beginning of year	3,328,722	-
Issuance	-	3,140,222
Effective interest accretion	277,175	188,500
Balance, end of year	3,605,897	3,328,722

15. Shareholders' equity (deficiency)

Common shares and share purchase warrants

Authorized:

The Company is authorized to issue an unlimited number of Class A common shares without par value.

- (i) On July 26, 2016, the Company completed a private placement (the "Financing") in which 6,131,579 units were issued at a price of \$0.19 per unit, for gross proceeds of \$1,165,000. Each unit consists of one common share and one-half of one common share purchase warrant ("Warrant"). Each whole Common Share purchase warrant entitles the holder thereof to purchase one common share at a price of \$0.35 until January 26, 2018. Each unit is subject to a statutory hold period of four months and one day from the date of closing. The value of the Warrants was measured based on the Black-Scholes option pricing model. An amount of \$163,772 was allocated to Warrants and was presented as part of the warrant reserve.

The following assumptions under the Black-Scholes option pricing model were used:

Exercise price (\$)	0.35
Weighted-average issuance date market price (\$)	0.25
Expected life (years)	1.5
Expected volatility (%)	90.4
Risk-free interest rate (%)	0.58
Dividend yield (%)	0

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

15. Shareholders' equity (deficiency) (continued)

The expected volatility was determined by reference to historical data of the Company's share price.

In connection with the Financing, the Company also paid finder fees and other related costs of \$9,124 and issued 42,000 compensation warrants which entitle the holder to purchase 42,000 common share units at a price of \$0.19. The fair value of the 42,000 purchase warrants was estimated at \$3,435 using Black-Scholes option pricing model with the same above-noted assumptions.

- (ii) On July 26, 2016, the Company completed a share debt transaction to settle a loan outstanding of \$150,000 and accounts payable in the aggregate amount of \$262,025 whereby the Company issued 2,060,126 common shares at a price of \$0.20 per common share in the aggregate amount of \$412,025. Upon this transaction, the Company derecognized the accounts payable outstanding of \$262,025 and loan payable outstanding of \$150,000 and recorded the common shares issued of \$412,025 in equity. The common shares issued were subject to a hold period of four months and one day from the date of issuance. Share issue costs of \$2,560 were paid in cash and recorded as a reduction of equity.
- (iii) On December 11, 2015, the Company completed a private placement in which 8,835,000 units were issued at a price of \$0.20 each for gross proceeds of \$1,767,000 (of which 6,800,000 units or \$1,360,000 were issued to related parties). Each unit consisted of one common share and one-half of one common share purchase warrant. Each whole Common Share purchase warrant ("Warrant Share") is exercisable at the strike price of \$0.50 per common share expiring December 11, 2017 (24 months from the closing date).

In accordance with the Black Scholes pricing model, the Company has allocated a value of \$0.085 to each purchase warrant for a total value of \$375,488 which has been credited to warrants reserve. The following assumptions under the Black Scholes model were used to arrive at this fair value.

Fair value market of the share	\$0.24
Risk free interest rate	0.48%
Expected volatility	101%
Expected dividend yield	Nil
Expected life (years)	2

The volatility factor was determined by looking at the historical volatility of the Company and also by looking at the published volatility of other similar companies listed on the TSX Venture.

On closing, the agents received a cash commission totalling \$18,200, and 91,000 compensation options. Each compensation option is exercisable for one unit at the issue price of \$0.20 for a period of 24 months from the closing of the transaction.

In accordance with the Black Scholes pricing model, the Company has allocated a value of \$0.137 to each compensation option based on the value of the underlying purchase warrant for a total value of \$12,467 which has been credited to warrants reserve. The following assumptions under the Black Scholes model were used to arrive at this fair value.

Fair value market of the share	\$0.24
Risk free interest rate	0.48%
Expected volatility	101%
Expected dividend yield	Nil
Expected life (years)	2

Share issue costs associated with this transaction of \$9,585 were paid in cash and recorded as a reduction of equity.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

15. Shareholders' equity (deficiency) (continued)

(iv) On March 30, 2015, the Company concluded a private placement of \$4,000,000 principal amount unsecured subordinated convertible debentures of the Company (see note 14).

