NANOTECH

September 30, 2020

ANNUAL REPORT

For purposes of this management's discussion and analysis ("MD&A"), "Nanotech", the "Company", "we", or "us" refers to Nanotech Security Corp. and its subsidiaries. This year and 2020 mean the fiscal year ended September 30, 2020. Last year and 2019 mean the fiscal year ended September 30, 2019, and 2018 means the fiscal year ended September 30, 2018. This quarter or the current quarter means the three months ended September 30, 2020.

ADVISORY

This MD&A, dated December 9, 2020, should be read in conjunction with the cautionary statement regarding forward-looking statements below and the Company's financial statements for the year ended September 30, 2020. The results reported herein have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and are presented in Canadian dollars. All quarterly information disclosed in the MD&A is unaudited.

Additional information relating to the Company is filed on SEDAR at www.sedar.com.

FORWARD-LOOKING STATEMENTS

The following discussion and analysis of the financial conditions and results of operations contains forward-looking statements concerning anticipated developments in the Company's operations in future periods, the adequacy of Nanotech's financial resources, and the events or conditions that may occur in the future. Forward-looking statements are frequently, but not always, identified by words such as "expects", "anticipates", "believes", "intends", "estimates", "predicts", "potential", "targeted", "plans", "possible" and similar expressions, or statements that events, conditions, or results "will", "may", "could" or "should" occur or be achieved.

These forward-looking statements include, without limitation, statements about the Company's market opportunities, strategies, competition, and the Company's views that its optics-based technologies will continue to show promise for large scale production and the potential impacts of the COVID-19 pandemic on the Company's operations. Other forward-looking statements imply that the Company will remain capable of being financed and/or will be able to partner development until profitability is eventually realized. The principal risks related to these forward-looking statements are the loss of a key customer, that the Company's products receive market acceptance and that its intellectual property claims will be sufficiently broad or enforceable to provide the necessary protection or attract the necessary capital, as well as risks related to the COVID-19 pandemic.

These forward-looking statements are based on the beliefs, expectations and opinions of management on the date the statements are made. Consequently, all forward-looking statements made in this discussion and analysis of the financial conditions and results of operations or the documents incorporated by reference, are qualified by this cautionary statement and there can be no certainty that actual results or developments the Company anticipates will be realized. For additional information with respect to certain of these risks or factors reference should be made to the "Business Risks and Uncertainties" section of the MD&A and the notes to the audited financial statements for the year ended September 30, 2020, as well as with the Company's continuous disclosure materials filed from time to time with Canadian securities regulatory authorities, which are available online at www.sedar.com. Nanotech disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, other than as required by law. Caution needs to be used when taking forward-looking statements into account when evaluating the Company.

GENERAL OVERVIEW

Nanotech is incorporated under the laws of British Columbia, listed on the TSX Venture Exchange (trading symbol: NTS) and quoted in the United States on the OTCQX Market (trading symbol: NTSFF). The Company's head office is located at #505 - 3292 Production Way, Burnaby, BC, Canada V5A 4R4. In addition, the Company owns and operates a manufacturing facility located in Thurso, Quebec. The Company's registered and records office is #1200 - 200 Burrard Street, Vancouver, BC, Canada V7X 1T2.

Nanotech develops and produces nano-optic structures and colour-shifting foils used in authentication and brand protection applications across a wide range of markets including banknotes, secure government documents, and commercial branding. The Company's technology platforms include:

- KolourOptik®, a patented technology that is exclusive to the government and banknote market and combines sub-wavelength nanostructures and microstructures to create modern overt security features with a unique and customizable visual effect. KolourOptik pure plasmonic colour pixels produce full colour, 3D depth, and movement used in security stripes and threads that are nearly impossible to replicate.
- LiveOptik™, a patented technology that utilizes innovative nano-optics one tenth the size of traditional holographic structures to create next generation overt security features customized to Nanotech's customers' unique requirements. LiveOptik delivers multi-colour, 3D depth, movement and image switches for secure brand protection stripes, threads and labels that are nearly impossible to replicate.
- LumaChrome™ optical thin film security features are manufactured using precision engineered nanometer thick layers of metals and ceramics to form filters designed to uniquely manipulate visible and non-visible light. This unique manipulation of light properties is used to create specialized security features in the form of threads, stripes, and patches that are applied to banknotes and other secure documents. By using sophisticated electron beam and sputtered deposition methods, Nanotech precisely controls the construction and inherent properties to provide custom colour-shifting solutions. An individual looking at these threads, stripes and patches sees an obvious colour shift (e.g. green to magenta) when it is tilted or rotated.

Report on 2020 Strategic Initiatives

In 2020, the Company pursued revenue growth by focusing on product sales opportunities in the government and banknote market and in the brand protection market. To achieve this, management previously established the following targets for fiscal 2020:

- ***Revenue diversification****. Increase product revenue by generating sales of nano-optic products, expanding product lines, and pursuing further growth opportunities for LumaChrome colour-shifting foil.*

  In fiscal 2020, Nanotech recorded product revenue from 23 delivered customer orders, compared to 14 for 2019, and increased product revenue by 24% compared to 2019. Product revenue growth was predominantly related to LumaChrome foil which included foil for two new banknote denominations and one new government ID application. In addition, the Company worked with several partners to qualify its LumaChrome foil on four new banknote opportunities and additionally delivered recurring LumaChrome foil orders in the second half of 2020.

  In the brand protection market, the Company won three reference customers in 2020, including two wins in the licensing vertical with the World Baseball Softball Confederation and CONCACAF and a product order for approximately 7.0 million labels in a confidential brand protection application. The Company also worked with a partner to deliver custom foil for a new commercial application and expanded its brand protection product offering with the launch of LumaChrome into the brand protection market.

- ***Develop strategic sales relationships****. Expand the Company's sales reach by partnering with more established OEMs to promote Nanotech's products to their existing customer bases.*

  The Company made significant progress in strengthening its sales partnerships in 2020. In the brand protection market, management partnered with two American channel partners who are now marketing Nanotech's LiveOptik products. In the government and banknote market, management is working with a key OEM partner to design a marketing housenote to enable this partner to begin marketing KolourOptik products.

- ***Develop strategic manufacturing and product partnerships****. Partner with select manufacturers that have a proven track record of excellence to reduce the manufacturing risk associated with scaling product sales and to expand the Company's product lines.*

  The Company has partnered with a large OEM partner to produce LiveOptik products for the brand protection market. Nanotech's product features have expanded to include foils, labels, QR codes, and track and trace capability because of its manufacturing partnerships. Outsourcing LiveOptik manufacturing also enables the Company to focus on its core capabilities in technology development.

  In the government and banknote market, management is in the process of qualifying a world class OEM manufacturing partner for its KolourDepth™ products. Qualification is expected to be complete in the second quarter.

  In addition, Nanotech invested over $1.5 million to expand and upgrade its secure manufacturing facility in Thurso, Quebec to accommodate future growth, including modifications to LumaChrome production equipment, an enhanced electrical and heating system, and additional production equipment.

RESULTS OF OPERATIONS

Select financial information for the years ended September 30, 2020, 2019 and 2018:

Select Financial Information	2020	2019	2018[1]
Revenue	$ 7,714,173	$ 6,402,702	$ 8,247,414
Cost of sales	1,481,511	1,511,865	1,510,101
	6,232,662	4,890,837	6,737,313
Expenses			
Research and development	1,840,811	1,477,668	1,407,430
General and administration	2,344,258	2,307,021	2,532,156
Sales and marketing	2,223,865	2,161,056	2,018,055
Depreciation and amortization	1,542,875	1,481,388	1,485,024
Impairment of assets	315,338	-	-
Restructuring costs	-	787,575	-
	8,267,147	8,214,708	7,442,665
Loss from continuing operations before other income	(2,034,485)	(3,323,871)	(705,352)
Other income	(239,139)	(488,617)	(782,408)
Income (loss) from continuing operations	(1,795,346)	(2,835,254)	77,056
Loss from discontinued operations	-	-	(123,322)
Net loss	$ (1,795,346)	$ (2,835,254)	$ (46,266)
Adjusted EBITDA[2]	$ 331,762	$ (399,402)	$ 1,588,278

[1]Revenue, cost of sales and other income for 2018 has been adjusted to reflect the reclassification of tenant and steam income from revenue to other income under the full retrospective application of IFRS 15 – *Revenue from Contracts with Customers*, which was adopted October 1, 2018. For further information, see note 4(b) of the consolidated financial statements for the year ended September 30, 2019.

[2]Adjusted EBITDA is a non-IFRS measure as described in the "Non-IFRS Financial Measures" section of this MD&A.

Financial Position as at September 30	2020	2019	2018
Cash, cash equivalents and short-term investments	$ 8,601,140	$ 10,289,264	$ 9,613,621
Total assets	$ 27,982,579	$ 28,523,244	$ 30,229,055
Total liabilities	2,624,128	1,791,610	1,325,139
Total equity	25,358,451	26,731,634	28,903,916

Revenue

The Company currently derives the majority of its revenue from contract services with a G10 central bank. During the year ended September 30, 2017, the Company disclosed a development contract for up to $30.0 million over a period of up to five years. These contract services incorporate both nano-optic and optical thin film technologies and are focused on developing authentication features for future banknotes. While the Company is progressing toward the goal of incorporating a Nanotech security feature on this customer's banknote, there is inherent variability in the timing and scope of the contract services. Revenues from this customer increased $1,007,563 or 20% in the year ended September 30, 2020 compared to the same period last year.

Revenue for the year ended September 30, 2020 increased by $1,311,471 or 21% to $7,714,173, compared to $6,402,702 in the same period last year primarily due to increased contract services revenue in the current period in combination with increased revenue from products. Product revenue increased by $303,909 or 24% as the Company delivered 23 product sales in the current year compared to 14 in the same period last year.

Gross Margin

Gross margin for the year ended September 30, 2020 increased by $1,341,825 or 27% to $6,232,662, compared to $4,890,837 in the same period last year. Overall, the gross margin percentage was 81% for the year ended September 30, 2020, an increase from 76% in the same period last year primarily due to the increase in higher margin contract services revenue in the current period.

Research and Development

Research and development expenditures for the year ended September 30, 2020 increased by $363,143, or 25% to $1,840,811 compared to $1,477,668 in the same period last year. This increase was primarily due to increased patent expenditures, professional fees related to the Thurso facility, and preventive maintenance costs. These cost increases were partially offset by payroll subsidies received under the Canada Emergency Wage Subsidy COVID-19 program that reduced salary expense in the current period.

General and Administration

General and administration expenditures for the year ended September 30, 2020 increased $37,237, or 2% to $2,344,258 compared to $2,307,021 in the same period last year. The increase was primarily due to higher salary and professional expenses, partially offset by decreased share-based compensation, as well as reduced rent expense as the Company transitioned to new lease accounting under IFRS 16 – *Leases* ("IFRS 16") in fiscal 2020.

Sales and Marketing

Sales and marketing expenditures for the year ended September 30, 2020 were $2,223,865, an increase of $62,809 or 3% compared to $2,161,056 in the same period last year. The increase was related to higher salary and benefits expense in the current period as the Company expanded its product and marketing teams, partially offset by lower travel and conference costs in the COVID-19 environment.

Depreciation and Amortization

Depreciation and amortization included in operating expenditures for the year ended September 30, 2020 was $1,542,875, compared to $1,481,388 in the same period last year, which reflects the additional depreciation recorded for right-of-use leased assets and other capital asset additions related to the expansion of the Thurso facility, partially offset by reduced depreciation under the Company's declining balance depreciation method.

Depreciation included in cost of sales for the year ended September 30, 2020 was $85,870, compared to $84,734 for the same period last year, which reflects higher sales in the current year.

Impairment of assets

During the year ended September 30, 2020, the Company initiated a capital project to replace a propane heating system at its Thurso facility with an electric heating system. The carrying amount of the propane heating system was reduced to the recoverable amount, as measured by the expected proceeds upon disposal, and the Company recorded a non-cash impairment loss of $315,338 as at September 30, 2020. Management committed to a plan to sell the propane heating system subsequent to the end of the reporting period and located a buyer with a sale expected to close before December 31, 2020.

Restructuring Costs

On December 21, 2018, the Board implemented an executive transition plan, under which Mr. Doug Blakeway, the former CEO, transitioned his responsibilities to Mr. Troy Bullock. Under the terms of this transition plan, Mr. Blakeway's executive services consulting agreement was terminated, triggering termination benefits as laid out in the agreement: two years base salary, a pro-rated performance bonus, and vesting of all outstanding share-based awards. The Company incurred restructuring costs of $787,575 for the year ended September 30, 2019, of which $92,200 represented share-based compensation related to the accelerated vesting of Mr. Blakeway's restricted share units ("RSUs").

