

PyroGenesis Canada Inc.
Consolidated
Financial Statements
December 31, 2020 and 2019

PyroGenesis Canada Inc.

December 31, 2020 and 2019

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PyroGenesis Canada Inc.

Management's Responsibility

Management is responsible for the preparation and presentation of the accompanying consolidated financial statements, including responsibility for significant accounting judgments and estimates in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board. 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 Registered Public Accounting Firm, 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.

March 31, 2021

[Signed by P. Peter Pascali]

P. Peter Pascali, Chief Executive Officer

[Signed by Robert Radin]

Robert Radin, Interim Chief Financial Officer



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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors PyroGenesis Canada Inc.

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated statements of financial position of PyroGenesis Canada Inc. (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of comprehensive income (loss), shareholders' deficiency, and cash flows for the years ended December 31, 2020 and 2019, and the related notes (collectively, the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2020 and 2019, and its consolidated financial performance and its consolidated cash flows for the years ended December 31, 2020 and 2019, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

We have served as the Company's auditor since 2015.

Montréal, Canada

March 31, 2021

PyroGenesis Canada Inc.

Consolidated Statements of Financial Position

	December 31, 2020	December 31, 2019
	\$	\$
Assets		
<i>Current assets</i>		
Cash and cash equivalents [note 6]	18,104,899	34,431
Accounts receivable [note 7]	3,329,653	210,540
Costs and profits in excess of billings on uncompleted contracts [note 8]	1,073,633	122,980
Investment tax credits receivable [note 9]	567,059	709,395
Current portion of deposits [note 12]	1,421,246	150,322
Contract assets	694,301	-
Other assets	145,996	106,954
Total current assets	25,336,787	1,334,622
<i>Non-current assets</i>		
Deposits [note 12]	301,341	178,105
Strategic investments [note 10]	39,991,750	1,609,354
Property and equipment [note 13]	2,529,570	1,977,481
Right-of-use assets [note 14]	3,701,000	3,742,769
Royalties receivable [note 11]	1,060,000	-
Investment tax credits receivable [note 9]	705,316	-
Intangible assets [note 15]	905,614	736,898
Total assets	74,531,378	9,579,229
Liabilities		
<i>Current liabilities</i>		
Accounts payable and accrued liabilities [note 16]	4,708,051	4,913,155
Billings in excess of costs and profits on uncompleted contracts [note 17]	6,592,972	3,084,657
Current portion of term loans [note 18]	12,208	496,000
Promissory note payable to the controlling shareholder and CEO	-	284,956
Current portion of lease liabilities [note 14]	225,977	139,529
Convertible debentures [note 19]	-	2,898,358
Total current liabilities	11,539,208	11,816,655
<i>Non-current liabilities</i>		
Lease liabilities [note 14]	2,762,565	3,845,497
Term loans [note 18]	100,499	-
Deferred income taxes [note 29]	706,000	-
Total liabilities	15,108,272	15,662,152
Shareholders' equity (deficiency) [note 20]		
Common shares and warrants	67,950,069	47,073,243
Contributed surplus	10,480,310	6,679,730
Equity portion of convertible debentures [note 19]	-	401,760
Deficit	(19,007,273)	(60,237,656)
Total shareholders' equity (deficiency)	59,423,106	(6,082,923)
Total liabilities and shareholders' equity (deficiency)	74,531,378	9,579,229

Contingent liabilities, subsequent events [notes 27 and 31]. The accompanying notes form an integral part of the consolidated financial statements.

Approved on behalf of the Board:

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

[Signed by Robert Radin] Robert Radin

PyroGenesis Canada Inc.

Consolidated Statements of Comprehensive Income

Years ended December 31,

	2020	2019
	\$	\$
Revenues [note 5]	17,775,029	4,813,978
Cost of sales and services [note 22]	7,472,361	3,515,886
Gross profit	10,302,668	1,298,092
Expenses		
Selling, general and administrative [note 22]	12,334,553	6,188,898
Research and development, net [note 9]	(731,077)	851,512
Impairment of plasma atomization system and related inventory [note 13]	-	2,367,531
	11,603,476	9,407,941
Net loss from operations	(1,300,808)	(8,109,849)
Changes in fair value of strategic investments [note 10]	44,626,698	176,237
Finance costs, net [note 23]	(524,074)	(1,237,504)
Net earnings (loss) before income taxes	42,801,816	(9,171,116)
Income taxes [note 29]	1,033,412	-
Net earnings (loss) and comprehensive income (loss)	41,768,404	(9,171,116)
Earnings (loss) per share [note 24]		
Basic	0.28	(0.07)
Diluted	0.27	(0.07)

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

PyroGenesis Canada Inc.

Consolidated Statements of Changes in Shareholders' Equity (Deficiency)

	Number of Class A common shares	Class A common shares and warrants	Contributed Surplus	Equity portion of convertible debentures	Deficit	Total
		\$	\$	\$	\$	\$
Balance - December 31, 2019	141,303,451	47,073,243	6,679,730	401,760	(60,237,656)	(6,082,923)
Shares issued upon public issuance [note 19]	3,354,550	12,076,380	-	-	-	12,076,380
Share issuance cost	-	(1,640,052)	-	-	-	(1,640,052)
Shares issued upon exercise of stock options [note 19]	2,118,000	1,244,207	(484,807)	-	-	759,400
Shares issued upon exercise of share purchase warrants [note 19]	7,060,617	5,623,323	-	-	-	5,623,323
Issuance of convertible loan – equity component [note 19]	-	-	-	98,422	-	98,422
Conversion of loan into shares [note 19]	3,225,000	925,982	-	(98,422)	-	827,560
Conversion of debentures into shares [note 19]	3,369,375	3,073,356	-	(360,981)	-	2,712,375
Share redemptions for cancellation [note 19]	(1,285,000)	(426,370)	-	-	(538,021)	(964,391)
Equity component of convertible debentures [note 19]	-	-	40,779	(40,779)	-	-
Share-based payments	-	-	4,244,608	-	-	4,244,608
Net earnings and comprehensive earnings	-	-	-	-	41,768,404	41,768,404
Balance – December 31, 2020	159,145,993	67,950,069	10,480,310	-	(19,007,273)	59,423,106
Balance - December 31, 2018	133,501,051	42,863,456	6,795,274	401,760	(51,066,540)	(1,006,050)
Private placements [note 19]	6,418,400	3,722,472	-	-	-	3,722,472
Share issue expenses [note 19]	-	(106,395)	-	-	-	(106,395)
Shares issued upon exercise of stock options [note 19]	1,384,000	593,710	(287,350)	-	-	306,360
Share-based payments	-	-	171,806	-	-	171,806
Net loss and comprehensive loss	-	-	-	-	(9,171,116)	(9,171,116)
Balance – December 31, 2019	141,303,451	47,073,243	6,679,730	401,760	(60,237,656)	(6,082,923)

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

PyroGenesis Canada Inc.

Consolidated Statements of Cash Flows

Years ended December 31,

	2020	2019
	\$	\$
Cash flows provided by (used in)		
Operating activities		
Net income (loss)	41,768,404	(9,171,116)
Adjustments for:		
Share-based payments	4,244,608	171,807
Depreciation on property and equipment	63,118	168,835
Depreciation of right-of-use assets	408,335	359,783
Amortization of intangibles assets	27,190	20,133
Amortization of contract assets	161,291	-
Finance costs	524,074	1,237,502
Change in fair value of investments	(44,626,698)	(176,237)
Loss on disposal of property and equipment	2,795	-
Deferred income taxes	706,000	-
Unrealized foreign exchange	30,704	-
Impairment of plasma atomization system and related inventory	-	2,367,531
	3,309,821	(5,021,762)
Net change in balances related to operations [note 21]	(4,124,808)	1,722,952
	(814,987)	(3,298,810)
Investing activities		
Additions to property and equipment	(702,111)	(822,953)
Additions to intangible assets	(113,564)	(165,673)
Purchase of strategic investments	(4,158,240)	-
Disposal of strategic investments	9,905,447	261,000
Other	-	(13,357)
	4,931,532	(740,983)
Financing activities		
Interest paid	(395,013)	(572,860)
Repayment of term loans	(117,154)	-
Repayment of SR&ED and term loans	(440,233)	(247,200)
Repayment of lease liabilities	(1,363,050)	(131,321)
Repayment of promissory notes	(295,000)	-
Repayment of convertible debentures	(358,500)	-
Proceeds from issuance of convertible loans	903,000	-
Proceeds from issuance of other term loans	195,919	458,187
Proceeds from issuance of shares upon exercise of warrants	5,623,322	-
Proceeds from issuance of shares upon exercise of stock options	759,400	306,360
Proceeds from issuance of shares [note 19]	12,076,380	3,722,472
Share issue costs	(1,640,052)	(106,395)
Shares repurchase for cancellation	(964,391)	-
	13,984,628	3,429,243
Effect of exchange rate changes on cash denominated in foreign currencies	(30,705)	-
	18,070,468	(610,550)
Net increase (decrease) in cash and cash equivalents	18,070,468	(610,550)
Cash and cash equivalents - beginning of year	34,431	644,981
Cash and cash equivalents - end of year	18,104,899	34,431

PyroGenesis Canada Inc.

Consolidated Statements of Cash Flows

Supplemental cash flow disclosure

Non-cash transactions:

Purchase of intangible assets included in accounts payable	113,826	31,484
Purchase of property and equipment included in accounts payable	27,870	166,638
Interest included in accounts payables	-	259,447
Cost reduction of property and equipment related to government assistance and investment tax credits receivable	-	80,146
Issuance of common shares upon exercise of convertible debentures	2,695,500	-
Issuance of common shares upon conversion of loan	827,560	-
Initial recognition of contract assets and commissions payables	855,592	-
Proceeds from disposal of strategic investments included in other receivables	892,609	-
HPQ shares received in lieu of payment of accounts receivable	395,514	-
Fair value of HPQ warrants exercised	337,500	-
Initial recognition or modification of lease liabilities and right-of-use assets [note 12]:		
Right-of-use assets	366,566	4,102,552
Lease liabilities	366,566	4,116,347
Accounts payable and deferred leases reclassified in right-of-use assets	-	11,333
Computer equipment reclassified in right-of-use assets	-	29,266
Capital lease obligations reclassified in lease liabilities	-	31,728

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

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

1. 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 Exchange under the Symbol "PYR" and on the Frankfurt Stock Exchange (FSX) under the symbol "8PY ", and since March 11, 2021, on NASDAQ in the USA under the symbol "PYRNF".

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 March 31, 2021.

(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:

- (i) strategic investments which are accounted for at fair value,
- (ii) stock-based payment arrangements, which are measured at fair value on grant date pursuant to IFRS 2, *Share-based Payment*, and
- (iii) Lease liabilities, which are initially measured at the present value of minimum lease payments.

