



## **ANNUAL REPORT**

**As at and for the year ended  
December 31, 2020**



## Message from the President & CEO

March 30, 2021

First, I want to convey my sincere hope that everyone is well and continues to stay healthy at this time. 2020 was a year that started with high hopes for many of us at NXT. We had just reported one of the best financial performances in our Company's history, having successfully completed the 2019 Nigerian SFD<sup>®</sup> survey. Unfortunately, given the oil price war and the global pandemic, exploration activity fell internationally and business development progress became challenging. Nonetheless, we maintained focus in our core areas of interest and have actively pursued new opportunities that should result in contracts for the Company as commodity prices increase in response to increased economic activity.

We took advantage of the slowness in the industry to improve our capabilities. In May 2020, NXT started development of a new interpretation work-flow process that includes mathematical transformations and mapping of SFD<sup>®</sup> data with the aim of presenting our results in a manner that will enable seamless interpretation in conjunction with the review of conventional geological and geophysical data and interpretations. Our analysis has enabled us to increase the quantitative component of our SFD interpretation. This work continues as we review data that verifies and validated our enhanced approach that will allow us to introduce new protocols in the field for the benefit of our clients. In conjunction with our research and development efforts, we are pleased to report that we were also granted 38 additional patents by the European Union, which brought the total number of NXT patents to 44.

Another technical achievement in 2020 was construction and successful testing of an additional SFD<sup>®</sup> acquisition system consisting of eight new sensors including four "cascade" type devices. NXT now has four SFD<sup>®</sup> systems which increases our operational readiness and reliability.

On the global E&P front, commodity prices appear to have stabilized and there are signs that a worldwide economic recovery is underway. In addition, promising news comes in the form of increased vaccination levels which enables the relaxation of travel restrictions that impeded our ability to get and perform contracts. As a result, NXT has had a very busy start to 2021 pursuing a number of strategic commercial opportunities. This gives me great confidence that our collective efforts will result in future success.

Commercial discussions progressed throughout the winter in our core areas of focus in Nigeria, East-Central Africa, Mexico, Asia and South America. We remain highly confident in the strategy we have taken to realize near term opportunities with national oil companies, which have a long term approach to the development of reserves.

In conclusion, we are advancing our initiatives to secure SFD<sup>®</sup> surveys. NXT's non-intrusive SFD<sup>®</sup> airborne technology not only increases drilling success rates for our customers but drastically reduces the negative environmental impact of traditional large-scale ground surveys. The reduction of costs and the impact upon the environment are two of the most important areas of current focus by the O&G industry.

We remain steadfast in our efforts to deliver strong results and growth in 2021 for all our shareholders. On behalf of our Board of Directors and the entire team at NXT, I want to thank all of our shareholders for their continued support.

Best regards,

"/s/ George Liszicasz"

George Liszicasz

President & CEO

NXT Energy Solutions Inc.



# **NXT ENERGY SOLUTIONS INC.**

## **Management's Discussion and Analysis**

**For the year ended  
December 31, 2020**

## Management's Discussion and Analysis

This discussion and analysis ("MD&A") was prepared by management of NXT Energy Solutions Inc. ("NXT", "we", "us", "our" or the "Company") based on information available as at March 30, 2021 unless otherwise stated, has been approved by the Board of Directors of the Company (the "Board"), and should be reviewed in conjunction with the audited consolidated financial statements and related notes for the year ended December 31, 2020 (the "consolidated financial statements"). This MD&A covers the unaudited three month and twelve month periods ended December 31, 2020, with comparative totals for the unaudited three month and twelve month periods ended December 31, 2019.

Our functional and reporting currency is the Canadian dollar. All references to "dollars", "\$", "CDN dollars" and "CDN\$" in this MD&A are to Canadian dollars unless specific reference is made to United States dollars ("US dollars" or "US\$").

NXT® and SFD® are registered trademarks of NXT in Canada and the United States.

### Advisories

#### ***Forward-looking Information***

Certain statements contained in this MD&A constitute "forward-looking information" within the meaning of applicable securities laws. These statements typically contain words such as "anticipate", "believe", "could", "estimate", "expect", "intend", "may", "plan", "predict", "will" and similar words and phrases suggesting future outcomes or an outlook. Forward-looking statements in this document includes, but is not limited to:

- estimates related to our future financial position and liquidity; and
- general business strategies and objectives.