In January 2019, termination benefits were paid and 187,500 shares were issued to Mr. Blakeway upon vesting of his RSUs. There are no restructuring costs accrued as at September 30, 2020 (2019 - $84,375).

Other Income

Other income for the year ended September 30, 2020 was $239,139, a decrease of $249,478, compared to other income of $488,617 in the same period last year. Finance income decreased in the current period due to lower interest rates and increased interest expense as a result of the transition to new lease accounting under IFRS 16. In addition, tenant and steam income decreased compared to the prior year as the tenant renting warehouse space in the Company's Thurso facility filed for CCAA protection, resulting in a write down of certain tenant and steam receivables. The tenant and steam agreements were terminated during the second quarter of 2020, and the Company may not recognize tenant or steam income moving forward.

Adjusted EBITDA

The calculation of Adjusted EBITDA has been amended this year to exclude tenant and steam (income) expenses, which are no longer expected to be recurring in nature. See the Quarterly Results section of this MD&A for the revised historical figures on a quarterly basis.

Adjusted EBITDA for the year ended September 30, 2020 was positive $331,762, compared to negative $399,402 during the same period last year. The increase was primarily due to increased revenue and higher profit margins in the current year, partially offset by increased research and development expenses and sales and marketing expenses as the Company continued to invest in its product and marketing strategies.

Net Loss

Net loss for the year ended September 30, 2020 was $1,795,346, compared to a net loss of $2,835,254 during the same period last year. The decrease in net loss was primarily due to increased revenue and higher profit margin in the current period and the decrease in one-time restructuring costs related to the executive transition in fiscal 2019, partially offset by a reduction in other income.

QUARTERLY RESULTS

	Q4 2020	Q3 2020	Q2 2020	Q1 2020	Q4 2019	Q3 2019	Q2 2019	Q1 2019
($ thousands, except per share data)								
Revenue	$ 2,913	$ 1,947	$ 1,385	$ 1,470	$ 1,450	$ 1,827	$ 1,594	$ 1,532
Net income (loss)	293	(332)	(973)	(782)	(705)	(521)	(477)	(1,132)
Adjusted EBITDA[1]	953	198	(567)	(252)	(263)	(77)	(74)	14
Basic earnings (loss) per share:								
Net income (loss)	0.00	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Diluted earnings (loss) per share:								
Net income (loss)	0.00	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)

[1] Adjusted EBITDA is a non-IFRS measure as described in the "Non-IFRS Financial Measures" section of this MD&A. The calculation of adjusted EBITDA has been amended to exclude tenant and steam (income) expenses, which are no longer expected to be recurring in nature.

Revenue and Adjusted EBITDA were impacted by the timing and scope of contract services and the timing of recurring LumaChrome orders in the quarters presented. There is inherent variability in contract revenue with government organizations and in the receipt of recurring LumaChrome orders. Net income (loss) was further affected by restructuring costs in the first quarter of 2019. There are no seasonal effects in the Company's business over the quarters presented.

Comparison of Fourth Quarter Results, Year-over-year

Revenue for the fourth quarter of 2020 was $2,913,111, compared to $1,449,687 in the same period of 2019. The increase is primarily due to increased contract services revenue in the current quarter, which was a result of the inherent variability in timing of development contract revenue.

Net income for the fourth quarter of 2020 was $292,844, compared to net loss of $704,848 in the fourth quarter of 2019. The increase is primarily due to increased revenue in the current quarter and increased steam income as a result of a settlement with the Company's former tenant over previously written down steam receivables. Net income was also affected by increased research and development expense and the impairment of assets during the current quarter, offset by decreased sales and marketing expense.

Adjusted EBITDA for the fourth quarter of 2020 was positive $953,007, compared to negative $262,712 in the same period of 2019. The difference is primarily due to increased revenue in the current quarter.

RELATED PARTY TRANSACTIONS

For the years ended September 30, 2020 and 2019, the Company had no transactions with related parties as defined in IAS 24 - *Related Party Disclosures*, except those pertaining to transactions with key management personnel in the ordinary course of their employment, or as disclosed below.

(a) *The remuneration of key management personnel*

		2020		2019
Salaries, accrued bonuses, employee benefits and director fees	$	744,720	$	712,298
Share-based payments		230,840		255,476
Restructuring costs		-		787,575
	$	975,560	$	1,755,349

(b) As at September 30, 2020, amounts owing to directors for director fees and expense reimbursements included in accounts payable and accrued liabilities were $58,619 (2019 - $47,622).

(c) As at September 30, 2020, amounts owing to a company controlled by a director of the Company included in accounts payable and accrued liabilities were $nil (2019 - $84,375). These payables as at September 30, 2019 represent amounts owing under the terms of an executive services consulting agreement.

(d) Legal and professional fees, taxes and disbursements totaling $nil for the year ended September 30, 2020 (2019 - $42,485) were incurred with a law firm of which a director of the Company was at the time a partner.

The above transactions are in the normal course of business and are measured at the exchange amount which is the amount of consideration established and agreed to by the related parties.

LIQUIDITY AND CAPITAL RESOURCES

The Company's principal sources of liquidity are cash provided by operations, including collection of accounts receivable, and access to equity capital resources. The Company's primary short-term cash requirement is to fund any potential shortfall from operations, working capital, and capital expenditures. Cash is also used to finance other long-term strategic business initiatives.

Summary of Statements of Cash Flows

		2020		2019
Cash provided by (used in) continuing operations	$	(269,393)	$	942,269
Cash used in discontinued operations		-		(16,204)
Cash provided by (used in) operating activities		(269,393)		926,065
Cash used in investing activities		(550,920)		(187,814)
Cash used in financing activities		(146,241)		-
Effect of foreign exchange on cash and cash equivalents		(33,593)		(1,013)
Cash and cash equivalents, beginning of year		2,752,002		2,014,764
Cash and cash equivalents, end of year	$	1,751,855	$	2,752,002

Operating Activities

Cash used by operating activities was $269,393 for the year ended September 30, 2020, compared to cash provided by operating activities of $926,065 for the same period last year. The Company used more cash in operations in the current year primarily as a result an increase in accounts receivable in 2020 due to strong fourth quarter revenues.

Investing Activities

Cash used in investing activities was $550,920 for the year ended September 30, 2020, compared to $187,814 used in the same period last year. In 2020, the Company expanded its manufacturing footprint within the Thurso production facility, added new equipment, and modified certain equipment to enhance the Company's production capabilities, resulting in an increase in capital expenditures compared to the same period in the prior year. This capital investment was offset by the net disposal of short-term investments to fund the expenditure.

Capital Resources

The Company's objectives when managing capital are to safeguard the ability to continue as a going concern, to provide adequate return to shareholders, to meet external capital requirements, and to preserve financial flexibility in order to benefit from potential opportunities that may arise. The Company's principal cash requirements are for operations, working capital, and capital expenditures.

The Company's officers are responsible for managing the Company's capital and do so through quarterly meetings and regular review of financial information. The Board of Directors is responsible for overseeing this process. In managing its capital, the Company considers changes in economic conditions, risks that impact operations, and future significant capital investment opportunities. For the year ended September 30, 2020, there were no changes in the Company's approach to capital management. Management will continue to safeguard liquid assets in the short-term to weather the COVID-19 pandemic, while also making capital and other investments required for the long-term operation of the business. The Company is well-positioned with liquid assets of $8.6 million at year end and no debt.

	2020	2019
Cash	$ 1,026,845	$ 752,911
Cash equivalents	725,010	1,999,091
Short-term investments	6,849,285	7,537,262
	$ 8,601,140	$ 10,289,264

The Company had no lines of credit and no exposure to asset-backed commercial paper.

The Company had commitments of $940,819 as at September 30, 2020, primarily for equipment purchases, operating costs in respect of leased office space, and contracted equipment maintenance. Management has reviewed its projected funding requirements for the next 12 months and expects that, through the generation and collection of revenues, the Company will maintain sufficient liquidity to meet its requirements.

Non-IFRS Financial Measures

In addition to results reported in accordance with IFRS, the Company discloses Adjusted EBITDA as a supplemental indicator of its financial performance.

The calculation of Adjusted EBITDA has been amended this year to exclude tenant and steam (income) expenses, which are no longer expected to be recurring in nature. See the Quarterly Results section of this MD&A for the revised historical figures on a quarterly basis.

The Company defines Adjusted EBITDA as net income (loss) excluding the impact of interest and financing costs (net of interest income), foreign exchange gain (loss), income taxes, depreciation and amortization, impairment of assets, share-based compensation, tenant income, steam (income) expense and restructuring costs. The Company believes Adjusted EBITDA is a useful measure as it provides information to management about the operating and financial performance of the Company and its ability to generate operating cash flow to fund future working capital needs, as well as future growth. Adjusted EBITDA may also be used by investors and analysts for the purpose of valuing the Company.

Readers are cautioned that these non-IFRS definitions are not recognized measures under IFRS, do not have standardized meanings prescribed by IFRS, and should not be construed to be alternatives to net earnings determined in accordance with IFRS or as indicators of performance, liquidity, or cash flows. The Company's method of calculating these measures may differ from methods used by other entities and accordingly Nanotech's measures may not be comparable to similarly titled measures used by other entities or in other jurisdictions. The Company uses these measures because it believes they provide useful information to both management and investors with respect to the operating and financial performance of the Company.

	2020	2019
Net loss	$ (1,795,346)	$ (2,835,254)
Finance income	(89,670)	(192,752)
Foreign exchange gain	(39,740)	(14,982)
Depreciation and amortization	1,628,746	1,566,122
Impairment of assets	315,338	-
Share-based compensation	422,163	570,772
Restructuring costs	-	787,575
Tenant income	(69,535)	(214,519)
Steam income	(40,194)	(66,364)
Adjusted EBITDA	$ 331,762	$ (399,402)

Financial Instruments

The Company considers the management of financial risk to be an important part of its overall corporate risk management policy. The nature and extent of risks arising from financial instruments and their related risk management are described in note 13 of the financial statements for the year ended September 30, 2020. In the year ended September 30, 2020, there was no material change to the nature of the risks arising from the Company's classification of financial instruments, or related risk management objectives. Management is monitoring the impact of COVID-19 on credit risk and will mitigate any increased customer-specific risk with either credit insurance or prepayment, where appropriate.

CAPITAL STRUCTURE AND OUTSTANDING SHARE DATA

The Company maintains an equity incentive plan consisting of a stock option plan and an RSU plan to grant options and RSUs to eligible participants. The obligations under the RSU plan can be settled at the Company's discretion through either cash or issuance of common shares. The Company intends to settle the obligation through the issuance of common shares.

During the year ended September 30, 2020, 2,079,000 options (2019 – 1,677,500) and 301,479 RSUs (2019 – 298,640) were granted. During the year ended September 30, 2020, 43,162 RSUs and 830,800 options (2019 – 15,120 RSUs and 750,000 options) were forfeited or expired during the year.

The common shares, options, and RSUs outstanding and exercisable as at the following dates are:

	September 30, 2020		September 30, 2019	
	Number	Weighted average exercise price	Number	Weighted average exercise price
Common shares outstanding	69,399,861		69,200,125	
Options				
Outstanding	4,783,200	$ 0.68	3,535,000	$ 0.95
Exercisable	3,383,700	$ 0.81	2,628,750	$ 1.05
RSUs				
Outstanding	284,083	N/A	225,502	N/A

As at September 30, 2020, the following RSUs were available to grant:

Total RSUs approved by shareholders	2,700,000
Shares issued to date under the RSU plan	(1,768,307)
Reserved for issuance under the RSU plan	931,693
RSUs outstanding	(284,083)
RSUs available to grant	647,610

As at September 30, 2020, the following options were available to grant:

10% of common shares issued and outstanding	6,939,986
Shares reserved for issuance under the RSU plan	(931,693)
Options outstanding	(4,783,200)
Options available to grant	1,225,093

As at December 9, 2020, the Company has 69,399,861 common shares issued and outstanding. There are no preferred shares issued and outstanding.

SIGNIFICANT ACCOUNTING POLICIES AND THE USE OF JUDGMENTS AND ESTIMATES

The preparation of financial statements in accordance with IFRS requires management to make judgments, estimates, and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, revenues, and expenses. Estimates and assumptions are continually evaluated and are based on historical experience and various factors that management believes to be reasonable under the circumstances. However, due to the nature of estimates, actual results may differ from these estimates. Revisions to accounting estimates are accounted for prospectively.

The Company's significant accounting policies are contained in note 3 to the financial statements. Significant areas requiring the use of judgments and estimates in the process of applying policies are discussed below.