(d) Basis of consolidation

For financial reporting purposes, subsidiaries are defined as entities controlled by the Company. The Company controls an entity when it has power over the investee; it is exposed to, or has rights to, variable returns from its involvement with the entity; and it has the ability to affect those returns through its power over the entity.

In instances where the Company does not hold a majority of the voting rights, further analysis is performed to determine whether or not the Company has control of the entity. The Company is deemed to have control when, according to the terms of the shareholder's and/or other agreements, it makes most of the decisions affecting relevant activities.

These consolidated financial statements include the accounts of the Company and its subsidiary Drosrite International LLC. Drosrite International LLC is owned by a member of the Company's key management personnel and close member of the CEO and controlling shareholder's family and is deemed to be controlled by the Company. All significant transactions and balances between the Company and its subsidiary have been eliminated upon consolidation.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

2. Basis of preparation (continued)

The accounting policies set out below have been applied consistently in the preparation of the financial statements of all years presented. Certain comparative information has been reclassified to conform with the financial statement presentation adopted in the current year. Finance costs and changes in fair value of strategic investments are excluded from the loss from operations in the consolidated statement of comprehensive income (loss). An immaterial error correction of \$126,615 of variation of deposits that was presented in the investing activities in the comparative period is now presented in the net change in balances related to operations in the operating activities in the consolidated statement of cash flows and the impairment of the plasma atomisation system and write-off of inventories has been grouped together in the consolidated statement of comprehensive income (loss).

3. Significant accounting policies

(a) Revenue recognition

Revenue from contracts is recognized for each performance obligation either over a period of time or at a point in time, depending on which method reflects the transfer of control of the goods and services underlying the particular performance obligation.

i) Long-term contracts

Long-term contracts involve made-to-order customized equipment and machines and are generally priced on a fixed fee basis. Under these contracts, the equipment or machines are made to a customer's specifications and if a contract is terminated by the customer, the Company is entitled to the greater of the amounts invoiced at the termination date and the reimbursement of the costs incurred to date of termination, including a reasonable margin. Agreements that contain multiple deliverables require the Company to determine whether they contain separately identifiable performance obligations and to allocate the consideration received to each performance obligation.

Revenue relating to long-term contracts is recognised over time based on the measure of progress determined by the Company's efforts or inputs towards satisfying the performance obligation relative to the total expected inputs. The degree of completion is assessed based on the proportion of total costs and/or hours incurred to date, compared to total costs and/or hours anticipated to provide the service under the entire contract, excluding the effects of inputs that do not depict performance, e.g. uninstalled materials. For long-term contracts with uninstalled materials, the Company adjusts the transaction price and recognises revenue on uninstalled materials to the extent of those costs incurred, i.e. at a zero percent profit margin, when certain conditions are met.

Estimates are required to determine anticipated costs and/or hours on long-term contracts. A provision is made for the entire amount of expected loss, if any, in the period in which they are first determinable.

Contract modifications are changes in scope and/or price that are approved by the parties to the contract. Approval may be written, oral or implied by customary business practices, and are legally enforceable. The Company accounts for modifications as a separate contract if the modifications add distinct goods or services that are priced commensurate with stand-alone selling prices or if the remaining goods or services are distinct from those already transferred, otherwise modifications are accounted for as part of the original contract.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

3. Significant accounting policies (continued)

Costs and profits in excess of billings on uncompleted contracts and trade receivables are both rights to consideration in exchange for goods or services that the Company has transferred to a customer, however the classification depends on whether such right is only conditional on the passage of time (trade receivables) or if it is also conditional on something else (costs and profits in excess of billings on uncompleted contracts), such as the satisfaction of further performance obligations under the contract. Billing in excess of costs and profits on uncompleted contracts is the cumulative amount received and contractually receivable by the Company that exceeds the right to consideration resulting from the Company's performance under a given contract.

The costs to obtain long-term contracts such as sale commissions are recognized as Contract assets and recognized as selling expenses over time based on degree of completion of the related contract.

ii) Sales of goods

Revenue related to sales of goods, which may include powders and spare parts are measured based on the consideration specified in contracts with customers. The Company recognizes revenue at a point in time when it transfers control of the goods to the buyer. This is generally at the time the customer obtains legal title to the product and when it is physically transferred to the custody transfer point agreed with the customer.

iii) Sale of intellectual property

Sale of intellectual property is recognized at the date the recipient obtains control of the asset. A variable consideration related to the sale of intellectual property is recognized to the extent that it is highly probable that a reversal will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

(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 net earnings.

(c) Cash and cash equivalents

Cash and cash equivalents are financial instruments readily convertible to a known amount of cash and not subject to a significant risk of changes in value. Cash equivalents include instruments with a maturity of three months or less from the date of acquisition and instruments with an original term longer than three months if there is no significant penalty for withdrawal within a three-month period from the date of acquisition.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

3. Significant accounting policies (continued)

(d) 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.

(e) Earnings (loss) per share

The Company presents basic earnings (loss) per share data for its common shares. Basic loss per share is computed by dividing net earnings (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 share purchase 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 year ended December 31, 2019, potential shares from all outstanding stock options, share purchase warrants and convertible debentures 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 Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

3. Significant accounting policies (continued)

(f) 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 and bringing the asset into operation. Borrowing costs capitalized to asset under development represents the interest expense calculated under the effective interest method and does not include any fair value adjustments of investments designated at fair value through profit and loss. Government assistance and investment tax credits related to the purchase or development of property and equipment are recorded in reduction of the cost. 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 over their respective useful life. Depreciation of an asset under construction begins when it is available for use, i.e. when it is in the location and condition necessary for it to be capable of operating in the manner intended by the Company.

Depreciation is calculated using the following methods and rates:

Computer equipment	Straight line over 3 years
Machinery and equipment	Straight line over 10 years
Automobile	Straight line over 7 years
Leasehold improvements	The lesser of the term of the lease or the useful life (20 years)

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.

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.

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

(g) Leases

Under IFRS 16, at inception, the Company assesses whether a contract is, or contains, a lease based on whether the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Company recognizes a right-of-use asset and a lease liability at the commencement date of the lease, i.e. the date the underlying asset is available for use.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

3. Significant accounting policies (continued)

Right-of-use assets

Right-of-use assets are measured at cost, less any accumulated depreciation and accumulated impairment losses, and adjusted for any remeasurement of lease liabilities. Cost of right-of-use assets is comprised of:

- the initial measurement amount of the lease liabilities recognized.
- any lease payments made at or before the commencement date, less any lease incentives received; and
- any initial direct costs incurred; and
- an estimate of costs to dismantle and remove the underlying asset, restore the site on which it is located or restore the underlying asset to the condition required by the terms and conditions of the lease contract.

Right-of-use assets are depreciated over the shorter period the of lease term and the useful life of the underlying asset. If a lease transfers ownership of the underlying asset or the cost of the right-of-use asset reflects that the Company expects to exercise a purchase option, the related right-of-use asset is depreciated over the useful life of the underlying asset based on periods detailed above. The depreciation starts at the commencement date of the lease. Right-of-use assets are assessed for impairment whenever there is an indication that the right-of-use assets may be impaired.

Lease liabilities

Lease liabilities are initially measured at the present value of the lease payments that are not paid at the commencement date over the lease term. The present value of the lease payments is determined using the lessee's incremental borrowing rate at the commencement date if the interest rate implicit in the lease is not readily determinable. The incremental borrowing rate is a function of the lessee's incremental borrowing rate, the nature of the underlying asset, the location of the asset, the length of the lease and the currency of the lease contract. Generally, the Company uses the lessee's incremental borrowing rate for the present value. At the commencement date, lease payments generally include fixed payments, less any lease incentives receivable, variable lease payments that depend on an index (e.g. based on inflation index) or a specified rate, and payments of penalties for terminating the lease, if the lease term reflects the lessee exercising the option to terminate the lease. Lease payments also include amounts expected to be paid under residual value guarantees and the exercise price of a purchase option if the Company is reasonably certain to exercise that option.

Variable lease payments that do not depend on an index or a specified rate are not included in the measurement of lease liabilities but instead are recognized as expenses in the period in which the event or condition that triggers the payment occurs.

After the commencement date, the carrying amount of lease liabilities is increased to reflect the accretion of interest and reduced to reflect lease payments made. In addition, the carrying amount of lease liabilities is remeasured when there is a change in future lease payments arising from a change in an index or specified rate, if there is a modification to the lease terms and conditions, a change in the estimate of the amount expected to be payable under residual value guarantee, or if the Company changes its assessment of whether it will exercise a termination, extension or purchase option. The remeasurement amount of the lease liabilities is recognized as an adjustment to the right-of-use asset, or in the profit and loss statement when the carrying amount of the right-of-use asset is reduced to zero.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

3. Significant accounting policies (continued)

Classification and presentation of lease-related expenses

Depreciation charge for right-of-use assets, expenses related to variable lease payments not included in the measurement of lease liabilities and loss (gain) related to lease modifications are allocated in the Company's profit and loss statement based on their function within the Company, while interest expense on lease liabilities is presented within finance costs.

Cash flow classification

Lease payments related to the principal portion of the lease liabilities are classified as cash flows from financing activities while lease payments related to the interest portion of the lease liabilities are classified as interest paid within cash flows from financing activities. Lease incentives received are classified as cash flows from investing activities. Variable lease payments not included in the measurement of lease liabilities are classified as cash flows from operating activities.

(h) 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.

(i) 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.

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 intangible assets which include:

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

Costs to establish patents for internally developed technology are considered development costs and are charged to comprehensive loss in the year they are incurred unless they meet specific criteria related to technical, market and financial feasibility. Patent costs include legal and other advisor fees to obtain patents, and patent application fees.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

3. Significant accounting policies (continued)

Amortization of the development costs is calculated on a straight-line basis over the remaining useful life of the related patent and begins when development is complete. During the period of development, the asset is tested annually for impairment.

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.

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.

Amortization is calculated on a straight-line basis:

	Useful life
Licenses	5 to 10 years
Patents and development costs	1 to 21 years

(j) 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 when the services are rendered by the consultant at the fair value of the services received, if the fair value can be measured reliably. In the case the fair value of the services cannot be measured reliably, the services are measured indirectly using the fair value of the equity instruments granted. If there are unidentifiable services, then they are measured at grant date. The cost of stock options is presented as share-based payment expense. 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 Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

3. Significant accounting policies (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.

Issuance of equity instruments

Incremental costs directly attributable to the issue of equity-classified shares are recognized as a deduction from the common shares and warrants, net of any tax effects.

Extinguishing financial liabilities with equity instruments

When equity instruments issued to a creditor to extinguish all or part of a financial liability are recognized initially, the Company measures them at the fair value of the equity instruments issued, unless that fair value cannot be reliably measured. If the fair value of the equity instruments issued cannot be reliably measured, then the equity instruments shall be measured to reflect the fair value of the financial liability extinguished.