Such forward-looking information is based on a number of assumptions which may prove to be incorrect. Assumptions have been made with respect to the following matters, in addition to any other assumptions identified in this document:

- our ability to market our SFD® technology and services to current and new customers;
- our ability to source personnel and equipment in a timely manner and at an acceptable cost;
- our ability to obtain all permits and approvals required;
- our ability to obtain financing on acceptable terms;
- our ability to obtain insurance to mitigate the risk of default on client billings;
- foreign currency exchange and interest rates; and
- general business, economic and market conditions (including global commodity prices).

Although NXT believes that the expectations reflected in such forward-looking information are reasonable, undue reliance should not be placed on them as NXT can give no assurance that such expectations will prove to be correct. Forward-looking information is based on expectations, estimates and projections that involve a number of risks and uncertainties which could cause actual results to differ materially from those anticipated by NXT and are described in the forward-looking information. Material risks and uncertainties include, but are not limited to:

- the ability of management to execute its business plan;
- health, safety and the environment (including risks related to COVID-19);
- the emergence of alternative competitive technologies;
- our ability to protect and maintain our intellectual property ("IP") and rights to our SFD® technology;
- our reliance on a limited number of key personnel;
- our reliance on a limited number of aircraft ;
- our reliance on a limited number of clients;
- counterparty credit risk;
- foreign currency and interest rate fluctuations;
- changes in, or in the interpretation of, laws, regulations or policies; and
- general business, economic and market conditions (including global commodity prices).

For more information relating to risks, see the section titled "*Discussion of Operations – Risks and Uncertainties*" in this MD&A and the section titled "*Risk Factors*" in NXT's most recently filed Annual Information Form. Except as required by applicable securities law, NXT undertakes no obligation to update publicly or revise any forward-looking statements or information, whether as a result of new information, future events or otherwise. Accordingly, the reader is cautioned not to place undue reliance on forward-looking statements.

Financial outlooks are provided for the purpose of understanding the Company's accounting practices and liquidity position, and the information may not be appropriate for other purposes.

#### ***Non-GAAP Measures***

NXT's accompanying consolidated financial statements are prepared in accordance with accounting principles generally accepted ("GAAP") in the United States of America ("US GAAP"). This MD&A includes references to net working capital which does not have a standardized meanings prescribed by US GAAP and may not be comparable to similar measures be presented by other entities. Net working capital is the net result of the difference between current assets and current liabilities. Management of NXT uses this non-GAAP measure to assess liquidity at a point in time.

## Description of the Business

NXT Energy Solutions Inc. is a Calgary-based technology company whose proprietary and patented Stress Field Detection ("SFD®") survey system utilizes quantum-scale sensors to detect gravity field perturbations in an airborne survey method which can be used both onshore and offshore to remotely identify traps and reservoirs with exploration potential. The SFD® survey system enables NXT's clients to focus their hydrocarbon exploration decisions concerning land commitments, data acquisition expenditures and prospect prioritization on areas with the greatest potential. SFD® is environmentally friendly and unaffected by ground security issues or difficult terrain and is the registered trademark of NXT Energy Solutions Inc. NXT provides its clients with an effective and reliable method to reduce time, costs and risks related to exploration.

## Financial and Operational Highlights

Key financial and operational highlights for Q4-20 and YE-20 include are summarized below.

- Cash and short-term investments at December 31, 2020 were \$3.03 million;
- Survey revenues in Q4-20 were \$nil and YE-20 were \$0.14 million;
- A net loss of \$1.69 million was recorded for Q4-20, including stock based compensation and amortization expenses of \$0.45 million;
- A net loss of \$6.00 million was recorded for YE-20, including stock based compensation and amortization expenses of \$1.78 million;
- Cash flow used in operating activities was \$0.93 million during Q4-20 and \$3.45 million YE-20;
- Net loss per Common Share (defined below) for Q4-20 was (\$0.03) basic and diluted;
- Net loss per Common Share for YE-20 was (\$0.09) basic and diluted;
- General and administrative ("G&A") expenses for Q4-20 as compared to Q4-19 decreased by \$0.24 million or 26%, mostly due to the Canada Emergency Wage Subsidy ("CEWS"), the Canada Emergency Rent Subsidy ("CERS"), lower legal costs and less travel; and
- G&A expenses for YE-20 as compared to YE-19 decreased by \$0.33 million or 9%, due primarily to the CEWS and CERS, the Scientific Research and Development Credit ("SR&ED"), and less travel than in YE-19;
- The Employee Share Purchase Plan commenced in Q4-20 with approximately 75% employee participation.