Going Concern

Financial statements are prepared on a going concern basis unless management either intends to liquidate the Company or to cease trading, or has no realistic alternative to do so. Assessment of the Company's ability to continue as a going concern requires the consideration of all available information about the future, which is at least, but not limited to, 12 months from the end of the reporting period. This information includes estimates of future cash flows and other factors, the outcome of which is uncertain. When management is aware, in making its assessment of material uncertainties related to events or conditions that may cast significant doubt upon the Company's ability to continue as a going concern, those uncertainties are disclosed.

Impairment of Non-financial Assets

Goodwill is the residual amount that results when the purchase price of an acquired business exceeds the sum of the amounts allocated to the assets acquired, less liabilities assumed, based on their fair values. Goodwill is not amortized and is tested for impairment annually, or more frequently if events or changes in circumstances indicate that the asset might be impaired. Goodwill is considered to be impaired when the carrying amount of the cash generating unit or group of cash generating units to which the goodwill has been allocated exceeds its recoverable amount. An impairment loss, if any, would be recognized as a separate line item in the statement of earnings.

Intangible assets, acquired individually or with a group of other assets, are initially recognized and measured at cost. The cost of a group of intangible assets acquired in a transaction, including those acquired in a business combination that meet the specified criteria for recognition apart from goodwill, is allocated to the individual assets acquired based on their relative fair values. Intangible assets with finite useful lives are amortized over their estimated useful lives and are tested for impairment when events or changes in circumstances indicate that an asset might be impaired. The amortization methods and estimated useful lives of intangible assets are reviewed annually.

The Company performs impairment tests for goodwill and other non-financial assets periodically as described above. Impairment tests involve considerable use of judgment and require management to make estimates and assumptions. The recoverable amount of cash generating units are derived from certain valuation models, which consider various factors such as discount rates, future cash flows, and revenue growth rates. Changes in estimates and assumptions can affect the reported value of goodwill and other non-financial assets.

Provisions

The Company records a provision when an obligation to a third party exists, the payment is probable, and the amount can be reasonably estimated. The Company records a provision based upon the best estimate of the expenditure required to settle the present obligation at the balance sheet date. While management believes these estimates are reasonable, differences in actual results or changes in estimates could have an impact on the liabilities and results of operations recorded by the Company.

Share-based Compensation

The Company measures the fair value of its share-based compensation awards using the Black-Scholes option pricing model. The resulting fair value is then adjusted for an estimated forfeiture amount and recognized on a straight-line basis over the relevant vesting period. Management uses judgment to determine the inputs to the Black-Scholes option pricing model including expected award lives and underlying share price volatility. Changes in these assumptions could have a material impact on the calculation of fair value and the amount of compensation expense recorded in earnings.

Investment Tax Credits

The Company recognizes investment tax credits when there is reasonable assurance that they will be realized. Investment tax credits may be carried forward to reduce future Canadian federal and provincial income taxes payable. The Company applies judgment when determining whether the reasonable assurance threshold has been met to recognize investment tax credits. The Company must interpret eligibility requirements in accordance with Canadian income tax laws and must assess whether future taxable income will be available against which the investment tax credits can be utilized. Any changes in these interpretations and assessments could have a material impact on the amount and timing of investment tax credits recognized in the financial statements.

Income Taxes

The Company is subject to taxation in numerous jurisdictions and exercises judgment in estimating the provision for federal, provincial, and foreign income taxes. Income tax laws and regulations can be complex and are potentially subject to different interpretation between the Company and the respective tax authority. Provisions for tax are made using the Company's best estimate of the amount of tax expected to be paid or recovered based on an assessment of all relevant factors. However, the precision and reliability of the estimates are subject to uncertainty and may change as additional information becomes known.

Deferred tax assets are recognized only when it is probable that sufficient taxable profit will be available in future periods against which deductible temporary differences may be utilized. The recognition of deferred income tax assets involves considerable use of judgment and requires management to make estimates and assumptions, including estimates of projected taxable income, the timing of the reversal of temporary differences, the tax rates and laws in each respective jurisdiction, and the impact of tax planning strategies. The amount of recognized deferred tax assets may change from period to period due to the uncertainties surrounding these assumptions.

Inventory

Inventory is measured at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses, taking into account the most reliable evidence available at each reporting date. The future realization of inventory may be affected by future technology or other market-driven changes that may reduce future selling prices. While management believes the estimates of net realizable value as at the balance sheet date are reasonable, differences in estimates could have an impact on the inventory valuation and results of operations of the Company.

Property, Plant, and Equipment

Property, plant, and equipment is measured at cost, less accumulated depreciation and accumulated impairment losses. Depreciation expense is recognized based on management's best estimate of the useful lives of the depreciable assets. The Company reviews the estimated useful life annually and recognizes any adjustment as appropriate. While management believes estimates of useful lives of depreciable assets as at the balance sheet date are reasonable, differences in estimates could impact the valuation of depreciable assets and the results of operations of the Company.

CHANGE IN ACCOUNTING POLICY

IFRS 16 – Leases

In January 2016, the IASB issued IFRS 16 – *Leases*, which supersedes IAS 17 – *Leases*. IFRS 16 establishes principles for the recognition, measurement, presentation and disclosure of leases. The standard establishes a single model for lessees to bring leases on balance sheet while lessor accounting remains largely unchanged and retains the finance and operating lease distinctions. IFRS 16 is effective for annual periods beginning on or after January 1, 2019. The Company adopted the standard on October 1, 2019, using the modified retrospective approach. The modified retrospective approach applies the requirements of the standard retrospectively with the cumulative effects of initial application recorded in opening accumulated deficit as at October 1, 2019, and no restatement of the comparative period.

On October 1, 2019, the Company had two real estate leases for office space which were impacted by the adoption of the standard. The Company recognized right-of-use assets of $780,767, net of tenant inducements of $35,001, and lease liabilities of $815,768 related to these leases. The right-of-use assets are depreciated on a straight-line basis over the remaining lease term. The lease liability is carried at amortized cost with a finance charge recorded using the effective interest rate method. The depreciation expense of the right-of-use assets and the finance charge of the lease liability partially replaced the lease-related expenses recorded in general and administration expense. In relation to the leases under IFRS 16, the Company recognized depreciation expense of $186,140 and finance costs of $44,868 for the year ended September 30, 2020, compared to general and administration expense of $208,011 for the year ended September 30, 2019.

The following table reconciles the operating lease commitments included in the September 30, 2019 commitments note to the lease liability recorded on transition as at October 1, 2019.

Operating lease commitments as at September 30, 2019	$	281,029
Discounted using the incremental borrowing rate as at October 1, 2019		(17,990)
Lease liabilities recognized as at October 1, 2019		263,039
Extension options reasonably certain to be exercised		552,729
Lease liabilities recognized as at October 1, 2019	$	815,768

On November 6, 2019, the Company signed a lease extension and modification agreement to combine its two leases and extend the term to April 30, 2025. As required by IFRS 16, the Company remeasured the lease liability by discounting the revised lease payments using an incremental borrowing rate of 4.5% and made a corresponding adjustment to the right-of-use asset of $267,778.
The following table reconciles the change in the right-of-use asset for the year ended September 30, 2020.

Balance on transition, October 1, 2019	$	780,767
Lease modification		267,778
Depreciation		(186,140)
Balance as at September 30, 2020	$	862,405

The following table reconciles the change in the lease liability and discloses a maturity analysis of the lease liability for the year ended September 30, 2020.

Balance on transition, October 1, 2019	$	815,768
Lease modification		267,778
Accretion of lease liability		44,868
Repayment of principal and interest		(191,109)
Balance as at September 30, 2020	$	937,305
Minimum lease payments:		
Less than one year	$	212,166
Between one and five years		829,942
		1,042,108
Less future finance charges		(104,803)
	$	937,305
Current portion	$	173,558
Non-current portion		763,747
Balance as at September 30, 2020	$	937,305

NEW STANDARDS AND INTERPRETATIONS NOT YET ADOPTED

Classification of Liabilities as Current or Non-Current (Amendments to IAS 1)

In January 2020, IASB issued *Classification of Liabilities as Current or Non-Current*, which amends IAS 1 – *Presentation of Financial Statements*. The narrow scope amendments affect only the presentation of liabilities in the statement of financial position and not the amount or timing of its recognition. It clarifies that the classification of liabilities as current or non-current is based on rights that are in existence at the end of the reporting period and specifies that classification is unaffected by expectations about whether an entity will exercise its right to defer settlement of a liability. It also introduces a definition of 'settlement' to make clear that settlement refers to the transfer to the counterparty of cash, equity instruments, other assets or services. The amendments are effective for annual reporting periods beginning on or after January 1, 2022. Earlier application is permitted. The Company is assessing the potential impact of these amendments.

BUSINESS RISKS AND UNCERTAINTIES

The Company is subject to a number of risks and uncertainties that can significantly affect its business, financial condition, and future financial performance. The Company has a comprehensive process to identify, manage, and mitigate risk, wherever possible. The risks and uncertainties described below are not necessarily the only risks the Company faces. Additional risks and uncertainties that are presently unknown to the Company or deemed immaterial by the Company may adversely affect the Company's business.

History of Operating Losses and Negative Cash Flow

Nanotech continues to be an expenditure-based entity which has incurred substantial losses since inception and may continue to incur losses and experience negative cash flows. The Company cannot predict if or when it will operate profitably, reliably generate positive cash flows, or be able to implement its business strategy successfully. Pursuit of the business strategy requires Nanotech to incur significant expenditures for research and product development, marketing, and general administrative activities. As a result, there is a need to continue to grow revenues and gross margins to achieve and sustain profitability and positive operating cash flows, and the Company may need to raise additional capital.

Financing Arrangements

Execution of the business plan and commercial viability could be jeopardized if Nanotech is unable to raise additional funds for working capital, R&D projects, sales, marketing, and product development activities, as well as other business opportunities. Mitigation of this risk is attempted by generating funds from a variety of sources including through debt financing, the sale of common equity, government funding, collaboration partners, vendor financing, and revenues from the Company's commercial products.

If the cash generated from the Company's business becomes insufficient to fund future capital requirements, the Company will require additional financing. The Company's ability to access capital markets on terms that are acceptable will be dependent on prevailing market conditions, as well as the Company's future financial condition. Although the Company does not have any reason to anticipate unusual difficulties in raising funds in the future, there can be no assurance that capital will be available on suitable terms and conditions, or at all.

Acquisitions

The Company has in the past and may continue to expand its operations and business by acquiring additional businesses, products, or technologies. There can be no assurance that the Company will be able to identify, acquire, obtain required regulatory approvals, profitably manage additional businesses, or successfully integrate any acquired businesses, products or technologies into the Company without substantial expenses, delays or other operational, regulatory, or financial problems. Furthermore, acquisitions may involve a number of additional risks, including diversion of management's attention, failure to retain key personnel, unanticipated events or circumstances, unidentified pre-closing liabilities and other legal liabilities, some or all of which could have an adverse effect on the Company's business, results of operations and financial condition. In addition, there can be no assurance that any acquired businesses, products, or technologies will achieve anticipated revenues and income growth. Acquisitions could also result in potentially dilutive issuances of equity securities. The failure of the Company to manage its acquisitions strategy successfully could have a material adverse effect on the Company's business, results of operations, and financial condition.

Fixed Costs

The Company requires a staff of specialized employees, as well as specialized manufacturing and test facilities, to perform under its contracts. In order to maintain its ability to compete, the Company must continuously retain the services of a core group of specialists. This reduces the Company's flexibility to reduce workforce costs in the event of a slowdown or downturn in its business. In addition, the manufacturing and test facilities the Company owns or leases under long-term agreements are fixed costs that cannot be adjusted quickly to account for significant variance in production requirements or economic conditions.

Dependence on Key Personnel

The success of the Company is largely dependent on the abilities and experience of its executive officers and other key personnel. Competition for highly skilled management, technical, research and development, and other personnel is intense in the Company's industry. There can be no assurance that the Company can retain its current executive officers, or key personnel, or attract and retain additional executive officers or key personnel as needed. The loss of certain executive officers or key personnel could have an adverse impact upon the Company's growth, operations, and profitability.

Significant Competition

Many of the Company's competitors are larger and have substantially greater resources than the Company. Furthermore, it is possible that other domestic or foreign companies or governments, some with greater experience in the industry in which the Company operates and many with greater financial resources than the Company possesses, could seek to produce products that compete with the Company's products, including the use of new technology which could render the Company's products less competitively viable. Some of the Company's foreign competitors currently benefit from, and others may benefit in the future from, subsidies or protective measures by their home countries. Furthermore, government agencies may at any time decide to perform similar work as the Company either for themselves or for other government agencies, effectively competing with the Company.

The Company's financial performance is dependent on its ability to generate a sustainable order rate for its manufacturing operations. This can be challenging and may fluctuate on an annual and quarterly basis as the number of contracts awarded varies and is difficult to predict. There is also competitive pressure on pricing and other material contractual terms, such as those terms allocating risk between the manufacturer and its customers.