Loans with shareholders

Loans with shareholders where the Company is receiving a benefit from the shareholder because an independent third party would not have been transacted at the same value is split into a capital transaction and a deemed third-party transaction. Proceeds from the deemed third-party transaction measured at fair value is recognized in the profit or loss, with the remaining proceeds being recognized directly in equity as a contribution from shareholders in the contributed surplus.

Financial Instruments

Financial assets are classified at amortized cost, fair value through profit or loss ("FVTPL") or fair value through other comprehensive income ("FVOCI") based on the entity's business model for managing the financial assets and the contractual cash flow characteristics of these assets. Assessment and decision on the business model approach used is an accounting judgment.

A financial asset is measured at amortized cost if it is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows and its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. The Company includes in this category cash and cash equivalents and trade accounts receivable.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

3. Significant accounting policies (continued)

A financial asset is measured at fair value through profit or loss ("FVTPL") if:

- (a) Its contractual terms do not give rise to cash flows on specified dates that are solely payments of principal and interest (SPPI) on the principal amount outstanding; or
- (b) It is not held within a business model whose objective is either to collect contractual cash flows, or to both collect contractual cash flows and sell; or
- (c) At initial recognition, it is irrevocably designated as measured at FVTPL when doing so eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities or recognizing the gains and losses on them on different bases.

The Company includes in this category investments in equity instruments.

Change in fair value of financial liabilities attributable to changes in the entity's own credit risk are to be presented in other comprehensive income unless they affect amounts recorded in income.

All financial liabilities, other than those measured at fair value through profit or loss, are included in the financial liabilities measured at amortized cost. The Company includes in this category accounts payable and accrued liabilities, term loans, long-term debt and convertible debentures.

Recognition:

The Company recognizes a financial asset or a financial liability when it becomes a party to the contractual provisions of the instrument.

Purchases or sales of financial assets that require delivery of assets within the time frame generally established by regulation or convention in the market place (regular way trades) are recognized on the trade date, i.e. the date that the Company commits to purchase or sell the asset.

Initial measurement

Financial assets and liabilities (other than financial assets at FVTPL) are measured initially at their fair value plus any directly attributable incremental costs of acquisition or issue.

Financial assets and financial liabilities at FVTPL are recorded in the statement of financial position at fair value. All transaction costs for such instruments are recognized directly in profit or loss.

Subsequent measurement

Financial assets (other than financial assets at FVTPL) are measured at amortized cost using the effective interest method less any allowance for impairment. Gains and losses are recognized in profit or loss when the debt instruments are derecognized or impaired, as well as through the amortization process.

Financial liabilities are measured at amortized cost using the effective interest method. Gains and losses are recognized in profit or loss when the liabilities are derecognized, as well as through the amortization process.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

3. Significant accounting policies (continued)

Fair value measurement principles

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Where financial assets and financial liabilities measured at fair value through profit or loss have a quoted price in an active market at the reporting date, the fair value is based on this price. A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from a stock exchange and those prices represent actual and regularly occurring market transactions on an arm's length basis.

Securities traded on stock exchanges are stated at market price based on the closing price on the relevant valuation day.

Derecognition

A financial asset is derecognized where the rights to receive cash flows from the asset have expired, or the Company has transferred its rights to receive cash flows from the asset. The Company derecognizes a financial liability when the obligation under the liability is discharged, cancelled or expired.

Offsetting of financial instruments

Financial assets and financial liabilities are offset, and the net amount reported in the statement of financial position if, and only if, there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, or to realize the assets and settle the liabilities simultaneously.

Impairment of financial instruments

The Company applies the "expected credit loss" ("ECL") model to financial assets measured at amortized cost. The Company's financial assets subject to this impairment model are cash, trade and other receivable.

The trade accounts receivable have no financing component and have maturities of less than 12 months at amortized cost and, as such, the Company applies the simplified approach for expected credit losses (ECLs) to all its trade accounts receivable. Therefore, the Company recognizes a loss allowance based on lifetime ECLs at each reporting date.

The Company's approach to ECLs reflects a probability-weighted outcome, the time value of money and reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

The Company uses the provision matrix as a practical expedient to measure ECLs on trade receivables, based on days past due for groupings of receivables with similar loss patterns. The provision matrix is based on historical observed loss rates over the expected life of the receivables and is adjusted for forward-looking estimates.

The impairment guidance using the ELC model did not have a significant impact on the carrying amounts of the Company's trade accounts receivable as the Company has had negligible credit losses.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

3. Significant accounting policies (continued)

Write-off

The gross carrying amount of a financial asset is written off when the Company has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof.

Compound Financial Instrument

Compound financial instrument issued by the Company comprises convertible debentures that can be converted into common shares at the option of the holder, and the number of shares to be issued does not vary with changes in their fair value.

The component parts of the compound instrument issued by the Company are initially classified separately as financial liabilities and equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an 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 the convertible debentures are issued, the liability component is initially recognized at the fair value of similar debt instruments which do not have an equity conversion option. The initial amount of the liability component is determined by discounting the face value of the convertible debentures using a rate of interest prevailing for similar non-convertible instruments at the date of issue for instruments of similar terms and risks. The conversion option classified as the equity component is determined by deducting the amount of the liability component from the gross proceeds. The equity component is recognized net of income tax effects within the other equity account.

Subsequently, the liability component is accounted for at amortized cost and is accreted using the effective interest method, up to the face value of the convertible debentures during the period they are outstanding. Interest expense on the convertible debentures is composed of the interest calculated on the face value of the convertible debentures and a non-cash notional interest representing the accretion of the carrying value of the convertible debentures. The equity component is not remeasured.

The conversion option classified as equity remains in the other equity account until the conversion option is exercised, in which case, the balance recognized in other equity is transferred to share capital. When the conversion option remains unexercised at the maturity date of the convertible debentures, the balance recognized in other equity will be transferred to contributed surplus. No gain or loss is recognized in the consolidated income statement upon conversion or expiration of the conversion option.

Transaction costs related to the issuance of 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 other equity. Transaction costs relating to the liability component are included in the carrying amount of the liability component and are amortized over the term of the convertible debentures using the effective interest method.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

3. Significant accounting policies (continued)

Effective Interest Method

The effective interest method is a method of calculating the amortized cost of a financial asset/financial liability and of allocating interest income/expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts/payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial instrument, or (when appropriate) a shorter period, to the net carrying amount on initial recognition.

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.

Critical judgments in applying accounting policies

(a) Assessment of whether there is any indication that property and equipment and intangible asset may be impaired

At each reporting date, the Company reviews the carrying amounts of its property and equipment and intangible assets with a finite useful life to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. Management's judgments is required in assessing whether there is any indication that an asset may be impaired.

(b) Intangible assets

The recognition of development costs as intangible assets requires judgments to determine whether the required criteria for recognition are met including management estimates of future economic benefits.

(c) Sale of intellectual property

The recognition of variable consideration related to the sale of intellectual property requires management's judgments to determine whether it is highly probable that a reversal will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

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

(d) 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. Uncertainty over the eligibility and final assessment by taxation authorities of investment tax credits requires judgment. Management involves its technical staff and external specialists in determining if the expenditures meet the requirements of the different tax credit claims.

Key sources of estimation uncertainty

(e) Revenue recognition

Revenue recognition for long-term contracts completion 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 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 performance obligations and to allocate the consideration received to each performance

(f) Stock-based payments

The Company uses the fair value method of valuing compensation cost 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 and volatility. The assumptions and models are discussed in note 20.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

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

(g) Useful lives of property and equipment and intangible assets

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.

(h) Fair value of investments

Where the fair values of investments recorded in the statement of financial position cannot be derived from active markets, they are determined using valuation techniques including the Black-Scholes models. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgment is required in establishing the fair values. The judgments include considerations of inputs such as the expected volatility and the initial allocation of the consideration paid between the fair value of the common shares and warrants received. Should any of the inputs to these models or changes in assumptions about these factors occur, this could affect the reported fair value of the investments.

(i) Right-of-use assets and lease liabilities

In determining the carrying amount of the right-of-use asset and corresponding lease liabilities, assumptions include the non-cancellable term of the lease plus periods covered by an option to renew or purchase the leases, estimated useful lives of the related assets, and incremental borrowing rate. Renewal and purchase options are only included in the lease term if management is reasonably certain to renew. Management considers factors such as market conditions, comparable rental rates and similar property values. The Company is also required to estimate the incremental borrowing rate specific to each portfolio of leased assets with similar characteristics if the interest rate in the lease is not readily determined. Management determines the incremental borrowing rate using base rate for similar loans plus a risk premium.

(i) Income taxes

The Company has unused available tax losses, deductible temporary differences and investment tax credits. The Company recognizes deferred income tax assets for these unused tax losses and deductible temporary differences only to the extent that, in management's opinion, it is probable that future taxable profit will be available against which these available tax losses and temporary differences can be utilized. The Company recognizes investment tax credits when it has reasonable assurance that it has complied with the conditions of the programme and that the amounts will be realized (i.e., that it will generate future federal income taxes payable against which the tax credits can be applied). The Company's projections of future taxable profit involve the use of significant assumptions and estimates with respect to a variety of factors, including future sales and operating expenses. There can be no assurance that the estimates and assumptions used in our projections of future taxable income will prove to be accurate predictions of the future, and in the event that our assessment of the recoverability of these deferred tax assets and investment tax credits changes in the future, a material increase or reduction in the carrying value of these deferred tax assets and investment tax credits could be required, with a corresponding charge to net earnings.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

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

(j) COVID-19 pandemic

The COVID-19 pandemic continues to cause significant financial market and social dislocation. The situation is dynamic with various cities and countries around the world responding in different ways to address the outbreak. While the Company has experienced the impact of the outbreak of the Coronavirus (COVID-19) on its operations, it had continued to operate during the current pandemic. During the year ended December 31, 2020, the Company recognized payroll subsidies totaling \$775,967 principally under the Canadian Emergency Wage Subsidy program, which amount required estimation (see note 22). In the event of a prolonged continuation of the pandemic, it is not clear what the potential impact may be on the Company's business, financial position and financial performance.

5. Revenues

Revenues by product line:

The Company's revenues are generated primarily from PUREVAP™ related sales of \$4,163,059 (2019 - \$525,556), DROSRITE™ related sales of \$9,976,696 (2019 -\$560,916), the development and support related to systems supplied to the U.S. Military of \$1,425,883 (2019 -\$637,841), torch related sales of \$1,452,455 (2019 - \$2,323,351), and other sales and services of \$756,936 (2019 - \$766,314).