On closing, the agent received a cash commission totalling \$218,475, and was also granted 270,417 broker warrants. Each broker warrant is exercisable for one common share at a price of \$0.60 for a period of 24 months from the closing of the transaction.

In accordance with the Black Scholes pricing model, the Company has allocated a value of \$0.199 to each broker warrant based on the value of the underlying purchase warrant for a total value of \$53,813 which has been credited to warrants reserve. The following assumptions under the Black Scholes model were used to arrive at this fair value

Fair value market of the share	\$0.44
Risk free interest rate	0.51%
Expected volatility	101%
Expected dividend yield	Nil
Expected life (years)	2

Transaction costs incurred on the issuance of these convertible debentures consisted of the agent's commission of \$218,475, debt issue costs and legal fees of \$68,721 which were paid in cash. Capitalized transaction costs related to the convertible debentures of \$287,196 were prorated between equity and liability components, with those recorded against the liability to be amortized using the effective interest method.

(a) Stock option plan

The Company has a stock option plan authorizing the Board of Directors to grant options to directors, officers, employees and consultants to acquire common shares of the Company at a price computed by reference to the closing market price of the shares of the Company on the business day before the Company notifies the stock exchanges of the grant of the option. The number of shares which may be granted to any one person shall not exceed 5% (2% for consultants) of total share capital over a twelve month period.

The following table sets out the activity in stocks options:

	Options issued Number	Weighted average exercise price \$
Balance – December 31, 2014	3,916,000	0.28
Options granted	3,130,000	0.30
Options exercised	(35,000)	0.21
Options forfeited	(605,000)	0.20
Balance – December 31, 2015	6,406,000	0.30
Options granted	4,530,000	0.18
Options expired	(500,000)	0.80
Options forfeited	(685,000)	0.30
Balance – December 31, 2016	9,751,000	0.22

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

15. Shareholders' equity (deficiency) (continued)

In the years ended December 31, 2016 and 2015, the following options were granted:

Date of grant	October 26, 2016	October 20, 2016	September 25, 2016
Number of options granted	80,000	100,000	4,350,000
Vesting period from date of grant	3 year	3 year	1 year ¹
Exercise price (\$)	0.18	0.19	0.18
Value of each option under the Black Scholes pricing model (\$)	0.122	0.120	0.122
Total fair value of options granted (\$)	9,760	12,000	530,700
Assumptions under the Black Scholes model:			
Fair value of the market share(\$)	0.18	0.18	0.18
Risk free interest rate (%)	0.68	0.68	0.59
Expected volatility (%)	87	87	87
Expected dividend yield	-	-	-
Expected life (number of months)	60	60	60
Forfeiture rate (%)	-	-	-

¹ On September 25, 2016, the Company granted 4,350,000 stock options to its executive officers which have a five year term. A total of 2,225,000 of the stock options granted vested on the date of grant, 2,125,000 are scheduled to vest on September 25, 2017.

Date of grant	February 12, 2015	June 1, 2015	July 15, 2015
Number of options granted	2,630,000	400,000	100,000
Vesting period from date of grant	3 years	3 years	3 years
Exercise price (\$)	0.30	0.32	0.36
Value of each option under the Black Scholes pricing model (\$)	0.202	0.243	0.273
Total fair value of options granted (\$)	531,260	97,200	27,300
Assumptions under the Black Scholes model:			
Fair value of the market share(\$)	0.275	0.32	0.36
Risk free interest rate (%)	0.70	0.90	0.68
Expected volatility (%)	101	104	104
Expected dividend yield	-	-	-
Expected life (number of months)	60	60	60
Forfeiture rate (%)	8	8	8

The underlying expected volatility was determined by reference to historical data of the Company's share price. No special features inherent to the stock options granted were incorporated into the measurement of fair value.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

15. Shareholders' equity (deficiency) (continued)

As at December 31, 2016, the outstanding options, as issued under the stock option plan to directors, officers, employees and consultants for the purchases of one common share per option, are as follows:

Issue date	Number of options	Exercise price	Number of exercisable options (1)	Expiry date
		\$		
September 19, 2012	100,000	0.15	100,000	September 19, 2017
September 19, 2012	550,000	0.175	550,000	September 19, 2017
November 19, 2012	1,901,000	0.21	1,901,000	November 19, 2017
May 30, 2013	100,000	0.22	100,000	May 30, 2018
February 12, 2015	2,570,000	0.30	1,187,000	February 12, 2020
September 25, 2016	4,350,000	0.18	2,225,000	September 25, 2021
October 20, 2016	100,000	0.19	10,000	October 20, 2021
October 25, 2016	80,000	0.18	8,000	October 26, 2021
	9,751,000	0.212	5,081,000	

(1) At December 31, 2016, the weighted average price of the exercisable options was \$0.22.

(b) Warrants

The following table reflects the activity in warrants during the year ended December 31, 2016 and the number of issued and outstanding share purchase warrants as at December 31, 2016:

	Number of warrants December 31, 2015	Issued (expired)	Number of warrants December 31, 2016	Price per warrant	Expiry date
				\$	
Private placement – November 26, 2014 (1)	2,142,857	-	2,142,857	0.195	November 26, 2017
Broker warrants – November 26, 2014	150,000	(150,000)	-	-	November 26, 2016
Broker warrants – March 30, 2015	270,417	-	270,417	0.60	March 30, 2017
Private placement – December 11, 2015	4,417,500	-	4,417,500	0.50	December 11, 2017
Broker warrants– December 11, 2015	45,500	-	45,500	0.20	December 11, 2017
Private placement – July 26, 2016	-	3,065,790	3,065,790	0.35	January 26, 2018
Broker warrants– July 26, 2016	-	42,000	42,000	0.19	January 26, 2018
	7,026,274	2,957,790	9,984,064	0.40	

(1) On July 26, 2016, the Company amended the terms of common share purchase warrants issued by the Company in connection with a private placement completed on November 26, 2014. In connection with this amendment, the exercise price of the Warrants was reduced from \$0.55 to \$0.26 and on September 20, 2016 was further reduced to \$0.195. The warrants are subject to accelerated expiry provision in accordance with the policies of the TSXV such that the exercise period of the warrants will be reduced to thirty days if, for any ten consecutive trading days during the unexpired term of the warrants (the "Premium Trading Days"), the closing price of the Company's Common Shares is \$0.325 or more, with the 30-days expiry period to begin no more than seven calendar days after the 10th Premium Trading Day. The expiry date of the warrants was extended to November 26, 2017. The Company has elected not to present the adjustment to equity arising from the modification to the terms of these warrants.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

16. Supplemental disclosure of expenses and cash flow information

<i>Net changes in non-cash components of operating working capital</i>	2016	2015
	\$	\$
Decrease (increase) in:		
Accounts receivable	(3,531)	994,362
Costs and profits in excess of billings on uncompleted contracts	(403,330)	(898,883)
Investment tax credits receivable	209,526	(356,153)
Prepaid expenses	64,828	(27,937)
Inventories	-	(846,241)
Sales tax receivable	222,151	(123,881)
Increase (decrease) in:		
Accounts payable and accrued liabilities	(348,128)	909,629
Billings in excess of costs and profits on uncompleted contracts	1,032,778	(76,608)
	774,294	(475,712)

17. Other information

- (a) The aggregate amortization of intangible assets expense for the years ended December 31, 2016 and December 31, 2015 was \$1,396,675 and \$1,397,074 respectively and was recorded in cost of sales and services.
- (b) Depreciation on property and equipment amounted to \$127,405 for the year ended December 31, 2016 (2015 - \$163,727) and is recorded in selling, general and administrative. Employee benefits totaled \$4,370,638 in the year ended December 31, 2016 (2015 - \$4,524,265) and included share-based compensation of \$366,025 (2015 - \$327,650).
- (c) During the year, the Company wrote-off inventory in the amount of \$ \$994,015 that was not expected to be realized.
- (d) Net finance costs include the following items:

	2016	2015
	\$	\$
Finance income		
Change in fair value of investments	25,540	-
Gain on disposal of investments	55,160	-
	80,700	-
Finance costs		
Interest on convertible debentures	300,000	225,000
Interest accretion of convertible debentures	277,175	188,500
Interest on term loan	62,367	-
Interest on balance of sale –company under common control	-	12,841
	639,542	426,341
Net finance costs	558,842	426,341

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

18. Related party transactions

Rent was charged by a trust beneficially owned by a shareholder of the Company in the amount of \$188,781 (2015 - \$181,980). A balance due of \$40,688 (2015 - \$72,279) is included in accounts payable and accrued liabilities.