Economic and Political Conditions

Customer demand for the Company's products may be affected by economic and political conditions on an international, national, and/or regional level. For example, changes in interest rates, foreign exchange rates, credit availability, level of government spending, the cyclical nature of capital markets, and political decisions may adversely influence the Company's sales or the Company's ability to access certain funding.

Insurance

The Company maintains an extensive program of insurance coverage in the normal course of business, consistent with similar businesses. In addition, the insurance program covers some of the unique risks encountered by the Company. Although the limits and deductibles of such insurance have been established through risk analysis and the recommendation of professional advisors, there can be no assurance that such insurance will remain available to the Company at commercially reasonable rates or that the amount of such coverage will be adequate to cover all liability incurred by the Company. If the Company is held liable for amounts exceeding the limits of its insurance coverage or for claims outside the scope of that coverage, its business, results of operations, and financial condition could be adversely affected.

Market Acceptance

The Company cannot accurately predict whether its products and services will achieve significant market acceptance or whether there will be a market for its products and services on terms the Company finds acceptable. Market acceptance of the Company's products and services depends on a number of factors, including the quality, sophistication, price and availability of substitute products and services. Lack of significant market acceptance, delays in acceptance, failure of certain markets to develop or the Company's need to make significant investments to achieve acceptance by the market would negatively affect its business, financial condition, and results of operations.

Customer Dependence and Concentration

In 2020, two customers represented 79% and 16% respectively of total revenues (2019 – two customers represented 80% and 14% respectively of total revenues). The loss of a significant customer or any significant contract cancellations could negatively affect revenue and results of operations.

Government Contracts and Funding

Changes in government policies, priorities or regulations, funding levels through agency or program budget reductions, the imposition of budgetary constraints or the lack of government appropriations, the delay and/or deferment in governmental contract approvals or government programs could have a material adverse effect on the Company's financial condition, results of operations, or future growth. A decline in governmental support and funding for programs in which the Company or its customers participate could result in contract terminations, delays in contract rewards, failure to exercise contract options, cancellation of planned procurements and fewer new business opportunities, any of which could have a material adverse effect on the Company's financial condition and results of operations.

Quality Issues and Contract Performance

The Company develops, manufactures, and sells technologically advanced complex products that could contain defects in design, manufacture and implementation. Defects may also occur in components and products that the Company purchases from third parties. The Company employs sophisticated design and testing processes. However, there can be no assurance that the Company's products will be successfully implemented or will pass required acceptance criteria. There can be no assurance that the Company will be able to detect and fix all defects in the products it sells. Failure to do so could result in lost revenue, harm to reputation, significant warranty and other expenses, and could have a material adverse impact on the Company's financial condition and operating results. In addition, a failure with respect to any product may adversely affect the perception by the Company's customers of the quality of its products and may materially and adversely affect the Company's ability to win new contracts.

Manufacturing

The Company has limited experience manufacturing KolourOptik products on a commercial scale. The Company outsources certain parts of the manufacturing process to a limited number of third parties and depends on these manufacturers to meet the Company's needs in a timely and satisfactory manner at a reasonable cost. Disruptions in the supply chain and manufacturing process could negatively affect the Company's revenues, costs, and margins.

Security Environment

Many of the Company's customers have specific security requirements relating to the work that can be performed for them. These requirements can change quickly and with little notice causing a reduction or even elimination of potential work for the Company and the ability of the Company to participate in future business. Any reduction or elimination of work could have an adverse effect on the revenues and margins of the Company.

Cyber Security

The Company faces the risk of a security breach or other significant disruption of its IT networks and related systems, whether through cyber-attack or cyber intrusion via the internet, malware, computer viruses and email attachments to persons with access to the Company's systems. Security breaches or other significant disruptions of the Company's IT networks and related systems could have a material adverse effect on the Company's business and results of operations.

Although the Company makes significant efforts to maintain security and the integrity of its IT networks and related systems, there can be no assurance that its security efforts and measures will be effective or that attempted security breaches or disruptions will not be successful or damaging. The Company may also need to expend significant resources to protect against security breaches.

Technological Change

The banknote, branding and security markets in which the Company operates are characterized by changing technology and evolving industry standards. The Company's actual and planned products embody complex technology which may not always be compatible with current and evolving technical standards developed by others. Failure or delays by the Company to meet or comply with the requisite and evolving industry or user standards could have a material adverse effect on the Company's business, results of operations and financial condition. The Company's ability to anticipate changes in technology, technical standards and the needs of the industries it serves or proposes to serve may be a significant factor in the Company's ability to compete or expand into new markets.

Retention of Markets and Development of New Offerings

The Company may experience design, manufacturing, marketing and other difficulties that could delay or prevent the development, introduction or acceptance of new products and enhancements. There can be no assurance the Company will be able to anticipate and achieve the technological advances necessary to remain competitive and profitable, that new products or enhancements will be developed and manufactured on schedule or on a cost-effective basis, or that the Company's existing products will not become technologically obsolete. The Company's failure to accurately predict the needs of current and prospective customers, and to develop products or enhancements that address those needs, may result in the loss of current customers or the inability to secure new customers.

Intellectual Property Rights

To protect the Company's proprietary rights, the Company relies on a combination of patent protections, copyrights, trade secrets, trademark laws, confidentiality agreements with employees and third parties, and protective contractual provisions such as those contained in licence agreements with consultants, subcontractors, vendors and customers. Despite these efforts, the Company's intellectual property rights may be invalidated, circumvented, challenged, infringed, or required to be licensed to others, which could have a material adverse effect on the Company's business, financial condition, or operating results. An infringement or misappropriation could harm any competitive advantage the Company currently derives or may derive from its proprietary rights. Litigation may be necessary to enforce or protect the Company's intellectual property rights, protect its trade secrets, or determine the validity and scope of the proprietary rights of others. Such litigation may be time consuming and expensive to prosecute or defend and could result in the diversion of the Company's time and resources.

If any of the Company's technology violates proprietary rights, including copyrights and patents, third parties may assert infringement claims against the Company. Any claims from third parties may also result in limitations on the Company's ability to use the intellectual property subject to these claims. The Company may be required to redesign its products or obtain licences from third parties to continue offering the Company's products without substantially re-engineering such products or defending itself and its customers against infringement claims and liability for damages. This may affect the Company's operations and, in addition, the Company could suffer substantial costs in defending itself against infringement claims.

COVID-19 PANDEMIC

In March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. The ultimate duration of COVID-19, the magnitude of the impact on the economy, and the full extent to which COVID-19 may have direct and indirect impacts on Nanotech's business is not known at this time. This could include an impact on the Company's ability to obtain debt and equity financing, impairment in the value of long-lived assets, or potential future decrease in revenue or the profitability of Nanotech's operations. The Company has not yet experienced any material negative impacts to its business, results of operations, or its financial position as a result of COVID-19, other than the deferral of some customer ordering decisions and potential sales opportunities to fiscal 2021.

As of the date of this MD&A, the Company's Thurso, Quebec production facility and Burnaby, BC office and laboratories are fully operational, with appropriate health and safety measures implemented.

ADDITIONAL INFORMATION

2021 Outlook

In 2021, management intends to build on 2020's successes to further commercialize the Company's technology and pursue revenue growth.

Revenue diversification remains a priority, and there are growth opportunities for its nano-optic products across all key markets. The capital investments made in the Thurso facility in 2020 will provide additional opportunities to bid on banknote and government identification projects while launching LumaChrome foil for the brand protection market in 2021.

Developing additional strategic partnerships will also continue to be a focus allowing Nanotech to leverage established OEMs to broaden the Company's sales reach and manufacturing capability. Management sees further opportunities to leverage new and existing strategic partners in 2021, while Nanotech remains focused on technology development.

Management plans to invest in products for both the banknote and the brand protection markets in 2021. These investments include additional development staff, production trials and certifications, as well as an increase in product marketing. While the Company has seen success with its existing nano-optic products, management believes there are opportunities to offer new products with exceptional differentiation and has received positive feedback from customers on new product previews.

In addition to pursuing product revenue growth and diversification, the Company will also continue to provide contract services for its confidential central bank customer. While the Company does not have visibility on if or when Nanotech's security feature might be integrated into the customer's banknotes, management is pleased with the progress of this development contract and with the growth in contract services awarded for 2021.

The Company has a solid base of 2021 revenue, with purchase orders for $6.7 million dollars relating to contract services and anticipated recurring revenue. Revenue growth for 2021 is targeted at 15% to 25%, with growth expected in LumaChrome sales, additional contract services and successful product launches. Given Nanotech's continued investment in technology, management expects modest Adjusted EBITDA losses in 2021.

With a strong balance sheet including no debt, an expanding IP portfolio, record contract services awards for 2021, and recurring LumaChrome business, the Company is well positioned for future product revenue growth and diversification.

Public Securities Filings

Additional information about Nanotech, is available on the Company's website at www.nanosecurity.ca, or on SEDAR at www.sedar.com.

Financial Statements of

Nanotech Security Corp.

Years ended September 30, 2020 and 2019

Nanotech Security Corp.
September 30, 2020 and 2019

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INDEPENDENT AUDITORS' REPORT

To the Shareholders of Nanotech Security Corp.

We have audited the accompanying non-consolidated financial statements of Nanotech Security Corp. ("the Entity"), which comprise:

- the non-consolidated statements of financial position as at September 30, 2020 and September 30, 2019
- the non-consolidated statements of operations and comprehensive loss for the years then ended
- the non-consolidated statements of changes in shareholders' equity for the years then ended
- the non-consolidated statements of cash flows for the years then ended
- and notes to the non-consolidated financial statements, comprising a summary of significant accounting policies

(Hereinafter referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the non-consolidated financial position of the Entity as at September 30, 2020 and September 30, 2019, and its non-consolidated financial performance and its non-consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in **the "Auditors' Responsibilities for the Audit of the Financial Statements"** section of our auditors' report.

We are independent of the Entity in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other ethical responsibilities in accordance with these requirements.

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

Emphasis of Matter – Change in Accounting Policy

We draw attention to Note 4 to the financial statements which indicates that the Entity has changed its accounting policy for leases due to the adoption of IFRS 16 – *Leases* as of October 1, 2019.

Our opinion is not modified in respect of this matter.

Other Information

Management is responsible for the other information. Other information comprises:

- the information included in Management's Discussion and Analysis filed with the relevant Canadian Securities Commissions.
- the information, other than the financial statements and the auditors' report thereon, included in the "Annual report".

Our opinion on the financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit and remain alert for indications that the other information appears to be materially misstated.

We obtained the information included in Management's Discussion and Analysis filed with the relevant Canadian Securities Commissions as at the date of this auditors' report. If, based on the work we have performed on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact in the auditors' report.

We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

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

In preparing the financial statements, management is responsible for assessing the Entity's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Entity's financial reporting process.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

  The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Entity's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Entity to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.
- Provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

KPMG LLP

Chartered Professional Accountants
The engagement partner on the audit resulting in this auditors' report is Konstantin Polyakov.

Vancouver, Canada
December 9, 2020

Nanotech Security Corp.

Statements of Operations and Comprehensive Loss

Years ended September 30, 2020 and 2019
(In Canadian dollars)

		2020		2019
Revenue (note 17)	$	7,714,173	$	6,402,702
Cost of sales (note 18)		1,481,511		1,511,865
		6,232,662		4,890,837
Expenses (note 18)				
Research and development		1,840,811		1,477,668
General and administration		2,344,258		2,307,021
Sales and marketing		2,223,865		2,161,056
Depreciation and amortization		1,542,875		1,481,388
Impairment of assets (note 8)		315,338		-
Restructuring costs (note 20)		-		787,575
		8,267,147		8,214,708
Loss from operations before other income		(2,034,485)		(3,323,871)
Other income				
Foreign exchange gain		(39,740)		(14,982)
Finance income (note 10)		(89,670)		(192,752)
Tenant income		(69,535)		(214,519)
Steam income		(40,194)		(66,364)
		(239,139)		(488,617)
Net loss and total comprehensive loss	$	(1,795,346)	$	(2,835,254)
Basic and diluted loss per share:				
Net loss	$	(0.03)	$	(0.04)
Weighted average number of common shares				
Basic and diluted		69,215,951		68,916,001

See accompanying notes to the financial statements.

Nanotech Security Corp.