The following is a summary of the Company's revenues by revenue recognition method:

	2020	2019
	\$	\$
Revenue from contracts with customers:		
Sales of goods under long-term contracts	12,432,666	4,585,337
Sales of goods in point of time	1,730,273	228,641
Other revenue:		
Sale of intellectual properties (i)	3,612,090	-
	17,775,029	4,813,978

See note 30 for sales by geographic area.

(i) Sale of intellectual properties

During the year, the Company sold intellectual property to a subsidiary of a company in which it holds a strategic investment for a non-refundable fee of \$2.4 million. Under the terms of the sale agreement, control of the intellectual property was transferred to the purchaser and the Company has no obligation to undertake activities that will significantly affect the intellectual property. The terms of the agreement also include additional variable consideration that can be received from future sales made by the purchaser, including minimum royalties of \$50,000 in 2021, \$100,000 in 2022, \$150,000 in 2023, and \$200,000 in 2024 and every year thereafter (see note 11). The Company has also amended a previous agreement with a company in which it holds a strategic investment to re-instate minimum royalties that were previously waived by the Company related to a sale of intellectual property that occurred in 2016. The terms of this agreement also include additional variable consideration that can be received from future sales made by the purchaser including minimum royalties of \$200,000 in 2021 and \$250,000 in 2022 and every year thereafter (see note 11).

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

5. Revenues (continued)

The Company only recognizes variable consideration, including minimum royalties, arising from these agreements in the period(s) when it is highly probable that a reversal will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

Transaction price allocated to remaining performance obligations

As at December 31, 2020, revenue expected to be recognized in the future related to performance obligations that are unsatisfied (or partially satisfied) at the reporting date is \$29,999,009 (2019 - \$6,011,159). Revenue will be recognized as the Company satisfies its performance obligations under long-term contracts, which is expected to occur over the next 3 years.

6. Cash and cash equivalents

As at December 31, 2020 and 2019, there are no restrictions on cash and cash equivalents. Cash and cash equivalents include the following components:

	2020	2019
Cash	10,104,899	34,431
Guaranteed investment certificates	8,000,000	-
Cash and cash equivalents	18,104,899	34,431

Guaranteed investment certificates are instruments issued by Canadian financial institutions and include \$3,000,000 bearing interest at a rate of 0.56% and \$5,000,000 bearing interest at a rate of 0.53%. These instruments are redeemable without penalty 60 days and 30 days, respectively, from the date of acquisition and mature in February 2021 and December 2021.

7. Accounts receivable

Details of accounts receivable were as follows:

	December 31, 2020	December 31, 2019
	\$	\$
1 – 30 days	309,362	71,423
31 – 60 days	226,713	9,483
61 – 90 days	253,141	17,753
Greater than 90 days	218,008	5,469
Total trade accounts receivable	1,007,224	104,128
Unbilled trade receivables	1,132,911	-
Other receivables	931,041	-
Sales tax receivable	258,477	106,412
	3,329,653	210,540

As at December 31, 2020 other receivables primarily included an amount of \$892,609 to be received for HPQ shares sold before year end with proceeds not having been received.

There is no material allowance for expected credit losses recorded as at December 31, 2020 and December 31, 2019.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

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

As at December 31, 2020, the Company had seven contracts with total billings of \$8,378,093 which were less than total costs incurred and had recognized cumulative revenue of \$9,451,726 since those projects began. This compares with four contracts with total billings of \$89,256 which were less than total costs incurred and had recognized cumulative revenue of \$212,236 as at December 31, 2019.

Changes in costs and profits in excess of billings on uncompleted contracts during the year are explained by \$93,415 (2019 - \$307,832) recognised at the beginning of the year being transferred to accounts receivable, and \$1,044,072 (2019 - \$184,852) resulting from changes in the measure of progress.

9. Investment tax credits

An amount recognized in 2020 included \$131,871 (2019 - \$434,474) of investment tax credits earned in the year, as well as \$1,058,017 of investment tax credits earned in prior years that met the criteria for recognition in 2020. \$18,420 (2019 - \$179,670) of the investment tax credits recognized in the year was recorded against cost of sales and services, \$1,141,468 (2019 - \$144,658) against research and development expenses and \$30,000 (2019 - \$29,913) against selling general and administrative expenses.

Research and development expenses for the year amounted to \$775,824 less investment tax credits of \$1,141,468, less government grants of \$365,433 totalling \$(731,077) (2019 - \$851,512).

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

10. Strategic investments

	December 31, 2020	December 31, 2019
	\$	\$
Beauce Gold Fields (“BGF”) shares – level 1	123,095	133,354
HPQ Silicon Resources Inc. (“HPQ”) shares - level 1	16,489,220	1,476,000
HPQ warrants – level 3	23,379,435	-
	39,991,750	1,609,354

The change in the strategic investments is summarized as follows:

	("BGF") shares – level 1		("HPQ") shares - level 1		HPQ warrants – level 3	
	Quantity	\$	Quantity	\$	Quantity	\$
Balance, December 31, 2018	1,025,794	102,579	21,350,000	1,281,000	18,750,000	310,537
Disposed	-	-	(2,900,000)	(261,000)	-	-
Expired	-	-	-	-	(1,000,000)	-
Change in the fair value	-	30,775	-	456,000	-	(310,537)
Balance, December 31, 2019	1,025,794	133,354	18,450,000	1,476,000	17,750,000	-
Additions	-	-	7,887,000	3,395,742	5,200,000	560,000
Received in lieu of payment of services rendered	-	-	4,394,600	395,514	4,394,600	-
Exercised	-	-	1,500,000	540,000	(1,500,000)	(337,500)
Disposed	-	-	(17,241,400)	(10,798,056)	-	-
Change in the fair value	-	(10,259)	-	21,480,020	-	23,156,935
Balance, December 31, 2020	1,025,794	123,095	14,990,200	16,489,220	25,844,600	23,379,435

The Company owns 11.55% on a fully diluted basis of HPQ as at December 31, 2020 (2019 – 11.51%) and has other business transactions with this entity– see note 11.

The following table sets out the details and activity of the HPQ warrants:

Expiry date	Number of warrants			Number of warrants		Exercise price (\$)
	Dec. 31, 2019	Additions	Exercised	Dec. 31, 2020		
21-Nov-20	1,500,000	-	(1,500,000)	-	0.15	
21-Aug-21	16,250,000	-	-	16,250,000	0.17	
29-Apr-23	-	1,200,000	-	1,200,000	0.10	
02-Jun-23	-	4,394,600	-	4,394,600	0.10	
03-Sep-23	-	4,000,000	-	4,000,000	0.61	
	17,750,000	9,594,600	(1,500,000)	25,844,600		

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

10. Strategic investments (continued)

1,200,000 common shares and 1,200,000 warrants of HPQ were purchased in cash for an amount of \$60,000 in April 2020.

4,394,600 common shares of HPQ and 4,394,600 warrants of HPQ were received in May 2020 to settle trade receivables from HPQ in the amount of \$395,414. At the transaction date, this non-monetary transaction was measured at the fair value of the trade receivables.

4,000,000 common shares and 4,000,000 warrants were purchased in cash for an amount of \$2,400,000 in September 2020.

In 2020, 2,687,000 common shares of HPQ were purchased in cash for an amount of \$1,495,742 and 16,429,400 common shares of HPQ were disposed for an amount of \$10,798,056. The disposal of the common shares of HPQ in 2020 has resulted in a realized gain of \$6,773,512. As at December 31, 2020, an amount of \$892,609 is included in accounts receivable (see note 7).

1,500,000 HPQ warrants were exercised in cash for an amount of \$202,500 in December 2020.

In 2019, 1,000,000 warrants of HPQ expired unexercised.

At inception, the fair value of the HPQ warrants purchased in 2020 was measured using the Black-Scholes option pricing model using the following assumptions:

Number of warrants	1,200,000	4,394,600	4,000,000
Date of issuance	April 29, 2020	June 2, 2020	Sept. 3, 2020
Exercise price (\$)	0.10	0.10	0.61
Assumptions under the Black Scholes model:			
Fair value of the shares (\$)	0.04	1.05	1.05
Risk free interest rate (%)	0.30	0.20	0.20
Expected volatility (%)	97.45	114.80	112.52
Expected dividend yield	0	0	0
Contractual remaining life (number of months)	36	29	32

As at December 31, 2020, the fair value of the HPQ warrants was measured using the Black-Scholes option pricing model using the following assumptions:

Number of warrants	16,250,000	1,200,000	4,394,600	4,000,000
Date of issuance	Dec. 21, 2018	April 29, 2020	June 2, 2020	Sept. 3, 2020
Exercise price (\$)	0.17	0.10	0.10	0.61
Assumptions under the Black Scholes model:				
Fair value of the shares (\$)	1.05	1.05	1.05	1.05
Risk free interest rate (%)	0.20	0.20	0.20	0.20
Expected volatility (%)	145.03	115.30	114.80	112.52
Expected dividend yield	0	0	0	0
Contractual remaining life (number of months)	8	28	29	32

As at December 31, 2020, a gain from initial recognition of the warrants of \$859,998 (\$24,017 – 2019) has been deferred off balance sheet until realised.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

11. Royalties receivable

	December 31, 2020	December 31, 2019
	\$	\$
Opening balance	-	-
Royalties recognized during the year	1,600,000	-
Discounting	(390,000)	-
Amounts received during the year	(150,000)	-
Balance at end of the year	1,060,000	-

The company sold intellectual property to HPQ Silicon Resources Inc. in 2016 (“HPQ 2016 contract”) and its wholly owned subsidiary, HPQ Nano Silicon Powders Inc. in 2020 (“HPQ Nano contract”). The terms of those sales contracts include, in addition to the purchase price amounts already received of \$1,000,000 in 2016 and \$2,400,000 in 2020 respectively, the following variable consideration in the form of royalty payments:

HPQ 2016 contract:

Royalties are 10% of net sales, with minimum payments of \$200,000 in 2021 and \$250,000 in 2022 and every year thereafter. Payment is due no later than 30 days after the year end of HPQ Silicon Resources Inc. An amount of \$150,000 has been received in 2020 under this agreement.

HPQ Nano contract:

Royalties are 10% of net sales, with minimum payments of \$50,000 in 2021, \$100,000 in 2022, \$150,000 in 2023, and \$200,000 in 2024 and every year thereafter. Payments are due no later than 10 days after the year end of HPQ Nano Silicon Powders Inc.

During the year, the Company recognized \$1,100,000 and \$500,000 for the HPQ 2016 and HPQ Nano contracts, respectively, of royalties receivable, which amounts have been discounted using a 12.5% rate. See note 5.