Interest on balance of sale was charged by a company under common control in the amount of \$Nil (2015 - \$12,841). The balance of interest that has not been paid of \$317,319 (2015 - \$317,319) is included in loans.

Interest on the convertible debentures was charged by a shareholder of the Company in the amount of \$56,640 (2015 - \$42,516).

Fees of \$46,000 were charged for services rendered by the independent directors who are members of the Company's Board of Directors (2015 - \$47,000).

Fees of \$Nil were charged for professional services rendered by a company controlled by a director of the Company (2015 - \$116,000).

As part of the private placement of December 11, 2015 (see note 15 (ii)), 6,800,000 units were issued at a price of \$0.20 each for a gross proceeds of \$1,360,000 to shareholders and key management of the Company.

As part of the unsecured and subordinated convertible debentures of \$4,000,000 issued March 30, 2015 (see note 14), 1,000,000 convertible debentures were issued at a price of \$0.80 each as settlement of \$755,000 of the Balance of Sale due to a shareholder of the Company.

As part of a stock option incentive plan, on September 25, 2016, 4,350,000 common shares at a price of \$0.18 in the capital of the company were granted to the Directors of the Company. The options will be exercisable for a period of five (5) years, commencing on the date of the grant.

The key management personnel of the Company are the members of the Board of Directors and certain executive officers. During the year ended December 31, 2016 the total compensation to key management consisted of the following:

	2016	2015
	\$	\$
Salaries	605,475	620,573
Pension contributions	8,073	7,924
Other benefits	41,391	42,036
Total compensation	654,939	670,533

A balance of \$145,571 of key management compensation is included in accounts payable and accrued liabilities as at December 31st, 2016 (2015 - \$171,314) [note 11].

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

19. Financial instruments

As part of its operations, the Company carries a number of financial instruments. It is management's opinion that the Company is not exposed to significant interest, currency or credit risks arising from these financial instruments except as otherwise disclosed. The Company's overall risk management program focuses on the unpredictability of the financial market and seeks to minimize potential adverse effects on the Company's financial performance. The Company does not use derivative financial instruments to hedge these risks.

Foreign currency risk

The Company enters into transactions denominated in US Dollars for which the related revenues, expenses, accounts receivable and accounts payable and accrued liabilities balances are subject to exchange rate fluctuations.

As at December 31, 2016, the following items are denominated in foreign currencies:

	US \$	CDN \$
Cash	61,842	83,035
Accounts receivable	223,292	299,791
Accounts payable and accrued liabilities	(137,135)	(182,649)
Net exposure	147,999	200,177

As at December 31, 2015, the following items are denominated in foreign currencies:

	US \$	CDN \$
Cash	469,851	650,274
Accounts receivable	180,576	241,142
Accounts payable and accrued liabilities	(199,176)	(265,983)
Net exposure	451,251	625,433

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. Management has implemented a policy to manage foreign exchange risk by using its purchases in U.S. dollars as a natural hedge against its revenue stream. Therefore the Company does not hold derivative financial instruments to manage the fluctuation of exchange rate risk.

Sensitivity analysis

At December 31, 2016, if the US Dollar changes by 10% against the Canadian dollar with all other variables held constant, the impact on after-tax loss for the year would have been \$20,000 (2015 - \$63,000).

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

19. Financial instruments (continued)

Credit concentration

As at December 31, 2016, three customers accounted for 53% (2015 - four customers for 73%) of revenues from operations.