Statements of Financial Position
As at September 30, 2020 and 2019

(In Canadian dollars)

	2020	2019
Assets		
Current assets:		
Cash and cash equivalents (note 16(c))	$ 1,751,855	$ 2,752,002
Short-term investments (note 6)	6,849,285	7,537,262
Accounts receivable (note13(b))	1,505,391	503,660
Inventory (note 7)	210,715	237,264
Prepaid expenses and other assets	324,974	419,753
	10,642,220	11,449,941
Property, plant and equipment (notes 8 and 16(d))	15,089,496	15,684,845
Goodwill (note 9)	1,388,458	1,388,458
Right-of-use asset (note 4)	862,405	-
	$ 27,982,579	$ 28,523,244
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities (note 15)	$ 1,630,754	$ 1,232,159
Deposits	56,069	543,368
Current portion of lease liability (note 4)	173,558	-
	1,860,381	1,775,527
Non-current liabilities:		
Lease liability (note 4)	763,747	-
Tenant inducement	-	16,083
	2,624,128	1,791,610
Shareholders’ equity		
Share capital (note 11(a))	62,499,841	62,355,479
Contributed surplus (note 11(b))	3,408,653	3,130,852
Deficit	(40,550,043)	(38,754,697)
	25,358,451	26,731,634
	$ 27,982,579	$ 28,523,244

Related party transactions (note 15)
Commitments and contingencies (note 19)
See accompanying notes to the financial statements.

Nanotech Security Corp.

Statements of Changes in Shareholders' Equity

Years ended September 30, 2020 and 2019
(In Canadian dollars)

	Number of shares		Share capital		Contributed surplus		Deficit		Total shareholders' equity
Balance as at October 1, 2018	68,771,501	$	61,892,395	$	2,930,964	$	(35,919,443)	$	28,903,916
Net loss	-		-		-		(2,835,254)		(2,835,254)
RSUs vested (note 11(b)(ii))	428,624		463,084		(463,084)		-		-
Share-based compensation - options (note 11(b)(i))	-		-		362,583		-		362,583
Share-based compensation - RSUs (note 11(b)(ii) and note 20)	-		-		300,389		-		300,389
Balance as at September 30, 2019	69,200,125	$	62,355,479	$	3,130,852	$	(38,754,697)	$	26,731,634
Balance as at October 1, 2019	69,200,125	$	62,355,479	$	3,130,852	$	(38,754,697)	$	26,731,634
Net loss	-		-		-		(1,795,346)		(1,795,346)
RSUs vested (note 11(b)(ii))	199,736		144,362		(144,362)		-		-
Share-based compensation - options (note 11(b)(i))	-		-		306,777		-		306,777
Share-based compensation - RSUs (note 11(b)(ii))	-		-		115,386		-		115,386
Balance as at September 30, 2020	69,399,861	$	62,499,841	$	3,408,653	$	(40,550,043)	$	25,358,451

See accompanying notes to the financial statements.

Nanotech Security Corp.
Statements of Cash Flows

Years ended September 30, 2020 and 2019
(In Canadian dollars)

	2020	2019
Cash flows provided by (used in):		
Operating activities:		
Net loss	$ (1,795,346)	$ (2,835,254)
Items not involving cash:		
Depreciation and amortization (note 18)	1,628,746	1,566,122
Share-based compensation (note 18 and note 20)	422,163	662,972
Impairment of assets (note 8)	315,338	-
Unrealized foreign exchange gain (loss)	29,450	(2,448)
Finance income (note 10)	(89,670)	(192,752)
Other	(11,815)	(35,803)
Non-cash working capital changes (note 16(a))	(875,578)	1,578,505
Interest paid on lease liability	(44,868)	-
Interest received	152,187	200,927
	(269,393)	942,269
Net cash used in discontinued operations (note 21)	-	(16,204)
Cash provided by (used in) operating activities	(269,393)	926,065
Investing activities:		
Purchase of property and equipment (notes 8 and 16(d))	(1,233,063)	(249,468)
Disposal of short-term investments	815,832	203,314
Net acquisition of short-term investments	(133,689)	(141,660)
Cash used in investing activities	(550,920)	(187,814)
Financing activities:		
Repayment of lease liability	(146,241)	-
Cash used in financing activities	(146,241)	-
Effect of foreign exchange on cash and cash equivalents	(33,593)	(1,013)
Increase (decrease) in cash and cash equivalents	(1,000,147)	737,238
Cash and cash equivalents, beginning of year	2,752,002	2,014,764
Cash and cash equivalents, end of year	$ 1,751,855	$ 2,752,002

See supplementary cash flow information (note 16)
See accompanying notes to the financial statements.

1. Summary of business

Nanotech Security Corp. (the “Company” or “Nanotech”) is incorporated under the laws of British Columbia with common shares listed on the TSX Venture Exchange (trading symbol: NTS) and quoted in the United States on the OTCQX Market (trading symbol: NTSFF). The Company’s head office is located at #505 - 3292 Production Way, Burnaby, British Columbia, Canada V5A 4R4.

Nanotech develops and produces nano-optic structures and colour-shifting foils used in authentication and brand protection applications across a wide range of markets including banknotes, secure government documents, and commercial branding.

2. Basis of preparation

(a) *Statement of compliance*

These financial statements are 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 issue by the Company’s Board of Directors on December 9, 2020.

Certain comparative figures in the statements of cash flows have been reclassified to conform to the current period’s presentation. This reclassification had no impact on the cash provided by (used in) operations, investing or financing.

(b) *Basis of measurement*

These financial statements are presented in Canadian dollars and have been prepared on a historical cost basis.

(c) *Use of judgments, estimates, and assumptions*

The preparation of financial statements in accordance with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, revenue and expenses. Estimates and assumptions are continually evaluated and are based on historical experience and various factors that management believes to be reasonable under the circumstances. However, due to the nature of estimates, actual results may differ from these estimates. Revisions to accounting estimates are accounted for prospectively.

Significant judgments and estimates made by management in the process of applying policies and that have the most significant effect on the amounts recognized in the financial statements include the following:

(i) Going concern

Assessment of the Company’s ability to continue as a going concern requires estimates of future cash flows and other factors.

(ii) Impairment of non-financial assets

Goodwill arising on an acquisition of a business is carried at cost, as established at the date of acquisition of the business less impairment losses, if any. For purposes of impairment testing, goodwill is allocated to each of the Company’s cash-generating units (“CGU”) that is expected to benefit from the synergies of the combination. A CGU to which goodwill has been allocated is tested for impairment annually, or more frequently when there is an indication that the CGU may be impaired.

Management evaluates goodwill for impairment annually as at September 30th. Impairment tests involve considerable use of judgment and require management to make estimates and assumptions. The recoverable amount of CGUs are derived from certain valuation models, which consider various factors such as discount rates, future cash flows, and revenue growth rates. While management uses its best estimate and assumptions to assess goodwill impairment, there are inherent uncertainties in projecting future cash flows (note 9).

2. Basis of preparation (continued)

(c) *Use of judgments, estimates, and assumptions (continued)*

(ii) Impairment of non-financial assets (continued)

Property and equipment and right-of-use asset impairment testing, which is influenced by judgment in defining a CGU and determining the indicators of impairment, and estimates used to measure impairment losses, if any (note 8). These estimates include future cash flow projections, growth rates, and discount rates.

(iii) Provisions

Provisions are based upon the best estimate of the expenditure required to setting the present obligation at the balance sheet date.

(iv) Share-based compensation expense

Share-based compensation expense requires the use of judgment in determining the most appropriate inputs, including estimates and assumptions with respect to expected life, risk-free interest rate, volatility and forfeiture rate (note 11).

(v) Investment tax credits

The Company applies judgment when determining whether the reasonable assurance threshold has been met to recognize investment tax credits. Management must interpret eligibility requirements in accordance with Canadian income tax laws and must assess whether future taxable income will be available against which the investment tax credits can be utilized (note 14).

(vi) Income taxes

Provisions for tax are made using the Company's best estimate of the amount of tax expected to be paid or recovered based on an assessment of all relevant factors, which requires judgment (note 14).

(vii) Inventory

The assessment of net realizable value requires the use of estimated selling price less the estimated costs of completion and selling expenses (note 7).

(viii) Property, plant and equipment

Depreciation expense is recognized based on management's best estimate of the useful lives of the depreciable assets (note 8).

(d) *Foreign currency translation*

The financial statements of the Company are presented in Canadian dollars. The Canadian dollar is the functional currency of the Company, being the currency of the primary economic environment in which it operates.

Foreign currency transactions are translated into the functional currency using the foreign currency rates prevailing at the date of the transaction. Period-end balances of monetary assets and liabilities in foreign currency are translated to the functional currency using period-end foreign currency rates. Foreign currency gains and losses arising from settlement of foreign currency transactions are recognized in profit or loss.

3. Significant accounting policies

(a) *Revenue recognition*

The Company recognizes revenue when control of goods or services has been transferred to the customer. Revenue is measured at the fair value of consideration to which the Company expects to be entitled to, including variable consideration, if any, to the extent that it is highly probable that a significant reversal will not occur.

3. Significant accounting policies (continued)

(a) Revenue recognition (continued)

Revenue from contract services is recognized over time as those services are provided. Invoices for contract services are issued on a monthly basis and are usually payable within 30 days. Revenue from the sale of products is recognized when customers obtain control, which occurs when products are shipped. Invoices are generated at that point in time and are usually payable within 30 days. The Company does not offer any discounts or returns.

(b) *Earnings (loss) per common share*

Basic net earnings (loss) per common share is calculated using the weighted average number of common shares outstanding during the year.

Diluted net loss per share reflects the potential dilution of common share equivalents, such as outstanding stock options and restricted share units (“RSU”), in the weighted average number of common shares outstanding during the year, if dilutive. For this purpose, the “treasury stock method” is used for the assumed proceeds upon the exercise of outstanding stock options for purchase of common shares at the average market price during the period. For the periods recording a loss, basic and diluted figures are the same, as the exercise of all stock options and RSUs would be anti-dilutive.

(c) *Research and development*

Research costs are expensed in the period incurred. Development costs are capitalized and recorded as an intangible asset only if technical feasibility has been established and the Company expects to generate probable future economic benefits from the asset created on completion of development. The costs capitalized include materials, direct labour, directly attributable overhead expenditures, and borrowing costs on qualifying assets. Other development costs are expensed in the period incurred. During the years ended September 30, 2020 and 2019 all development costs have been expensed.

(d) *Government grants*

A government grant is recognized if there is reasonable assurance that it will be received and that the Company will comply with the conditions associated with the grant. If the conditions are met, the Company recognizes the grant in profit or loss on a systematic basis in line with its recognition of the expenses the grant is intended to compensate. For grants related to income, a company can elect to either offset the grant against the related expenditure or include it in other income. Government grants received by the Company during the period which are accounted for as government grants related to income are offset against the related expenditures the grant is intended to compensate.

For grants related to assets, a company can elect to either recognize the grant as deferred income or deduct the amount from the carrying value of the assets. Government grants received by the Company during the period which are accounted for as government grants related to assets are recorded as a reduction of the cost of the related asset.

(e) *Investment tax credits*

Refundable investment tax credits are recorded using the cost-reduction method, whereby the credits are deducted from the cost of the related asset or expenditure when there is reasonable assurance that the investment tax credit will be realized. Non-refundable investment tax credits are recorded using the flow-through method, whereby the credits are accounted for as a reduction of tax expense and recognized as a tax asset to the extent that it is probable that taxable profits will be available against which they can be utilized.

(f) *Financial instruments*

Financial assets and financial liabilities are recognized when the Company becomes a party to the contractual provision of a financial instrument. Financial assets are derecognized when the contractual

3. Significant accounting policies (continued)

(f) *Financial instruments (continued)*

rights to receive cash flows from the financial asset expire. Financial liabilities are derecognized when obligations under the contract expire, are discharged, or canceled.

Financial assets and liabilities are offset and the net amount is reported in the statement of financial position when there is a legally enforceable right to offset the recognized amounts and an intention to settle on a net basis or realize the asset and settle the liability simultaneously.

(i) Financial assets

The following accounting policies apply to the classification of financial assets:

- Amortized Cost – the asset is held within a business model whose objective is to collect contractual cash flows, and the contractual terms give rise to cash flows that are solely payments of principal and interest.
- Fair Value Through Other Comprehensive Income – cash flows arising from the asset are solely payments of principal and interest, and the asset is held in a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets.
- Fair Value Through Profit and Loss – all financial assets not classified as measured at Amortized Cost or Fair Value Through Other Comprehensive Income are measured at Fair Value Through Profit and Loss. On initial recognition, the Company may irrevocably designate a financial asset as Fair Value Through Profit and Loss if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise under Amortized Cost or Fair Value Through Other Comprehensive Income.

A financial asset (unless it is a trade receivable without a significant financing component that is initially measured at the transaction price) is initially measured at fair value plus transaction costs that are directly attributable to its acquisition (except items at Fair Value Through Profit and Loss, which do not include transaction costs).