12. Deposits

	December 31, 2020	December 31, 2019
	\$	\$
Current portion:		
Suppliers	1,421,246	150,322
Non-current portion:		
Suppliers	1,099	137,864
Rent	300,242	40,241
Total non-current	301,341	178,105
Total Deposits	1,722,587	328,427

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

13. Property and equipment

	Computer equipment	Machinery and equipment	Automobile	Leasehold improvements	Equipment under construction	Total
	\$	\$	\$	\$	\$	\$
Cost						
Balance at December 31, 2018	549,864	1,621,899	21,912	904,512	2,168,136	5,266,323
Additions	21,654	-	-	9,539	922,917	954,110
Reclass to Equipment under Construction	-	-	-	(749,045)	749,045	-
Reclass to right-of-use assets	(49,530)	-	-	-	-	(49,530)
Impairment	-	-	-	-	(2,168,136)	(2,168,136)
Balance at December 31, 2019	521,988	1,621,899	21,912	165,006	1,671,962	4,002,767
Additions	27,671	-	306,164	15,895	268,272	618,002
Impairment	-	-	(21,912)	-	-	(21,912)
Balance at December 31, 2020	549,659	1,621,899	306,164	180,901	1,940,234	4,598,857
Accumulated depreciation						
Balance at December 31, 2018	479,802	1,371,542	17,440	89,236	105,421	2,063,441
Depreciation	32,368	50,071	1,342	3,749	81,305	168,835
Reclass to right-of-use assets	(20,264)	-	-	-	-	(20,264)
Impairment	-	-	-	-	(186,726)	(186,726)
Balance at December 31, 2019	491,906	1,421,613	18,782	92,985	-	2,025,286
Depreciation	17,206	20,029	22,083	3,800	-	63,118
Impairment	-	-	(19,117)	-	-	(19,117)
Balance at December 31, 2020	509,112	1,441,642	21,748	96,785	-	2,069,287
Carrying amounts						
Balance at December 31, 2019	30,082	200,286	3,130	72,021	1,671,962	1,977,481
Balance at December 31, 2020	40,547	180,257	284,416	84,116	1,940,234	2,529,570

In 2019 the Company commenced construction on a new and improved Plasma Powder Production equipment with advanced technological improvements with regard to production output and operating costs. As a result, the existing powder production, Plasma atomization system and related inventory, was no longer deemed to have any future benefit and was written down by \$2,367,531 to the net recoverable amount of nil.

Equipment under construction includes the leasehold improvements of a clean room and the costs related to building the new Plasma Powder Production equipment.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

14. Leases

The Company has entered into lease contracts mainly for buildings and computer equipment, which expire at various dates through the year 2024. Some leases have extension or purchase options for various terms. Some lease payments are based on changes in price indices. The lease contracts do not impose any financial covenants.

As of January 1, 2020, a lease for rent of a property with a trust whose beneficiary is the controlling shareholder and CEO of the Company was modified to amend the lease term, fix the annual rent increase at a rate of 2%, exercise the option to extend the term of the lease for five years and prepay the rent amount of \$1,178,530, which was presented against the lease liability. At the date of modification, the lease liability was remeasured and an amount of \$366,566 was recorded as an adjustment to the right-of-use asset. The lease liability was recalculated using a discount rate of 4%. As at December 31, 2020, the right-of-use asset and the lease liabilities related to this lease amount to \$1,328,557 and \$221,496 respectively (2019 - \$1,350,487 and 1,218,958). In 2020, the variable components of the leases which are not included in the lease liabilities under IFRS 16, comprise property taxes for an amount of \$258,042 (2019 - \$266,581) which were charged to the Company. In return the trust agreed to convert the 2020 Convertible loan approximately one year before its due date (note 19).

a) Right-of-use assets

	Land and building	Computer equipment	Total
	\$	\$	\$
Balance at January 1, 2019	4,073,286	29,266	4,102,552
Depreciation	(348,590)	(11,193)	(359,783)
Balance at December 31, 2019	3,724,696	18,073	3,742,769
Remeasurement of lease liabilities	366,566	-	366,566
Depreciation	(402,947)	(5,388)	(408,335)
Balance at December 31, 2020	3,688,315	12,685	3,701,000

b) The table below summarizes changes to the lease liabilities:

	\$
Balance at January 1, 2019	4,116,347
Payments	(131,321)
Balance at December 31, 2019	3,985,026
Remeasurement	366,566
Payments	(1,363,050)
Balance at December 31, 2020	2,988,542

c) Amount recognized in the statement of comprehensive loss:

	2020	2019
	\$	
Depreciation of right-of-use assets	408,335	359,783
Interest on lease liabilities	211,666	258,288
Expense related to lease payments not included in the measurement of lease liabilities	-	7,264

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

14. Leases (continued)

d) Maturity analysis – contractual undiscounted cash flows of lease liabilities as at December 31, 2020

	\$
2021	406,542
2022	2,875,509
2023	4,839
	3,286,890

15. Intangible assets

	Licenses	Patents	Development costs	Total
	\$	\$	\$	\$
Cost				
Balance at December 31, 2018	8,409,051	375,329	244,871	9,029,251
Additions	-	197,157	-	197,157
Write-off	(8,409,051)	-	-	(8,409,051)
Balance at December 31, 2019	-	572,486	244,871	817,357
Additions	-	305,420	-	305,420
Write-Off	-	(109,514)	-	(109,514)
Balance at December 31, 2020	-	768,392	244,871	1,013,263
Accumulated amortization				
Balance at December 31, 2018	8,409,051	43,818	16,508	8,469,377
Amortization	-	3,625	16,508	20,133
Write-off	(8,409,051)	-	-	(8,409,051)
Balance at December 31, 2019	-	47,443	33,016	80,459
Amortization	-	10,682	16,508	27,190
Balance at December 31, 2020	-	58,125	49,524	107,649
Carrying amounts				
Balance at December 31, 2019	-	525,043	211,855	736,898
Balance at December 31, 2020	-	710,267	195,347	905,614

The Company's development costs have been incurred to develop plasma related technologies and the patents protect the design and specification of these technologies.

16. Accounts payable and accrued liabilities

	December 31, 2020	December 31, 2019
	\$	\$
Accounts payable	2,206,249	2,780,628
Accrued liabilities	1,701,554	1,866,823
Sale commissions payable ¹	731,671	-
Accounts payable to the controlling shareholder and CEO	68,577	214,470
Accounts payable to a trust beneficially owned by the controlling shareholder and CEO	-	51,234
	4,708,051	4,913,155

¹Sale commissions payable relates to the costs to obtain long-term contracts with clients.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

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

The amount to date of costs incurred and recognized profits less recognized losses for construction projects in progress amounted to \$6,831,326 (2019 - \$4,612,082).

Payments to date received were \$13,424,298 on contracts in progress (2019 - \$7,696,739).

Changes in billings in excess of costs and profits on uncompleted contracts during the year are explained by \$1,282,217 (2019 - \$1,283,144) recognised at the beginning of the year being recognised as revenue, and an increase of \$4,790,536 (2019 - \$15,391) resulting from cash received excluding amounts recognised as revenue.

18. Term loans

	EDC Loan ¹	Other Term Loans ²	Other Term Loans ³	2019 SR&ED Tax Credit loan ⁴	2018 SR&ED Tax Credit loan ⁵	2017 SR&ED Tax Credit loan ⁶	Total
	\$	\$	\$	\$	\$	\$	\$
Balance, December 31, 2018	-	-	-	-	-	247,200	247,200
Additions	-	-	115,200	247,500	214,000	-	576,700
Conversion option	-	-	(12,800)	-	-	-	(12,800)
Financing costs	-	-	-	(63,558)	(54,955)	-	(118,513)
Accretion	-	-	8,533	1,389	40,691	-	50,613
Repayment	-	-	-	-	-	(247,200)	(247,200)
Balance, December 31, 2019	-	-	110,933	185,331	199,736	-	496,000
Addition	157,058	38,861	-	-	-	-	195,919
Financing costs	(83,119)	-	-	-	-	-	(83,119)
Accretion	1,861	-	4,267	40,902	14,264	-	61,294
Payments	-	(1,954)	(115,200)	(226,233)	(214,000)	-	(557,387)
Balance, December 31, 2020	75,800	36,907	--	-	-	-	112,707
Less current portion	-	12,208					12,208
Balance, December 31, 2020	75,800	24,699	--	-	-	-	100,499

¹ maturing in 2027, non-interest bearing, payable in equal instalments from July 2023 to June 2027

² maturing October 23, 2023 bearing interest at a rate of 6.95% per annum, payable in monthly instalments of \$1,200 secured by automobile (carrying amount of \$36,702 as at December 31, 2020)

³ matured May 1, 2020 bearing interest rate of 8% per annum payable at the maturity date, repaid July 2020.

⁴ matured December 23, 2020 bearing interest rate of 16.68% payable at the issuance, repaid July 2020.

⁵ matured April 3, 2020 bearing interest rate of 16.68% payable at the issuance, repaid May 2020.

⁶ matured September 30, 2018 bearing interest rate of 18% (effective interest rate 23%), repaid February 2019.

On March 5, 2020, the Company entered into a repayable contribution agreement up to \$450,000 under the Regional Economic Growth through Innovation program from the Economic Development Agency of Canada ("EDC"). The contribution is repayable in 60 equal monthly instalments due and payable 24 months following the completion of the project. During the year ended December 31, 2020, the Company received contribution totaling \$157,058. The loan was discounted using the effective interest method. The effective interest rate on the loan is 15%.

On May 1, 2019 the Company entered into loan agreements with unrelated individuals totaling \$115,200 bearing interest at the annual rate of 8% payable at maturity, on May 1, 2020. The other term loans are unsecured and are convertible, at 10% discount, for a variable amount, of shares into any future private placement until maturity. The fair value of the debt instrument at inception was determined using the estimated cash flows discounted using a market rate of 20%. At the inception date, the residual amount of the non derivative liability of \$12,800 associated with the conversion feature has been recorded in accounts payable and accrued liabilities. On March 31, 2020, the maturity of the other term loans was extended to July 13 and July 15, 2020 and were fully repaid on maturity dates. Upon repayment of the loans, the derivative liability of \$12,800 was reclassified in financing costs.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

19. Convertible debentures

	2020 Convertible loan	2018 Convertible debentures	Total
			\$
Balance at December 31, 2018	-	2,527,241	2,527,241
Effective interest	-	371,117	371,117
Balance at December 31, 2019	-	2,898,358	2,898,358
Liability component at issuance	804,578	-	804,578
Effective interest accretion	22,982	155,642	178,624
	827,560	3,054,000	3,881,560
Repayment of debentures including accommodation fees, in cash	-	(358,500)	(358,500)
Conversion into common shares	(827,560)	(2,695,500)	(3,523,060)
Balance at December 31, 2020	-	-	-

2020 Convertible loan

On March 18, 2020, the Company closed a \$903,000 non-brokered secured convertible loan (“2020 Convertible loan”) at 12% per annum, with a trust whose beneficiary is the controlling shareholder and CEO of the Company. The loan bore interest at the rate of 12% per annum, with interest payable in cash on a quarterly basis in arrears and matured September 17, 2021. The convertible loan may be converted before maturity, in whole at anytime or in part from time to time at a conversion price of \$0.28 at the option of the lender. The convertible loan was secured by a deed of hypothec charging on the universalities of movable assets.