Customer	2016 Revenues	Percentage of total revenues
1	\$671,108	13%
2	\$948,047	19%
3	\$1,039,908	21%
	\$2,659,063	53%

Customer	2015 Revenues	Percentage of total revenues
1	\$943,472	15%
2	\$1,801,257	29%
3	\$742,276	12%
4	\$1,059,242	17%
	\$4,546,247	73%

Four customers accounted for 93% (2015 - three customers for 74%) of the accounts receivable, representing the Company's major credit risk exposure. Credit concentration is determined based on customers representing 10% or more of total revenues and/or total accounts receivable. The Company believes that there is no unusual exposure associated with the collection of these receivables. The maximum potential exposure is the carrying amounts. The Company manages its credit risk by performing credit assessments of its customers and provides allowances for potentially uncollectible accounts receivable. The Company does not generally require collateral or other security from customers on accounts receivable.

Fair value of financial instruments

Financial instruments comprise of cash, accounts receivable, investments, accounts payable and accrued liabilities, loans and convertible debentures. There are three levels of fair value that reflect the significance of inputs used in determining fair values of financial instruments:

Level 1 — quoted prices (unadjusted) in active markets for identical assets or liabilities

Level 2 — inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices)

Level 3 — Inputs for the asset or liability that are not based on observable market data

The fair values of cash, accounts receivable, accounts payable and accrued liabilities, and loans approximate their carrying amounts due to their short-term maturities. Investments are valued at fair value and classified as Level 1.

As of December 31, 2016, the fair value of the convertible debenture approximate its carrying value since there was no significant change in the interest rate from the issuance of the convertible debenture compare to the current interest rate.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

19. Financial instruments (continued)

Interest rate risk

Interest rate risk is the risk that the value of a financial instrument might be adversely affected by a change in interest rates. Changes in market interest rates may have an effect on the cash flows associated with some financial assets and liabilities, known as cash flow risk, and on the fair value of investments or liabilities, known as price risk. The Company is exposed to a risk of fair value on the convertible debentures as those financial instruments bear interest at fixed rates.

Other price risk

Other price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices (other than those arising from foreign currency risk and interest rate risk), whether those changes are caused by factors specific to the individual financial instrument or its issuers or factors affecting all similar financial instruments traded in the market. The most significant exposure to other price risk for the Company arises from the investments. If equity prices had increased or decreased by 5% as at December 31, 2016, with all other variables held constant, the Company's investments would have increased or decreased respectively, by approximately \$19,000 (2015 - \$2,500).

Liquidity risk

Liquidity risk is the risk that the Company will encounter difficulty in meeting obligations associated with financial liabilities that are settled by delivery of cash or investments. The Company's ability to continue as a going concern is dependent on management's ability to raise required funding through future equity and / or debt issuances and to generate positive cash flows from operations (see note 1b). The Company manages its liquidity risk by forecasting cash flows from operations and anticipating any investing and financing activities. Management and the Board of Directors are actively involved in the review, planning and approval of significant expenditures and commitments.

The following table summarizes the contractual maturities of financial liabilities as at December 31, 2016.

Financial liability	Carrying amount	Total	6 months or less	6-12 months	1-2 year
	\$	\$	\$	\$	\$
Accounts payable and accrued liabilities	1,446,728	1,446,728	1,446,728	-	-
Loans ¹	620,766	661,633	-	661,633	-
Convertible debentures ²	3,605,897	4,375,000	150,000	150,000	4,075,000
	5,673,391	6,483,361	1,596,728	811,633	4,075,000

¹ Including interest at a rate of 18%.

² including interest at a rate of 7.5%.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

20. Contingent liability

The Company had received a government grant in prior years of approximately \$800,000 to assist with the development of a new system of advanced waste treatment systems technology.

The grant is potentially repayable at the rate of 3% of any consideration received as a result of the project, for which funding has been received, to a maximum of the actual grant received. This will be in effect for 10 years beginning 3 years after the completion date of the new system which was on May 30, 2011.

The Company abandoned the project in fiscal 2011 and accordingly, no amount is expected to be repaid.

21. Capital management

The Company's objectives in managing capital are:

- a) To ensure sufficient liquidity to support its current operations and execute its business plan; and
- b) To provide adequate return to the shareholders

The Company's primary objectives when managing capital is to ensure the entity continues as a going concern as well as to maintain optimal returns to shareholders and benefits for other stakeholders.