The following accounting policies apply to the subsequent measurement of financial assets:

- Amortized Cost – the asset is subsequently measured at amortized cost using the effective interest method. Interest income, foreign exchange gains or losses and impairment are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.
- Fair Value Through Other Comprehensive Income – the asset is subsequently measured at fair value. Interest income calculated using the effective interest rate method, foreign exchange gains or losses and impairment are recognized in profit or loss. Other net gains and losses are recognized in other comprehensive income. On derecognition, gains and losses accumulated in other comprehensive income are reclassified to profit or loss.
- Fair Value Through Profit and Loss – the asset is subsequently measured at fair value. Net gains and losses, including any interest income, are recognized in profit or loss.

The Company's financial assets, which include cash and cash equivalents, short-term investments, and accounts receivable, are classified as amortized cost.

(ii) Financial liabilities

Financial liabilities are classified as either financial liabilities at fair value through profit or loss or as other financial liabilities.

Other financial liabilities include trade and other payables and non-trade payables. They are initially measured at fair value and are subsequently measured at amortized cost using the effective interest

3. Significant accounting policies (continued)

(f) *Financial instruments (continued)*

(ii) Financial liabilities (continued)

method. The Company has classified accounts payables and accrued liabilities as other financial liabilities.

(iii) Embedded derivatives

Derivatives embedded in non-derivative host contracts are treated as separate derivatives when they meet the definition of a derivative, their risks and characteristics are not closely related to those of the host contracts, and the contracts are not measured at the fair value through profit or loss. Embedded derivatives are recorded at fair value through profit or loss. During the years ended September 30, 2020 and 2019, the Company did not have any derivative instruments or embedded derivatives.

(g) *Cash and cash equivalents*

Cash and cash equivalents consist of cash balances with banks, investments with original maturities of three months or less, and investments that are both readily convertible to cash and subject to insignificant changes in market value.

(h) *Short-term investments*

Short-term investments consist of short-term interest-bearing term deposits which are highly liquid with maturity dates greater than three months but less than one year at the time of purchase.

(i) *Inventory*

Inventory is measured at the lower of cost and net realizable value and consists primarily of raw materials used in the manufacturing of optical thin film. Raw materials cost is determined on a weighted average basis. The cost of work in progress and finished goods includes the cost of raw material, direct labour, and an allocation of related overheads. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

(j) *Property, plant and equipment*

Property, plant and equipment are measured at cost, less accumulated depreciation and accumulated impairment losses. The initial cost of an asset comprises its purchase price and any costs directly attributable to bringing the asset into working condition for its intended use. Assets acquired in a business combination are measured at the fair value of the assets at the time of acquisition. Repairs and maintenance costs are charged directly to the statement of operations as incurred. Depreciation is calculated using the following methods and annual rates:

	Estimated useful life
Software	100% declining balance
Laboratory and office equipment	20 – 55% declining balance
Manufacturing equipment	10% declining balance
Building	4% declining balance
Leasehold improvements	straight line over the lesser of lease term or estimated useful life

The Company reviews the estimated useful lives and the depreciation methods of its property, plant and equipment annually.

3. Significant accounting policies (continued)

(k) *Intangible assets and goodwill*

(i) Intangible assets

Intangible assets with finite lives are measured at cost less accumulated amortization and accumulated impairment losses. Cost for intangible assets acquired in a business combination represents the fair value of the asset at the time of the acquisition. Intangible assets with finite lives are amortized over the life of the asset. As at September 30, 2020 and 2019, the Company did not have any indefinite life intangible assets other than goodwill.

(ii) Goodwill

Goodwill arising on an acquisition of a business is carried at cost, as established at the date of acquisition of the business less accumulated impairment losses, if any. Goodwill is not amortized but is tested for impairment annually or whenever there is an indication of impairment.

(l) *Impairment*

(i) Financial assets

The Company recognizes loss allowances for expected credit losses on financial assets measured at amortized cost. Loss allowances for trade receivables are measured at an amount equal to lifetime expected credit losses. Lifetime expected credit losses are the result of all possible default events over the expected life of a financial instrument. Expected credit losses are a probability-weighted estimate of credit losses and credit losses are measured as the present value of cash shortfalls from a financial asset. The Company determines whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating lifetime expected credit losses, by considering reasonably available quantitative and qualitative information based on the Company's credit risk experience, forward looking information, and other reasonable estimates.

(ii) Non-financial assets

Goodwill and non-financial assets are tested for impairment annually, or whenever events or changes in circumstances indicate that an asset's carrying amount may be less than its recoverable amount. Management uses judgment to estimate the inputs to these assessments and any changes to these inputs could have a material impact on the impairment calculation. For impairment testing, non-financial assets that do not generate independent cash flows are grouped together into a CGU, which represent the level at which largely independent cash flows are generated. Goodwill is allocated to a CGU or groups of CGUs based on the level at which it is monitored for internal reporting purposes. An impairment loss is recognized in profit or loss to the extent that the carrying value of an asset, CGU or group of CGUs exceeds its estimated recoverable amount. The recoverable amount of an asset, CGU, or group of CGUs is the greater of its value in use and its fair value, less cost to sell. Value in use is calculated as the present value of estimated future cash flows, discounted at appropriate discount rates. An impairment loss relating to a specific asset reduces the carrying value of the asset.

An impairment loss relating to a CGU or group of CGUs reduces the carrying value of goodwill allocated to the CGU or group of CGUs, then reduces the carrying value of the other assets of the CGU or group of CGUs on a pro-rata basis. An impairment loss in respect of goodwill is not reversed. A previously recognized impairment loss related to other non-financial assets is assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss related to other non-financial assets is reversed if there is a subsequent increase in recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying value does not exceed the carrying value that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

3. Significant accounting policies (continued)

(m) *Provisions*

Provisions represent liabilities for which the amount or timing is uncertain. Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. Where appropriate, the future cash flow estimates are adjusted to reflect risks specific to the liability.

(n) *Share-based compensation – stock options*

The Company issues stock options to directors, consultants, and employees pursuant to its stock option plan. The compensation expense for share-based payment is determined based on the fair value at the grant date using the Black-Scholes option-pricing model and is recorded in the statement of operations over the vesting period. Management uses judgment to determine the inputs to the Black-Scholes option-pricing model including the expected award lives and underlying share price volatility. Volatility is estimated by considering the Company's historic share price volatility over similar periods to the expected life of the awards under consideration. Changes in these assumptions will impact the calculation of fair value and the amount of compensation expense recognized in profit or loss. The resulting fair value is then adjusted for an estimated forfeiture amount. When stock options are exercised, any consideration paid by directors, consultants, and employees, as well as the related share-based compensation, is credited to share capital.

(o) *Share-based compensation – restricted share units ("RSUs")*

The Company issues RSUs to directors and employees pursuant to its RSU plan. The obligations under the RSU plan can be settled at the Company's discretion through either cash or the issuance of common shares. The Company measures the cost of equity-settled share-based transactions by reference to the fair value of the equity instruments at the date at which they are granted and is recorded in the statement of operations over the vesting period. For RSUs, the Company uses the TSX Venture Exchange share price at the grant date as fair value of the RSUs. The resulting fair value is then adjusted for an estimated forfeiture amount. Determination of the forfeiture rate is based on historical experience. The actual number of RSUs that vest is likely to be different from estimation.

(p) *Income taxes*

Income tax expense is comprised of current and deferred tax. Current and deferred tax are recognized into profit or loss except to the extent that it relates to a business combination or items recognized directly in other comprehensive income or share capital.

Current tax is the expected tax payable or receivable on taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes.

Deferred tax is not recognized for the following temporary differences; the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable earnings, and differences relating to investments in subsidiaries and jointly controlled entities to the extent that it is probable that they will not reverse in the foreseeable future. In addition, deferred tax is not recognized for taxable temporary differences arising on the initial recognition of goodwill. Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, or offset on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realized simultaneously.

3. Significant accounting policies (continued)

(p) *Income taxes (continued)*

Deferred tax assets are recognized for unused tax losses, tax credits, and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which they can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

(q) *Leases*

For the year ended September 30, 2019, leasing contracts are classified as either finance or operating leases based on the substance of the contractual arrangement at inception date. A lease is classified as a finance lease if it substantially transfers all of the risks and rewards of ownership of the leased asset. Where the contracts are classified as finance leases, upon initial recognition, the asset and liability are recorded at the lower of fair value and present value of the minimum lease payments, net of executory costs. Finance lease payments are apportioned between interest expense and repayments of the liability. Where the contracts are classified as operating leases, they are not recognized in the Company's Statements of Financial Position and lease payments are charged to profit or loss as they are incurred on a straight-line basis over the lease term.

For the year ended September 30, 2020, on adoption of IFRS 16, the Company assesses whether a contract is or contains a lease at the inception of the contract. Leases are recognized as a right-of-use asset and corresponding lease liability at the lease commencement date. The lease liability is measured at the present value of the future fixed payments and variable lease payments that depend on an index or rate over the lease term, less any lease incentives receivable, discounted using the lessee's incremental borrowing rate, unless the implicit interest rate in the lease can be easily determined. Lease liabilities are subsequently measured at amortized cost using the effective interest rate method. Lease terms applied are the contractual non-cancellable periods of the lease, plus periods covered by renewal or termination options, if the Company is reasonably certain to exercise those options. Lease liabilities are remeasured (with a corresponding adjustment to the right-of-use asset) when there is a change in the lease term, a change in the future lease payments resulting from a change in an index or rate used to determine those payments, or when the lease contract is modified and the lease modification is not accounted for as a separate lease.

The right-of-use assets include the initial measurement of the corresponding lease liabilities, lease payments at or before the commencement date, any initial direct costs, less any lease incentives received before the commencement date. The right-of-use assets are subsequently measured at cost and are depreciated on a straight-line basis from the date the underlying asset is available for use over the five year lease term.

The Company has elected not to recognise right-of-use assets and lease liabilities for leases of low value assets and short-term leases with terms of less than one year. The Company recognizes the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

(r) *Segment reporting*

The Company's operations currently consists of one operating segment.

(s) *Discontinued operations*

A discontinued operation is a component of the Company's business that represents a separate major line of business or geographical area of operations that has been disposed of or classified as held for sale. Operations and cash flows can be clearly distinguished from the rest of the Company, both operationally and for financial reporting purposes. When the Company classifies an operation as a discontinued operation, it presents the comparative statements of operations as if the operation had been discontinued from the start of the comparative year. In doing this, the Company excludes the results for the discontinued

(Expressed in Canadian dollars)

3. Significant accounting policies (continued)

(s) *Discontinued operations (continued)*

operations and any gain or loss from disposal from the statements of operations from continuing operations and presents them on a separate line as profit or loss (net of tax) from the discontinued operation. Per share information and changes to other comprehensive loss related to discontinued operations are presented separately from continuing operations. Cash flows from discontinued operations are presented separately from cash flows from continuing operations in the statements of cash flows.

4. Change in accounting policy

IFRS 16 – Leases

In January 2016, the IASB issued IFRS 16 – *Leases*, which supersedes IAS 17 – *Leases*. IFRS 16 establishes principles for the recognition, measurement, presentation and disclosure of leases. The standard establishes a single model for lessees to bring leases on balance sheet while lessor accounting remains largely unchanged and retains the finance and operating lease distinctions. IFRS 16 is effective for annual periods beginning on or after January 1, 2019. The Company adopted the standard on October 1, 2019, using the modified retrospective approach. The modified retrospective approach applies the requirements of the standard retrospectively with the cumulative effects of initial application recorded in opening accumulated deficit as at October 1, 2019, and no restatement of the comparative period.

On October 1, 2019, the Company had two real estate leases for office space which were impacted by the adoption of the standard. The Company recognized right-of-use assets of $780,767, net of tenant inducements of $35,001, and lease liabilities of $815,768 related to these leases. The right-of-use assets are depreciated on a straight-line basis over the remaining lease term. The lease liability is carried at amortized cost with a finance charge recorded using the effective interest rate method. The depreciation expense of the right-of-use assets and the finance charge of the lease liability partially replaced the lease-related expenses recorded in general and administration expense. In relation to the leases under IFRS 16, the Company recognized depreciation expense of $186,140 and finance costs of $44,868 for the year ended September 30, 2020, compared to general and administration expense of $208,011 for the year ended September 30, 2019.

The following table reconciles the operating lease commitments included in the September 30, 2019 commitments note to the lease liability recorded on transition as at October 1, 2019.

Operating lease commitments as at September 30, 2019	$	281,029
Discounted using the incremental borrowing rate as at October 1, 2019		(17,990)
Lease liabilities recognized as at October 1, 2019		263,039
Extension options reasonably certain to be exercised		552,729
Lease liabilities recognized as at October 1, 2019	$	815,768

On November 6, 2019, the Company signed a lease extension and modification agreement to combine its two leases and extend the term to April 30, 2025. As required by IFRS 16, the Company remeasured the lease liability by discounting the revised lease payments using an incremental borrowing rate of 4.5% and made a corresponding adjustment to the right-of-use asset of $267,778.