At the issuance date, the 2020 Convertible loan was recorded as follows:

	\$
Liability component	804,578
Conversion option recognized in equity, net of transaction cost of \$47,338	98,422
Net proceeds	903,000

On September 30, 2020, the 2020 Convertible loan was converted into 3,225,000 common shares. Upon conversion, the equity component of \$98,422 was allocated to share capital. The conversion was performed in return for the modification of a lease agreement for rent of a property with the same trust whose beneficiary is the controlling shareholder and CEO of the Company (note 14).

2018 Convertible debentures

On March 30, 2020, the Company reached an agreement to extend the maturity date of its \$3,000,000 2018 convertible debentures to September 30, 2020, from the original maturity date of March 29, 2020. Under the terms of the agreement, the Company redeemed \$300,000 (representing 10% of the principal amount), paid a onetime accommodation fee of \$54,000, and is no longer subject to any prepayment penalties going forward. Upon redemption, an amount of \$40,779 corresponding to the equity component was reclassified to contributed surplus.

As the date of modification, the fair value of the 2018 Convertible debentures was determined using estimated cash flows discounted using a market interest rate of 17.5%. At the remeasurement date, a residual amount of \$16,875 representing the value of the conversion option equity component was classified in the shareholders’ Equity (Deficiency).

Upon conversion of the debentures in May and June 2020, 3,369,375 common shares were issued and the equity component of \$360,981 was classified in share capital.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

20. Shareholders' equity (deficiency)

Common shares and warrants

Authorized:

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

Shares issued upon public issuance

On November 3, 2020, the Company closed a bought-deal short form prospectus offering of 3,354,550 units at a price of \$3.60 per unit for aggregate gross proceeds to the Company of \$12,076,380, including the full exercise of the over-allotment option. In connection with the offering, the Company paid issuance costs of \$1,640,052 in cash and issued 191,414 compensation options. Each compensation option entitles the holder thereof to purchase one unit at a price of \$3.60 until November 10, 2022. Each unit is comprised of one common share of the Company and one-half of one common share purchase warrant of the company. Each warrant entitles the holder to purchase one additional common share at an exercise price of \$4.50 for a period of 24 months.

Under the warrant indenture, the Company has the right to accelerate the expiry date of the warrants to the date that is 30 days after delivery of a notice (the "Acceleration Notice") to the holders of warrants and the warrant agent confirming that the volume weighted average trading price of the Company's common shares on the Toronto Stock Exchange is greater than \$6.75 for 20 consecutive trading days (the "VWAP Requirement"). The VWAP Requirement was met as of close of business March 10, 2021. The Company has delivered the Acceleration Notice and indicated that the warrants will expire on April 14, 2021.

Shares issued upon exercise of stock options and share purchase warrants

During the year ended December 31, 2020, 2,118,000 (1,384,000 - 2019) stock options and 7,060,617 share purchase warrants were exercised for net proceeds of \$759,400 and \$5,623,323 (\$306,360 and Nil - 2019) respectively. The amounts credited to share capital from the exercise of stock options include an ascribed value from contributed surplus of \$484,807 (\$287,350 - 2019).

Conversion of loan into shares

On September 30, 2020, the 2020 Convertible loan with a carrying value of \$827,560 was converted into 3,225,000 common shares. Upon conversion, the liability component of \$98,422 was transferred to share capital (note 19).

Share redemptions for cancellation

The Corporation had also been authorized to repurchase, for cancellation on the open market, or subject to the approval of any securities authority by private agreements, between November 1, 2019 and October 31, 2020, or at an earlier date if the Corporation concludes or cancels the offer, up to 6,750,000 of its Class A Common Shares. The repurchases were made in the normal course of business at market prices through the Toronto Stock Exchange.

Between April 7, 2020 and June 15, 2020, the Company repurchased and cancelled 1,285,000 Class A Common shares at a weighted average price of \$0.75, for a total cash consideration of \$964,391 including commissions of \$12,845. The excess of the total consideration over the carrying amount of the shares, in the amount of \$538,021, was applied against deficit.

The Company was under no obligation to repurchase its Class A Common Shares as at December 31, 2020. During the year ended December 31, 2019, the Company did not repurchase any of its Class A Common Shares and was under no obligation to repurchase its Class A Common Shares.

PyroGenesis Canada Inc.

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For the years ended December 31, 2020 and 2019

20. Shareholders' equity (deficiency) (continued)

Private placements

On October 23, 2019, the Company completed a non-brokered private placement and issued 300,000 units at a price of \$0.56 per unit, for total gross proceeds of \$168,000. Each unit consists of one common share and three-quarters (0.75) of a common share purchase warrant of the Company. Each warrant entitles the holder to acquire one common share of the Company at a price of \$0.75. Each warrant expires fifteen (15) months from issuance. The Company did not pay finder's fees or issue any finders compensation warrants in connection with this private placement.

On June 19, 2019, the Company completed a non-brokered private placement and issued 1,000,000 units at a price of \$0.58 per unit, for total gross proceeds of \$580,000. Each unit consists of one common share and one common share purchase warrant of the Company. Each warrant entitles the holder thereof to purchase one common share at a price of \$0.85 until June 19, 2021. In connection with the private placement, the Company paid finder's fees in the amount of \$23,200.

On May 28, 2019, the Company completed a non-brokered private placement and issued 2,024,500 units at a price of \$0.58 per unit, for total gross proceeds of \$1,174,210. Each unit consists of one common share and one common share purchase warrant of the Company. Each warrant entitles the holder thereof to purchase one common share at a price of \$0.85 until May 28, 2021. In connection with the private placement, the Company paid finder's fees in the amount of \$40,600.

On May 15, 2019, the Company completed a non-brokered private placement and issued 2,996,500 units at a price of \$0.58 per unit, for total gross proceeds of \$1,737,970. Each unit consists of one common share and one common share purchase warrant of the Company. Each warrant entitles the holder thereof to purchase one common share at a price of \$0.85 until May 15, 2021. In connection with the private placement, the Company paid finder's fees in the amount of \$42,595.

On January 7, 2019, the Company received an additional subscription and sold an additional aggregate amount of 97,400 units of the Company at a price of \$0.58 per unit for gross proceeds of \$56,492. An amount of \$5,800 from the initial subscriptions of the Private Placement dated December 17, 2018 was received on December 23, 2018 and deposited on January 3, 2019. As a result of the initial subscriptions and subsequent subscription, the Company issued and sold pursuant to the Private Placement dated December 17, 2018 a total of 2,244,367 units for gross proceeds of \$1,301,733. Each unit consists of one common share of the Company and one common share purchase warrant. Each warrant entitles the holder thereof to purchase one common share at a price of \$0.85 until December 18, 2020.

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.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

20. Shareholders' equity (deficiency) (continued)

The following table sets out the activity in stock options:

	Number of options	Weighted average exercise price
		\$
Options, December 31, 2018	9,922,000	0.37
Granted	400,000	0.51
Exercised	(1,384,000)	(0.22)
Forfeited	(500,000)	(0.70)
Balance – December 31, 2019	8,438,000	0.37
Granted	2,810,000	4.23
Exercised	(2,118,000)	0.36
Forfeited	(90,000)	1.02
Balance, December 31, 2020	9,040,000	1.57

On October 26, 2020, the Company announced that it granted stock options to acquire 200,000 common shares of the Company to Mr. Rodney Beveridge, Director, and 50,000 common shares to Ms. Rodayna Kafal, Director & Vice President, Investor Relations and Strategic Business Development. The stock options have an exercise price of \$4.00 per common shares and are exercisable over a period of five (5) years.

On July 16, 2020, the Company granted an aggregate of 1,700,000 stock options to its directors entitling them to purchase an aggregate of 1,700,000 common shares of the Corporation, at a price of \$4.41 per common share. The 1,700,000 options will vest as follows: 25 percent at the date of the grant, 25 percent at the first anniversary of the date of grant, 25 percent at the second anniversary of the date of grant, and 25 percent at the third anniversary of the date of grant.

The Company also granted an aggregate of 760,000 stock options to employees entitling them to purchase an aggregate of 760,000 common shares of the Corporation, at a price of \$4.41 per common share. Of these options, 660,000 will vest as follows: 50 percent as of the date of grant and 50 percent at the first anniversary of the date of grant. The remaining 100,000 will vest as follows: 25 percent as of the date of grant, 25 percent at the first anniversary of the date of grant, 25 percent at the second anniversary of the date of grant and 25 percent at the third anniversary of the date of grant. All option grants disclosed above are exercisable for a period of five years.

On January 2, 2020, the Company granted 100,000 stock options to a Board of Director, in his capacity of Chair of the Audit Committee of the Corporation. The stock options have an exercise price of \$0.45 per Common Shares, vest immediately and is exercisable over a period of five (5) years.

On September 29, 2019, the Company granted a total of 400,000 stock options to members of the Board of Directors and the Acting Chief Financial Officer of PyroGenesis. The stock options have an exercise price of \$0.51 per common share, 50% vested at grant date and 50% at the first anniversary of the grant and are exercisable over a period of 5 years. The fair value of the stock options was estimated at \$0.34 per option by applying the Black-Sholes option pricing model.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

20. Shareholders' equity (deficiency) (continued)

The fair value of the stock options granted in the years ended December 31, 2020 and 2019 was measured based on the Black-Scholes option pricing model using the following assumptions:

Date of grant	October 26, 2020	July 16, 2020	January 2, 2020	September 29, 2019
Number of options granted	250,000	2,460,000	100,000	400,000
Exercise price (\$)	4.00	4.41	0.45	0.51
Fair value of each option under the Black Scholes pricing model (\$)	3.20	2.95	0.31	0.34
Assumptions under the Black Scholes model:				
Fair value of the market share (\$)	4.00	4.41	0.45	0.51
Risk free interest rate (%)	0.38	0.33	1.61	1.39
Expected volatility (%)	114	86	86	83
Expected dividend yield	-	-	-	-
Expected life (number of months)	60	60	60	60
Forfeiture rate (%)	-	-	-	-

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.