The Company currently funds these requirements from cash flows from operations and with financing arrangements with shareholders. The Company is not subject to any externally imposed capital requirements.

The management of capital includes common shares, warrants reserve, contributed surplus and equity portion of convertible debentures for a total amount of \$32,596,279 (2015 - \$30,664,913) and debt of \$4,423,886 (2015 - \$3,800,888). The Company monitors its working capital in order to meet its financial obligations. As at December 31, 2016, the Company's working capital deficiency was \$2,079,353 (2015 - excess of \$166,905).

There were no changes in the Company's approach to capital management during fiscal 2016.

22. Income taxes

(a) Reconciliation of income taxes

The impact of differences between the Company's reported income taxes on operating loss and the expense that would otherwise result from the application of statutory rates is as follows:

	2016 \$	2015 \$
Loss before income taxes	(6,952,219)	(4,917,779)
Income tax rates	26.90%	26.90%
Income tax recovery at the combined basic Federal and Provincial tax rates	(1,870,147)	(1,322,883)
Permanent differences	194,171	165,980
Tax rates changes	34,514	-
Unrecognized tax assets	1,641,462	1,156,903
Income tax expense	-	-

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

22. Income taxes (continued)

	2016	2015
	\$	\$
(b) Deferred tax expense:		
Origination and reversal of temporary differences	(1,641,462)	(1,156,903)
Change in unrecognized deductible temporary differences	1,641,462	1,156,903
Deferred tax expense	-	-

(c) The tax effects of significant items comprising the Company's net deferred tax assets and liabilities are as follows:

	2016	2015
	\$	\$
Financing cost	95,393	160,086
Property, plant and equipment	154,317	131,093
Intangible assets	1,454,180	1,089,367
Research and development expenses	1,186,196	911,350
Non-capital losses carried forward	3,591,479	2,548,207
	6,481,565	4,840,103
Deferred tax assets not recognized	(6,481,565)	(4,840,103)
	-	-

(d) Tax carry forward

The Company has the following non-capital losses available to reduce future income taxes:

Expiry date	Federal \$	Provincial \$
2031	2,313,597	2,313,597
2032	3,945,870	3,945,870
2033	2,047,643	2,047,643
2034	589,007	589,007
2035	703,664	416,827
2036	3,977,143	3,977,143
	13,576,924	13,290,087

The Company has a total of \$2,125,736 of federal income tax credits that can be carried forward for 20 years and expire from 2028 to 2036.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

23. Segment information

The Company operates in one segment, based on financial information that is available and evaluated by the Company's Board of Directors.

The Company's head office is located in Montreal, Quebec. The operation of the Company is located in one geographic area: Canada. The following is a summary of the Company's geographic information:

	2016	2015
	\$	\$
Revenue from external customers		
Canada	1,515,425	897,265
United States	3,191,654	2,003,770
Europe	75,404	-
Mexico	41,638	586,240
Asia	377,960	2,754,728
Middle East	20,052	-
	5,222,133	6,242,003

The following is a summary of the Company's revenue by product line:

	2016	2015
	\$	\$
Sale of goods under long-term contracts	2,226,432	4,525,396
Services	1,995,701	1,716,607
Sale of intellectual property	1,000,000	-
	5,222,133	6,242,003

24. Commitments

(a) Premises

The Company has entered into long-term leases for premises. The leases end between January 2022 and August 2022. The minimum lease payments due over the next two years are as follows:

	\$
2017	421,221
2018	428,108
2019	434,908
2020	441,708
2021	448,508
2022	167,280
	2,341,733

Included in the above are commitments to a trust beneficially owned by a shareholder of the Company of \$206,568 for 2017, \$202,121 for 2018, \$202,121 for 2020, \$202,121 for 2021 and \$16,843 for 2022.

PyroGenesis Canada Inc.

Notes to the Financial Statements

For the years ended December 31, 2016 and 2015

24. Commitments (continued)

(b) Automobile

The Company has entered in long-term lease for an automobile. The lease ends in August 2017. The minimum lease payments due over the next year are \$18,372.