(Expressed in Canadian dollars)

4. Change in accounting policy (continued)

IFRS 16 – Leases (continued)

The following table reconciles the change in the right-of-use asset for the year ended September 30, 2020.

Balance on transition, October 1, 2019	$	780,767
Lease modification		267,778
Depreciation		(186,140)
Balance as at September 30, 2020	$	862,405

The following table reconciles the change in the lease liability and discloses a maturity analysis of the lease liability for the year ended September 30, 2020.

Balance on transition, October 1, 2019	$	815,768
Lease modification		267,778
Accretion of lease liability (note 10)		44,868
Repayment of principal and interest		(191,109)
Balance as at September 30, 2020	$	937,305
Minimum lease payments:		
Less than one year	$	212,166
Between one and five years		829,942
		1,042,108
Less future finance charges		(104,803)
	$	937,305
Current portion	$	173,558
Non-current portion		763,747
Balance as at September 30, 2020	$	937,305

5. New standards and interpretations not yet adopted

Classification of Liabilities as Current or Non-Current (Amendments to IAS 1)

In January 2020, IASB issued *Classification of Liabilities as Current or Non-Current*, which amends IAS 1 – *Presentation of Financial Statements*. The narrow scope amendments affect only the presentation of liabilities in the statement of financial position and not the amount or timing of its recognition. It clarifies that the classification of liabilities as current or non-current is based on rights that are in existence at the end of a reporting period and specifies that classification is unaffected by expectations about whether an entity will exercise its right to defer settlement of a liability. It also introduces a definition of 'settlement' to make clear that settlement refers to the transfer to the counterparty of cash, equity instruments, other assets or services. The amendments are effective for annual reporting periods beginning on or after January 1, 2022. Earlier application is permitted. The Company is assessing the potential impact of these amendments.

6. Short-term investments

Short-term investments of $6,849,285 (2019 - $7,537,262) consist of cashable term deposits held with a Canadian chartered bank. The term deposits have maturity dates between December 21, 2020 and March 17, 2021. Interest rates range between 0.55% and 2.01%.

(Expressed in Canadian dollars)

7. Inventory

	2020	2019
Raw materials	$ 179,034	$ 134,435
Work in progress	30,281	100,087
Finished goods	1,400	2,742
	$ 210,715	$ 237,264

There were no inventory write-downs during the year ended September 30, 2020 (2019 - $47,513).

For the year ended September 30, 2020, the Company recognized inventories of $573,504 (2019 - $351,734) as expensed through cost of sales.

8. Property, plant and equipment

	Land	Building and leasehold improvement	Manufacturing equipment	Laboratory, software, and office equipment	Total
Cost					
Balance as at October 1, 2018	$ 141,700	$ 4,359,127	$ 18,006,136	$ 394,076	$ 22,901,039
Additions	-	194,030	21,761	77,596	293,387
Balance as at September 30, 2019	141,700	4,553,157	18,027,897	471,672	23,194,426
Additions	-	917,279	125,185	114,479	1,156,943
Impairment of assets	-	(362,549)	-	-	(362,549)
Balance as at September 30, 2020	$ 141,700	$ 5,107,887	$ 18,153,082	$ 586,151	$ 23,988,820
Accumulated depreciation					
Balance as at October 1, 2018	$ -	$ 696,665	$ 4,998,602	$ 240,915	$ 5,936,182
Depreciation expense	-	176,239	1,301,842	95,318	1,573,399
Balance as at September 30, 2019	-	872,904	6,300,444	336,233	7,509,581
Depreciation expense	-	179,610	1,179,004	78,340	1,436,954
Impairment of assets	-	(47,211)	-	-	(47,211)
Balance as at September 30, 2020	$ -	$ 1,005,303	$ 7,479,448	$ 414,573	$ 8,899,324
Net book value					
September 30, 2020	$ 141,700	$ 4,102,584	$ 10,673,634	$ 171,578	$ 15,089,496
September 30, 2019	$ 141,700	$ 3,680,253	$ 11,727,453	$ 135,439	$ 15,684,845

(Expressed in Canadian dollars)

8. Property, plant and equipment (continued)

During the year, the Company recorded a government subsidy of $100,689 related to a capital project at its Thurso manufacturing facility. This was accounted for as a government grant related to assets in accordance with IAS 20 – *Accounting for Government Grants and Disclosure of Government Assistance* ("IAS 20"). This government grant is non-repayable and was recorded as a reduction in the carrying amount of the underlying assets.

During the year ended September 30, 2020, the Company initiated a capital project to replace a propane heating system with an electric heating system. The carrying amount of the propane heating system was reduced to the recoverable amount, as measured by the expected net proceeds upon disposal, and the Company recorded a non-cash impairment loss of $315,338 as at September 30, 2020. Management committed to a plan to sell the propane heating system subsequent to the end of the reporting period and located a buyer with a sale expected to close before December 31, 2020.

9. Goodwill

The Company performs a goodwill impairment test annually on September 30 and whenever there is an indication of impairment. No impairment of goodwill was identified as a result of the Company's most recent annual impairment test.

The recoverable amount of the CGU is measured as its value in use, estimated using discounted cash flows. Management's past experience and future expectations of the business' performance are used to make a best estimate of the expected revenues, earnings before interest, taxes, depreciation and amortization, and operating cash flows covering a ten year forecast period, with a terminal value extrapolated into the future over the estimated useful life of the CGU.

The key assumptions used in performing impairment tests are as follows:

- Discount rate:

  Management applied a discount rate of 12% (2019 – 12%) in calculating the recoverable amount. This is a pre-tax rate which reflects the time value of money and risk associated with the business. Management has determined its discount rate to reflect the risk of an emerging technology company.

- Terminal growth rate:

  Management has assumed a terminal growth rate of nil (2019 – nil) beyond the ten year term, which management deems appropriate given the early stages of the Company's commercialization.

- Forecast period:

  Management used a ten year forecast period as this was deemed more appropriate for a company commercializing a new technology and entering new markets.

Management performs sensitivity analysis on the key assumptions. Sensitivity analysis indicates reasonable changes to key assumptions will not result in an impairment loss.

10. Finance income

	2020	2019
Interest income from cash and cash equivalents and short-term investments	$ (144,992)	$ (201,332)
Interest paid on lease liability	44,868	-
Other interest expenses	10,454	8,580
	$ (89,670)	$ (192,752)

(Expressed in Canadian dollars)

11. Share capital

(a) *Share capital*

Authorized:

Unlimited number of common shares with no par value

Unlimited number of preferred shares with no par value

Common shares issued and fully paid:

	Number of shares		Amount
Balance as at October 1, 2018	68,771,501	$	61,892,395
RSUs vested	428,624		463,084
Balance as at September 30, 2019	69,200,125	$	62,355,479
RSUs vested	199,736		144,362
Balance as at September 30, 2020	69,399,861	$	62,499,841

There are no preferred shares issued and outstanding.

(b) *Share-based payment plans*

(i) Stock option plan

Under the Company's share incentive plan, the maximum number of shares that may be reserved for grant of options at any point in time is 10% of the outstanding shares, less any shares reserved for issuance under the RSU plan. The following stock options were outstanding as at September 30, 2020:

	Number of options		Weighted average exercise price
Balance as at October 1, 2018	2,607,500	$	1.35
Granted	1,677,500		0.61
Expired	(750,000)		0.82
Balance as at September 30, 2019	3,535,000	$	0.95
Granted	2,079,000		0.37
Expired	(777,050)		1.05
Forfeited	(53,750)		0.45
Balance as at September 30, 2020	4,783,200	$	0.68

The following table summarizes information pertaining to the Company's stock options outstanding as at September 30, 2020:

	Options outstanding				Options exercisable		
Range of exercise prices	Number of options outstanding	Weighted average remaining contractual life (years)		Weighted average exercise price	Number of options exercisable		Weighted average exercise price
$0.00 - $0.50	2,024,000	4.38	$	0.37	712,000	$	0.40
$0.51 - $0.75	1,487,500	3.31		0.61	1,400,000		0.61
$1.01 - $1.25	666,700	1.06		1.12	666,700		1.12
$1.26 - $1.50	605,000	1.86		1.43	605,000		1.43
	4,783,200	3.26	$	0.68	3,383,700	$	0.81

(Expressed in Canadian dollars)

11. Share capital (continued)

(b) *Share-based payment plans (continued)*

(i) Stock option plan (continued)

The Company calculates the fair value of options at the grant date using the Black-Scholes option-pricing model. The table below outlines the weighted average assumptions used to estimate the fair value of options granted during the years ended September 30, 2020 and 2019:

	2020	2019
Risk free interest rate	1.2%	2.0%
Expected life	5.0 years	4.7 years
Expected volatility	54%	45%
Expected dividends	Nil	Nil
Average fair value	$ 0.17	$ 0.23

The Company charged the following share-based payments to expenses in connection with the Company's stock option plan, with a corresponding increase in contributed surplus:

	2020	2019
Total compensation - stock options	$ 306,777	$ 362,583

(ii) Restricted share unit plan

Under the Company's RSU plan, the maximum number of shares that may be reserved for issuance is fixed at 2,700,000. As at September 30, 2020, 647,610 RSUs remain available to be granted. The obligations under the RSU plan can be settled at the Company's discretion through either cash or issuance of common shares. The Company intends to settle the obligation through the issuance of common shares.

RSUs outstanding as at September 30, 2020:

	Number of RSUs
Balance as at October 1, 2018	370,606
Forfeited	(15,120)
Granted	298,640
Vested	(428,624)
Balance as at September 30, 2019	225,502
Forfeited	(43,162)
Granted	301,479
Vested	(199,736)
Balance as at September 30, 2020	284,083

During the year ended September 30, 2019 the Company granted 298,640 RSUs. The weighted average fair value was $0.56 per share. 25% of these RSUs vested on September 1, 2019, 35% vested on September 1, 2020, and the remaining 40% will vest on September 1, 2021.

During the year ended September 30, 2020 the Company granted 301,479 RSUs. The weighted average fair value was $0.39 per share. 25% of these RSUs vested on September 1, 2020, 35% will vest on September 1, 2021, and the remaining 40% will vest on September 1, 2022.

11. Share capital (continued)

(b) *Share-based payment plans (continued)*

(ii) Restricted share unit plan (continued)

The Company charged the following share-based payments to operating expenses in connection with the Company's RSU plan, with a corresponding increase in contributed surplus:

	2020	2019
Total compensation - RSUs	$ 115,386	$ 300,389

12. Capital risk management

The Company's objectives and policies for managing capital are to maintain a strong capital base to maintain investor, creditor and market confidence, sustain future development of the business, and safeguard the Company's ability to support the Company's normal operating requirements on an ongoing basis.

The capital of the Company consists of the items included in the statements of financial position in the shareholders' equity section. The Company manages its capital structure and makes changes based on economic conditions, risks that impact the operations, and future significant capital investment opportunities. To manage the Company's capital requirements, the Company has in place a planning and budgeting process which helps determine the funds required to ensure the Company has the appropriate liquidity to meet its operating and growth objectives. The Company's officers are responsible for managing the Company's capital and do so through quarterly meetings and regular review of financial information. The Board of Directors is responsible for overseeing this process.

13. Financial instruments and risk exposures

(a) *Fair value measurement*

The Company's financial assets include cash and cash equivalents, short-term investments, and accounts receivable. The Company's financial liabilities include accounts payable and accrued liabilities.

Cash and cash equivalents, short-term investments, and accounts receivable are classified as financial assets at amortized cost. Financial assets at amortized cost are initially recognized at fair value and subsequently carried at amortized cost less any impairment. Accounts payable and accrued liabilities are classified as other financial liabilities, measured at amortized cost using the effective interest rate method. The effective interest rate is the rate that exactly discounts the estimated future cash payments or receipts through the expected life of the financial instrument or a shorter period, where appropriate, to the net carrying amount of the financial asset or liability.

The carrying value of the Company's financial assets and liabilities is considered to be a reasonable approximation of fair value due to their immediate or short-term maturity, or their ability for liquidation at comparable amounts.

(b) *Credit risk*

Credit risk is the risk of a financial loss if a customer or counterparty to a financial instrument fails to meet its obligations under a contract. This risk primarily arises from the Company's receivables from customers.

The Company's exposure to credit risk is dependent upon the characteristics of each customer. Each customer is assessed for credit worthiness, using third party credit scores and through direct monitoring of their financial well-being on a continual basis. In some cases, where customers fail to meet the Company's credit worthiness benchmark, the Company may choose to mitigate customer-specific risk with either credit insurance or prepayment, where appropriate.