As at December 31, 2020, 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:

	Number of stock options Dec 31, 2019	Granted	Exercised	Forfeitures	Number of stock options Dec 31, 2020	Number of stock options vested	Exercise price per option \$	Expiry date
February 12, 2015	1,488,000	-	(1,488,000)	-	-	-	0.30	Feb 12, 2020
September 25, 2016	3,000,000	-	-	-	3,000,000	3,000,000	0.18	Sep 25, 2021
October 25, 2016	100,000	-	(100,000)	-	-	-	0.19	Oct 25, 2021
November 3, 2017	2,600,000	-	(180,000)	-	2,420,000	2,420,000	0.58	Nov 3, 2022
February 9, 2018	200,000	-	(120,000)	(80,000)	-	-	0.60	Feb 9, 2023
May 10, 2018	250,000	-	-	-	250,000	150,000	0.52	May 10, 2023
July 3, 2018	300,000	-	-	-	300,000	180,000	0.51	July 3, 2023
October 29, 2018	100,000	-	(30,000)	-	70,000	30,000	0.52	Oct 29, 2023
September 29, 2019	400,000	-	(200,000)	-	200,000	200,000	0.51	Sept 29, 2024
January 2, 2020	-	100,000	-	-	100,000	100,000	0.45	Jan 2, 2025
July 16, 2020	-	2,460,000	-	(10,000)	2,450,000	775,000	4.41	Jul 16, 2025
October 26, 2020	-	250,000	-	-	250,000	62,500	4.00	Oct 26, 2025
	8,438,000	2,810,000	(2,118,000)	(90,000)	9,040,000	6,917,500	1.57	

For the year ended December 31, 2020, a stock-based compensation expense of \$4,244,608 (2019 - \$171,807) was recorded in Selling, general and administrative expenses to the Consolidated Statements of Comprehensive income (loss).

As at December 31, 2020, an amount of \$3,904,882 (2019 - \$81,884) remains to be amortized until October 2024 related to the grant of stock options.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

20. Shareholders' equity (deficiency) (continued)

Share purchase warrants

The following table reflects the activity in warrants during the years ended December 31, 2020 and the number of issued and outstanding share purchase warrants at December 31, 2020:

	Number of warrants Dec 31, 2019	Issued	Exercised	Expired	Number of warrants Dec 31, 2020	Price per warrant \$	Expiry date
Issuance of units – April 19, 2018	3,108,333	-		(3,108,333)	-	0.85	Apr 19, 2020
Issuance of broker warrants – April 19, 2018	74,000	-		(74,000)	-	0.85	Apr 19, 2020
Issuance of units – April 20, 2018	3,385,715	-		(3,385,715)	-	0.85	Apr 20, 2020
Issuance of units – September 28, 2018	3,448,276	-		-	3,448,276	0.58	Jan 28, 2021
Issuance of units – October 19, 2018	1,500,750	-	(1,400,750)	-	100,000	0.58	Feb 13, 2021
Issuance of units – December 17, 2018	2,244,367	-	(2,244,367)	-	-	0.85	Dec 18, 2020
Issuance of units – May 15, 2019	2,996,500	-	(1,641,000)	-	1,355,500	0.85	May 15, 2021
Issuance of units – May 28, 2019	2,024,500	-	(1,274,500)	-	750,000	0.85	May 24, 2021
Issuance of units – June 19, 2019	1,000,000	-	(500,000)	-	500,000	0.85	Jun 19, 2021
Issuance of units – October 25, 2019	225,000	-	-	-	225,000	0.75	Oct 25, 2021
Issuance of units – November 10, 2020	-	1,677,275	-	-	1,677,275	4.50	Nov 10, 2022 ¹
Issuance of warrants – November 10, 2020	-	95,707	-	-	95,707	4.50	Nov 10, 2022 ¹
	20,007,441	1,772,982	(7,060,617)	(6,568,048)	8,151,758	1.52	

¹ On March 10, 2021, the Company has delivered the Acceleration Notice to accelerate the expiry date of the warrants to April 14, 2021 issued on November 10, 2020

21. Supplemental disclosure of cash flow information

Net change in balances related to operations:

	2020	2019
	\$	\$
Decrease (increase) in:		
Accounts receivable	(2,622,018)	420,612
Costs and profits in excess of billings on uncompleted contracts	(950,653)	184,852
Investment tax credits receivable	(562,980)	4,099
Deposits	(1,394,160)	307,709
Contract assets	(855,592)	-
Other assets	(39,042)	(30,564)
Royalties receivable	(1,060,000)	-
Increase (decrease) in:		
Accounts payable and accrued liabilities	(148,678)	2,103,997
Billings in excess of costs and profits on uncompleted contracts	3,508,315	(1,267,753)
	(4,124,808)	1,722,952

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

22. Other expense information

The aggregate amortization of intangible assets expense for the year ended December 31, 2020 was \$27,190 (2019 - \$20,133) and was recorded in cost of sales and services.

Depreciation on property and equipment amounted to \$63,118 for the year ended December 31, 2020 (2019 - \$168,835) and is recorded in selling, general and administrative. Employee benefits totaled \$11,801,314 in the year ended December 31, 2020 (2019 - \$5,967,563) and included share-based compensation of \$4,244,608 (2019 - \$171,807). During the year ended December 31, 2020, costs to obtain long term contacts of \$161,291 (2019 - \$Nil) were recognized to selling, general and administrative expenses.

The Company has been awarded various grants during the year, which were recognized when they became receivable. The grants, received in 2020, are unconditional and amounted to \$419,661 (2019 - \$261,088). An amount of \$365,433 (2019 - \$204,525) was recorded as a reduction to the related expenses in research and development, an amount of \$54,228 (2019 - \$56,563) was recorded as a reduction to the related expenses in selling, general and administrative.

The Company in 2020 applied for an amount of \$775,967 in wage subsidy under the CEWS program. An amount of \$118,416 was recorded as a reduction to employee compensation under cost of sales and services, \$504,339 was recorded as a reduction to employee compensation under selling, general and administrative expenses, and \$153,212 was recorded as a reduction to employee compensation under research and development costs.

23. Net finance costs:

	2020	2019
	\$	\$
Finance costs		
Interest and fees on convertible debentures	171,042	285,000
Interest accretion of convertible debentures	182,700	371,117
Interest on term loans	20,957	46,749
Interest on promissory notes	-	53,317
Interest on lease liabilities	211,666	258,288
Interest accretion on promissory notes	17,937	-
Penalties and other interest expenses	57,550	275,183
	661,852	1,289,654
Capitalized borrowing costs on Equipment under construction	(137,778)	(52,150)
Net finance costs	524,074	1,237,504

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

24. Earnings (loss) per share

The following table provides a reconciliation between the number of basic and fully diluted shares outstanding as at December 31, 2020 and 2019:

	2020	2019
Weighted daily average of Common shares	148,315,445	137,382,323
Dilutive effect of stock options	5,375,592	-
Dilutive effect of warrants	4,611,720	-
Weighted average number of diluted shares	158,302,757	137,382,323
Number of anti-diluted stock options, warrants, compensation options, convertible debentures and convertible loans excluded from fully diluted earnings per share calculation	4,664,396	31,737,530

25. Related party transactions

During the year ended December 31, 2020 and 2019, the Company concluded the following transactions with related parties:

As of January 1, 2020, a lease for rent of a property with a trust whose beneficiary is the controlling shareholder and CEO of the Company was modified and extended for five years. The modified agreement included a requirement to prepay the rent amount of \$1,178,529. As at December 31, 2020 the right-of-use asset and the lease liabilities amount to 1,328,557 and 221,496 respectively (2019 – 1,350,487 and 1,218,958). In 2020, property taxes for an amount of \$258,042 (2019- 266,581) were charged to the Company. In return for the modification of the lease agreement, a 2020 convertible loan of \$903,000 from a trust whose beneficiary is the controlling shareholder and CEO of the Company, was converted into 3,225,000 common shares of the Company. These expenses are recorded in captions cost of sales and selling and general in the statement of comprehensive income (loss).

An amount of \$58,050 (December 31, 2019 - \$Nil), of interest payable and an accretion amount of \$Nil (December 31, 2019 - \$Nil), were accrued on the 2020 convertible loan of \$903,000 from a trust whose beneficiary is the controlling shareholder and CEO of the Company.

A balance due to the controlling shareholder and CEO of the Company amounted to \$72,188 (2019 - \$214,470) for expense report, salary and vacation payable and is included in accounts payable and accrued liabilities.

An amount of \$17,937 (2019 - \$53,317), of interest accretion was expensed in net financing costs in the year on the loan of \$295,000 from the controlling shareholder and CEO of the Company. A balance due of \$Nil is included in accounts payable and accrued liabilities.

The key management personnel of the Company are the members of the Board of Directors and certain officers. Total compensation to key management consisted of the following:

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

25. Related party transactions (continued)

	2020	2019
	\$	\$
Salaries – key management	2,148,420	723,000
Pension contributions	18,529	10,960
Fees – Board of Directors	150,000	110,750
Share-based compensation – officers	1,989,144	13,473
Share-based compensation – Board of Directors	846,410	89,025
Other benefits – key management	544,402	58,412
Total compensation	5,696,905	1,005,620

The Company has added three employees in key management in 2020.

26. 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, the following items are denominated in US dollars:

	2020 CDN	2019 CDN
	\$	\$
Cash	1,366,627	74,749
Accounts receivable	621,817	28,704
Accounts payable and accrued liabilities	(252,463)	(403,273)
Total	1,735,981	(299,820)

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.

Sensitivity analysis

At December 31, 2020, if the US Dollar changes by 10% against the Canadian dollar with all other variables held constant, the impact on pre-tax gain or loss for the year ended December 31, 2020 would have been \$174,000 (December 31, 2019 – (\$30,000)).

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

26. Financial instruments (continued)

Credit risk and credit concentration

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. The maximum credit risk to which the Company is exposed as at December 31, 2020 represents the carrying amount of cash and cash equivalents, accounts receivable and royalties receivable. Cash and cash equivalents, which only comprise guaranteed investment certificates redeemable on relatively short notice by the Company, are held with major North American financial institutions. The Company manages its credit risk by performing credit assessments of its customers. The Company does not generally require collateral or other security from customers on accounts receivable. The Company believes that there is no unusual exposure associated with the collection of these receivables. During the year ended December 31, 2020, two customers accounted for 79% (December 31, 2019 – five customers for 77%) of revenues from operations.

	2020		2019	
	Revenues	% of total revenues	Revenues	% of total revenues
	\$	%	\$	%
Customer 1	9,523,353	53	1,166,705	24
Customer 2	4,444,022	26	835,142	17
Customer 3	-	-	637,841	13
Customer 4	-	-	560,916	12
Customer 5	-	-	525,556	11
Total	13,967,375	79	3,726,160	77

Two customers accounted for 69% (December 31, 2019 – three customers for 93%) of trade accounts receivable with amounts owing to the Company of \$1,211,177 (2019 - \$96,874), 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 royalties receivables are due from a company in which the Company has a strategic investments. The Company does not have collateral or other security associated with the collection of this receivable.

Fair value of financial instruments

The fair value represents the amount that would be received for the sale of an asset or paid for the transfer of a liability in an orderly transaction between market participants at the measurement date. The fair value estimates are calculated at a specific date taking into consideration assumptions regarding the amounts, the timing of estimated future cash flows and discount rates. Accordingly, due to its approximate and subjective nature, the fair value must not be interpreted as being realizable in an immediate settlement of the financial instruments.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

26. Financial instruments (continued)

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 and cash equivalents, trade accounts receivable, accounts payable and accrued liabilities approximate their carrying amounts due to their short-term maturities.

Investments in BGF and HPQ shares are valued at quoted market prices and are classified as Level 1.

Investments in HPQ warrants are valued using the Black-Scholes pricing model and are classified as Level 3.

The fair value of the term loans as at December 31, 2020 is determined using the discounted future cash flows method and management's estimates for market interest rates for similar issuances. Given their recent issuance, their fair market values correspond to their carrying amount.

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 other financial assets or liabilities, known as price risk, and on the fair value of investments or liabilities, known as price risks. The Company is exposed to a risk of fair value on cash equivalents, and term loans as those financial instruments bear interest at fixed rates.

Price risk

Price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market price (other than those arising from foreign currency risk and interest 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 the price risk for the Company arises from its investments in shares and warrants of public companies quoted on the TSXV Exchange. If equity prices had increased or decreased by 25% as at December 31, 2020, with all other variables held constant, the Company's investments would have increased or decreased respectively, by approximately \$11,874,375 (December 31, 2019 15% - \$241,000).

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 another financial asset. The Company manages its liquidity risk by forecasting cash flows from operations and anticipating any investing and financing activities.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

26. Financial instruments (continued)

The following table summarizes the contractual amounts payable and maturities of financial liabilities as at December 31, 2020:

	Carrying value	Total contractual amount	Less than one year	2-3 years	4-5 years	Over 5 years
	\$	\$	\$	\$	\$	\$
Accounts payable and accrued liabilities	4,708,051	4,708,051	4,708,051	-	-	-
Term loans	112,707	197,824	14,389	73,495	62,823	47,117
	4,820,758	4,905,875	4,722,440	73,495	62,823	47,117

27. Contingent liabilities

The Company is currently a party to various legal proceedings. If management believes that a loss arising from these proceedings is probable and can reasonably be estimated, that amount of the loss is recorded. As additional information becomes available, any potential liability related to these proceedings is assessed and the estimates are revised, if necessary. Based on currently available information, management believes that the ultimate outcome of these proceedings, individually and in aggregate, will not have a material adverse effect on the Company's financial position or overall trends in results of operations.

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 repayment provision will remain in effect until May 30, 2024. The Company abandoned the project in 2011 and accordingly, no amount is expected to be repaid.

28. Capital management

The Company's objectives in managing capital are:

- To ensure sufficient liquidity to support its current operations and execute its business plan; and
- 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 third parties and shareholders. The Company is not subject to any externally imposed capital requirements.

The Company monitors its working capital in order to meet its financial obligations. As at December 31, 2020, the Company's working capital was \$13,797,579 (2019 – deficiency of \$10,482,034).

The management of capital includes shareholders' equity for a total amount of \$59,423,106 (2019 – deficiency of \$6,082,923) and debt of \$112,707 (2019-\$3,769,323).

Although there were no significant changes in the Company's approach during fiscal 2020, the Company was able to retire its term loans and convert its convertible debentures to common shares. In order to maintain or adjust capital structure, the Company may issue new shares, sell portions of its strategic investment and periodically purchase its own shares on the open market.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

29. Income taxes

a) Income tax expenses is comprised of the following:

	2020	2019
	\$	\$
Current tax		
Current year	327,412	-
Deferred tax	-	-
Origination and reversal of temporary differences	6,816,080	(2,811,973)
Recognition of previously unrecognized tax assets	(170,082)	
Change in unrecognized deductible temporary differences	(5,939,998)	2,811,973
	706,000	
Income tax expense	1,033,412	-

b) Reconciliation of effective tax rate

	2020	2019
	\$	\$
Income (loss) before income taxes	42,801,816	(9,171,116)
Income tax rates	26.5%	26.6%
Income tax expense (recovery) at the combined basic Federal and Provincial tax rates	11,342,481	(2,439,517)
Permanent differences	(5,072,219)	271,576
Tax rate changes	37,443	8,153
Prior year adjustment	835,787	(652,185)
Recognition of previously unrecognized tax assets	(170,082)	-
Change in unrecognized deductible temporary differences	(5,939,998)	2,811,973
Income tax expense	1,033,412	-

The applicable statutory tax rates are 26.5% in 2020 and 26.6% in 2019. The company's applicable tax rate is the Canadian combined rates applicable in the jurisdiction in which the company operates. The decrease is due to the reduction of the Quebec income tax rate in 2020 from 11.6% to 11.5%.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

29. Income taxes (continued)

c) Deferred tax assets and liabilities

Recognized deferred tax assets and liabilities:

As at December 31, 2020 and 2019, recognized deferred tax assets and liabilities are attributable to the following:

	Assets		Liabilities		Net	
	2020	2019	2020	2019	2020	2019
	\$	\$	\$	\$	\$	\$
Non-capital losses carried forward	4,982,328	-	-	-	4,982,328	-
Strategic investments	-	-	(4,919,499)	-	(4,919,499)	-
Investment tax credits	-	-	(273,854)	-	(273,854)	-
Royalty receivable	-	-	(280,900)	-	(280,900)	-
Property and equipment	-	-	(25,273)	-	(25,273)	-
Right-of-use assets net of liabilities	-	-	(188,802)	-	(188,802)	-
Tax assets (liabilities)	4,982,328	-	(5,688,328)	-	(706,000)	-
Set off of tax	(4,982,328)	-	4,982,328	-	-	-
Net tax assets (liabilities)	-	-	(706,000)	-	(706,000)	-

d) Unrecognized deferred tax assets and investment tax credits

As at December 31, 2020 and 2019, the amounts and expiry dates of tax attributed and temporary difference for which no deferred tax assets was recognized as follows:

	December 31, 2020		December 31, 2019	
	Federal	Provincial	Federal	Provincial
	\$	\$	\$	\$
Research and development expenses, Without time limitation:	9,917,779	9,511,671	9,232,220	8,782,931
Federal research and development investment tax credits:				
2027	-	-	18,373	-
2028	-	-	192,436	-
2029	-	-	366,539	-
2030	-	-	89,879	-
2031	-	-	223,759	-
2032	-	-	186,031	-
2033	-	-	105,216	-
2034	361,430	-	212,609	-
2035	488,555	-	488,555	-
2036	359,594	-	359,594	-
2037	253,885	-	253,885	-
2038	186,015	-	186,015	-
2039	411,540	-	393,158	-
2040	142,367	-	-	-
	2,203,386	-	3,076,049	-

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

29. Income taxes (continued)

e) Tax losses carried forward

	December 31, 2020		December 31, 2019	
	Federal \$	Provincial \$	Federal \$	Provincial \$
Tax losses carried forward:				
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	-	-	3,579,827	3,440,527
2037	-	-	1,577,876	1,568,739
2038	3,715,297	-	5,716,536	5,650,620
2039	4,163,315	1,108,382	6,622,981	6,631,768
	7,878,612	1,108,382	27,097,001	26,604,598

	December 31, 2020		December 31, 2019	
	Federal \$	Provincial \$	Federal \$	Provincial \$
Other deductible temporary differences, Without time limitation:				
Financing costs	1,538,633	1,538,633	494,698	494,698
Intangible assets	3,908,608	3,599,602	4,953,545	4,953,545
	5,447,240	5,138,234	5,448,243	5,448,243

Deferred tax assets and investment tax credits have not been recognized in respect to these items because it is uncertain that future taxable profit will be available against which the company can utilise the benefits therefrom. The generation of future taxable profit depends on the successful commercialisation of the Company's products and technologies.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

30. 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 total revenues by geography:

	2020	2019
	\$	\$
Canada	5,828,186	889,284
United States	1,463,510	852,599
Europe	265,711	1,488,208
Mexico	174,818	122,890
Asia	-	1,399,824
Israel	4,007	-
Saudi Arabia	9,523,353	-
China	296,031	-
Australia	-	53,190
South America	181,184	7,983
Africa	38,229	-
	17,775,029	4,813,978

Revenue by product line and revenues recognized by revenue recognition method are presented in note 5.

31. Subsequent events

On January 12, 2021, the Company announced that it intended to implement a normal course issuer bid ("NCIB") through the facilities of the Toronto Stock Exchange ("TSX") or alternative trading systems. Pursuant to the NCIB, PyroGenesis may purchase, from time to time, over a period of 12 months starting January 14, 2021 and ending January 13, 2022, up to 5,000,000 common shares (approximately 3.14% of its common shares issued and outstanding as of January 4, 2021). On any given day, during the NCIB, PyroGenesis may only purchase up to 83,342 common shares, which is equivalent to 25% of the Average Daily Trading Volume of 333,370 calculated based on the trading volumes on the TSX from November 20, 2020 (being the first day PyroGenesis was listed on the TSX) to December 31, 2020. Purchases under the NCIB may commence as of January 14, 2021 and will end on the earlier of: (i) January 13, 2022; or (ii) the date on which the Company has purchased the maximum number of common shares to be acquired under the NCIB. The actual number of common shares which will be purchased, and the timing of such purchases, will be determined by the Company, and the price which the Company will pay for the common shares will be the market price at the time of the purchase. The common shares purchased under the NCIB will be cancelled.

On January 11, 2021 the Company entered into a lease agreement for an additional 31,632 sq. ft. in Montreal, Quebec, Canada. The term of the lease is five years commencing on May 1, 2021 and ending on April 30, 2026. There are two five-year options to renew the term of this lease.

Between January 1, 2021 and March 30, 2021, the Company issued 5,149,935 common shares upon the exercise of 5,149,935 warrants for total proceeds of \$7,354,091. The Company also issued 191,414 common shares upon the exercise of 191,414 compensation options with an exercise price of \$3.60 for total proceeds of \$689,090 and 11,000 common shares upon exercise of 11,000 stock options with an exercise price of \$0.58 for total proceeds of \$6,380.

PyroGenesis Canada Inc.

Notes to the Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

31. Subsequent events *(continued)*

On March 10, 2021, the Company had delivered the acceleration notice to accelerate the expiry date of warrants that were issued on November 10, 2020 to April 14, 2021 – see note 20 of the 2020 Financial Statements.

On March 10, 2021, the Company announced that its application to list its Common Shares on the NASDAQ had been approved. Trading commenced on March 11, 2021, under the ticker symbol “PYR”. The Common Shares ceased trading on the OTCQB at the close of markets on March 10, 2021. In connection with the listing of Common Shares on NASDAQ, the Company became subject to public company reporting obligations in the United States.