(Expressed in Canadian dollars)

13. Financial instruments and risk exposures (continued)

(b) *Credit risk (continued)*

The Company regularly reviews the collectability of its accounts receivable and establishes an allowance account for credit losses based on its best estimate of any potentially uncollectable accounts. As at September 30, 2020 and September 30, 2019, the balance of the allowance account for credit losses was $nil.

Pursuant to their respective terms, accounts receivable was aged as at September 30, 2020 and 2019:

		2020		2019
0 – 30 days	$	1,254,565	$	380,092
31 – 60 days		192,184		48,918
61 – 90 days		-		7,735
Greater than 90 days		-		22,584
Total accounts receivable*	$	1,446,749	$	459,329

*Certain balances included within accounts receivable such as GST, QST and PST receivables are not financial instruments and as such, are excluded from the note disclosure.

There is a possibility of increased customer credit risk due to the ongoing global recessionary trends as a result of the COVID-19 pandemic. As at September 30, 2020, the Company's accounts receivable are made up of approximately 54% (2019 - 46%) government trade receivables and the balance of the outstanding accounts receivable are spread over several other customers. The Company does not have a history of credit loss related to trade receivables and as such has not recorded an allowance for expected credit losses as at September 30, 2020 (2019 - $nil)

The Company may also have credit risk relating to cash and cash equivalents and short-term investments, which it manages by dealing with large banks and investing in highly liquid investments. The Company's objective is to minimize its exposure to credit risk in order to prevent losses on financial assets by placing its investments in highly liquid instruments such as guaranteed investment funds. The Company's cash and cash equivalents carrying value as at September 30, 2020 totaled $1,751,855 (2019 - $2,752,002), short-term investments of $6,849,285 (2019 - $7,537,262) and accounts receivables of $1,446,749 (2019 - $459,329), representing the maximum exposure to credit risk of these financial assets.

(c) *Liquidity risk*

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company has in place a planning and budgeting process which helps determine the funds required to ensure the Company has the appropriate liquidity to meet its operating and growth objectives.

As at September 30, 2020, the Company had cash and cash equivalents of $1,751,855 (2019 - $2,752,002), short-term investments of $6,849,285 (2019 - $7,537,262), and accounts receivable of $1,446,749 (2019 - $459,329) for a total of $10,047,889 (2019 - $10,748,593). Liquidity and additional financing are adequate for the settlement of short-term financial obligations.

(d) *Currency risk*

Currency risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate due to changes in foreign exchange rates.

The Company is exposed to currency risk as a result of components of cost being denominated in currencies other than the Canadian dollar, primarily the United States dollar. The Company holds cash and has liabilities (primarily accounts payable and accrued liabilities) in currencies other than the Canadian dollar, primarily the United States dollar. In addition, the Company also has United States dollar denominated accounts receivable that are subject to currency risk.

(Expressed in Canadian dollars)

13. Financial instruments and risk exposures (continued)

(d) *Currency risk (continued)*

The Company manages currency risk by holding cash in foreign currencies to support forecasted foreign currency denominated liabilities and does not use derivative instruments to reduce its exposure to foreign currency risk.

As at September 30, 2020, a 10% change in the United States dollar to Canadian dollar exchange rate would impact the Company's net loss favourably or unfavourably by $97,409 (2019 - $108,645).

(e) *Interest rate risk*

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company's exposure to the risk of changes in market interest rates relates primarily to cash equivalents and short-term investments. The Company does not enter into any interest rate swaps to mitigate interest rate risk.

14. Income taxes

(a) *Income tax expense*

Income tax expense differs from the expected expense if the Canadian federal and provincial statutory income tax rates were applied to loss from operations before income taxes. The principal factors causing these differences are shown below:

	2020	2019
Loss from operations before income taxes	$ (1,795,346)	$ (2,835,254)
Statutory tax rate	26.80%	26.86%
Expected tax recovery	(481,161)	(761,549)
Effective tax rate change and other	2,164	(9,935)
Permanent differences	115,886	182,719
Non-refundable investment tax credits	(37,347)	(279,553)
Change in unrecognized deferred tax assets	400,458	868,318
Income tax recovery	$ -	$ -

(b) *Recognized deferred tax assets and liabilities*

The Company has recognized deferred taxes in respect of the following:

	2020	2019
Deferred tax assets		
Non-capital losses carried forward	$ 2,153,255	$ 2,746,799
Deferred tax liabilities		
Property, plant, and equipment	(2,153,255)	(2,746,799)
Net deferred tax asset	$ -	$ -

(c) *Deferred income tax assets and liabilities*

The Company did not recognize deferred tax assets for the following deductible temporary differences:

	2020	2019
Non-capital loss carry forwards	$ 10,473,960	$ 9,904,837
Capital loss carry forwards	5,732,539	5,732,539
Non-refundable investment tax credits	995,038	1,053,322
Other temporary differences	8,974,988	7,722,972
Unrecognized deductible temporary differences	$ 26,176,525	$ 24,413,670

(Expressed in Canadian dollars)

14. Income taxes (continued)

(d) *Loss carry forwards*

As at September 30, 2020, the Company has tax loss carry forwards of approximately $18,419,169 (2019 - $20,147,513). The Company's tax loss carry forwards will expire, if not utilized, commencing in 2030. The Company recognizes the benefit of tax losses only to the extent of anticipated future taxable income. As at September 30, 2020, the Company has capital losses of approximately $5,732,539 (2019 - $5,732,539) that may be carried forward indefinitely to apply against future years' capital gains.

(e) *R&D and tax credit attributes*

As at September 30, 2020, the Company had unclaimed tax deductions of scientific research and experimental development expenditures of $3,648,000 (2019 - $3,548,000) that are available to reduce taxable income in future years and may be carried forward indefinitely. As at September 30, 2020, the Company has federal investment tax credits of $798,000 (2019 - $836,000) and provincial investment tax credits of $197,000 (2019 - $217,000) that may be carried forward to apply against future years' income tax payable. These investment tax credits begin to expire in 2033 and 2027 respectively.

15. Related party transactions

For the years ended September 30, 2020 and 2019, the Company had no transactions with related parties as defined in IAS 24 – *Related Party Disclosure*, except those pertaining to transactions with management personnel in the ordinary course of their employment, or as disclosed below.

(a) *Remuneration of key management personnel*

	2020	2019
Salaries, accrued bonuses, employee benefits and director fees	$ 744,720	$ 712,298
Share-based payments	230,840	255,476
Restructuring costs (note 20)	-	787,575
	$ 975,560	$ 1,755,349

(b) As at September 30, 2020, amounts owing to directors for director fees and expense reimbursements included in accounts payable and accrued liabilities were $58,619 (2019 - $47,622).

(c) As at September 30, 2020, amounts owing to a company controlled by a director of the Company included in accounts payable and accrued liabilities were $nil (2019 - $84,375). The payables as at September 30, 2019 represent amounts owing upon the termination of an executive services consulting agreement (note 20).

(d) Legal and professional fees, taxes and disbursements totaling $nil for the year ended September 30, 2020 (2019 - $42,485) were incurred with a law firm of which a director of the Company was at the time a partner.

The above transactions are in the normal course of business and are measured at the exchange amount which is the amount of consideration established and agreed to by the related parties.

(Expressed in Canadian dollars)

16. Supplementary cash flow information

(a) *Changes in non-cash working capital*

	2020	2019
Accounts receivable	$ (898,111)	$ 1,460,592
Inventory	20,896	(56,352)
Prepaid expenses and other assets	95,834	(295,475)
Accounts payable and accrued liabilities (note 16(d))	211,052	(73,628)
Deposit	(305,249)	543,368
	$ (875,578)	$ 1,578,505

(b) *Income taxes*

The Company did not pay any income taxes during the years ended September 30, 2020 and 2019.

(c) *Cash and cash equivalents*

Cash and cash equivalents consist of cash balances with banks, investments with original maturities of three months or less, and investments that are both readily convertible to cash and subject to insignificant changes in market value:

	2020	2019
Cash	$ 1,026,845	$ 752,911
Cash equivalents	725,010	1,999,091
	$ 1,751,855	$ 2,752,002

(d) *Supplemental disclosure of non-cash financing activities*

As at September 30, 2020, property, plant and equipment included in accounts receivable and accounts payable was $100,689 (2019 - $nil) and $268,468 (2019 - $61,849) respectively.

During the year ended September 30, 2020, deposits of $182,050 (2019 - $nil) were applied to property, plant and equipment.

17. Revenue and segmented information

The Company's operations currently consist of one operating segment. Within this operating segment, revenue is disaggregated by type as follows:

	2020	2019
Development contracts	$ 6,121,326	$ 5,113,764
Products and services	1,592,847	1,288,938
	$ 7,714,173	$ 6,402,702

During the year ended September 30, 2020, the Company recognized revenue of $208,233, which was previously recorded as a deposit on the balance sheet, as a result of the change in transaction price allocated to a satisfied performance obligation.

For the year ended September 30, 2020, sales within Canada were $116,358 (2019 - $354,518) and sales outside Canada were $7,597,815 (2019 - $6,048,184).

During the year ended September 30, 2020, the Company had two customers who represented greater than 10% of total revenues. They represented approximately 79% and 16% respectively of total revenues (2019 – two customers represented approximately 80% and 14% respectively of total revenues).

(Expressed in Canadian dollars)

18. Nature of expenses

The expenses presented below represent total cost of sales, research and development, general and administration expenses, sales and marketing, depreciation and amortization, impairment of assets and restructuring costs. During the year the Company received $209,258 in Canada Emergency Wage Subsidy relief related to COVID-19. This relief was accounted for as a government grant related to income in accordance with IAS 20. This government grant is non-repayable and was recorded as a reduction in the associated eligible salaries which the Company incurred.

	2020	2019
Salaries and benefits	$ 3,809,866	$ 3,302,635
Share-based compensation	422,163	570,772
Depreciation and amortization	1,628,746	1,566,122
Impairment of assets	315,338	-
Travel and entertainment	198,527	323,996
Professional fees and insurance	1,226,122	974,924
Public company costs	364,181	387,533
Rent and utilities	608,044	725,709
Maintenance and office expenses	527,849	379,193
Materials consumed	647,822	708,114
Restructuring costs (note 20)	-	787,575
	$ 9,748,658	$ 9,726,573

19. Commitments and contingencies

(a) As at September 30, 2020, the Company is committed to equipment purchases, operating costs in respect of leased office space, and contracted equipment maintenance for the following amounts:

2021	$ 325,407
2022	257,208
2023	188,458
2024	107,208
2025	62,538
	$ 940,819

(b) Certain nano-optic products are subject to a 3% sales royalty in favour of Simon Fraser University ("SFU") where certain elements of the nano-optic technology originated. Royalties were $2,504 during the year ended September 30, 2020 (2019 - $828). In 2014, the Company prepaid royalties that would offset against future royalties owed as part of the transfer of the intellectual property from SFU, of which $197,340 remains prepaid as at September 30, 2020 (2019 - $199,844).

(c) In March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. The ultimate duration of COVID-19, the magnitude of the impact on the economy, and the full extent to which COVID-19 may have direct and indirect impacts on Nanotech's business is not known at this time. This could include an impact on the Company's ability to obtain debt and equity financing, impairment in the value of long-lived assets, or potential future decrease in revenue or the profitability of Nanotech's operations. The Company has not yet experienced any material negative impacts to its business, results of operations, or its financial position as a result of COVID-19, other than the deferral of some customer ordering decisions and potential sales opportunities to fiscal 2021.

20. Restructuring costs

On December 21, 2018, the Board of Directors implemented an executive transition plan, under which Mr. Doug Blakeway, the former CEO, transitioned his responsibilities to Mr. Troy Bullock. Under the terms of this transition plan, Mr. Blakeway's executive services consulting agreement was terminated, triggering the following termination benefits as laid out in the agreement: two years base salary, a pro-rated performance bonus, and vesting of all outstanding share-based awards. The Company incurred restructuring costs of $787,575 for the year ended September 30, 2019, of which $92,200 represented share-based compensation related to the accelerated vesting of Mr. Blakeway's RSUs.

In January 2019, termination benefits were paid and 187,500 shares were issued to Mr. Blakeway upon vesting of his RSUs. Restructuring costs of $nil remain accrued as at September 30, 2020 (2019 - $84,375).

21. Discontinued operations

On September 21, 2017, the Board of Directors made the determination that the Company would pursue the possible sale of the assets of its subsidiary, Tactical Technologies Inc. ("Tactical"), to a third party. At September 30, 2017, Tactical was classified as a separate disposal group held for sale and as a discontinued operation.

On June 29, 2018, the assets used in connection with Tactical's surveillance equipment and van conversion business were sold to an employee of Tactical for a nominal amount and on September 28, 2018, Tactical was wound-up and struck from the corporate register.

The cash flows for the year ended September 30, 2019 include the effects of extinguishment of remaining liabilities pursuant to the disposal.