## Selected Annual Information

(\$M except per share)	YE-20	YE-19	YE-18
Total Assets	\$ 24,009,137	\$ 30,692,941	\$ 25,264,268
Lease liabilities	1,919,018	2,691,217	510,661
Revenue	136,566	11,976,149	-
Net earnings (loss)	(5,999,675)	3,772,908	(6,968,511)
Net earnings (loss) per share			
Basic	\$(0.09)	\$0.06	\$(0.11)
Diluted	\$(0.09)	\$0.06	\$(0.11)

Sales in YE-19 increased due to the execution of an SFD<sup>®</sup> survey in 2019. There were no SFD<sup>®</sup> surveys in YE-18 or YE-20. Long-term debt increased in YE-19 vs YE-18 as the Company adopted ASC topic 842, Leases (“Topic 842”) and therefore recognized Long-term lease obligations related to its leases. Total assets increased because of recognizing Topic 842 and working capital increases from Survey revenues in 2019. Total Assets decreased between YE-20 and YE-19 as Short-term investments were used for operating activities. Long-term debt decreased between YE-20 and YE-19 as lease payments reduced Long-term lease obligations. The adoption of Topic 842 resulted in the initial recognition of right-of-use assets of approximately \$3.5 million, current lease liabilities of approximately \$0.7 million, and non-current lease liabilities of approximately \$3.4 million as at January 1, 2019.

## Discussion of Operations

### ***COVID-19 (2019-nCoV/COVID-19) Pandemic***

As of the date of the consolidated financial statements the Covid-19 pandemic continues to be a risk to the operations of the Company. The Company has made provisions so employees can work safely in the office or if necessary from home, suspended all travel, followed all Alberta Services and Health Canada recommendations, and implemented hygiene and physical distancing policies. NXT continues to communicate with employees and customers via available communication methods such as tele-conferences and on-line video conferencing. Demand for our services and prospective revenues may become adversely impacted the longer the Covid-19 pandemic continues. The impact of the continuation of the Covid-19 pandemic may hamper our ability to deliver SFD<sup>®</sup> surveys contracts in the following ways. If restrictions on international travel continue, our aircraft and personal will not be able to perform surveys. An outbreak of the virus among our staff or our customers’ personnel could delay any survey in progress. Business development may be delayed when in-person meetings and technical presentations may be a superior delivery method to tele-conferences or on-line video conferencing.

The situation is dynamic and the ultimate duration and magnitude of the impact on the economy and the financial effect to the Company is not known at this time. Estimates and judgments made by management in the preparation of the consolidated financial statements are subject to a higher degree of measurement uncertainty during this volatile period.



The Company began receiving the CEWS beginning with the April period and the CERS beginning with the October period. For the YE-20 period the Company has recognized \$0.29 million in CEWS subsidy and \$0.06 million in the CERS. Funds from the CEWS and the CERS are being used to ensure staffing levels are maintained to continue to progress SFD® project discussions and marketing.

#### ***Pre-existing SFD® Data Sale***

In December 2020, the Company received a deposit of US\$100,000 to sell pre-existing SFD® data. The pre-existing SFD® data is expected to be delivered to the customer in the second quarter of 2021.

#### ***Patents***

As of the date of this MD&A, NXT has been granted SFD® patents in Russia (January 2017), Japan (July 2017), Canada (August 2017), Mexico (September 2017), the United States (two patents were granted in November 2017 and September 2018, respectively), China (April 2018), and Europe (January 2020). In total, we have obtained SFD® patents in 44 countries. In addition, two more SFD® patent applications in Brazil and India are pending. These patents protect our proprietary SFD® technology and serve as independent third-party recognition of our technological invention in terms of practical applicability, conceptual novelty, and knowledge advancement.

#### ***Note Receivable***

On September 6, 2019, NXT and Alberta Green Ventures Limited Partnership ("AGV") entered into a loan arrangement (the "Loan Arrangement") whereby NXT loaned to AGV US\$250,000 by way of note receivable for the purpose of providing AGV with additional funds necessary to continue advancing the common objectives of the parties under the existing co-operation agreement (the "Co-operation Agreement") and sales representative agreement (the "Sales Representative Agreement"). The loaned amounts were fully recovered in 2020.

## Summary of Operating Results

	Q4-20	Q4-19	YE-20	YE-19
Survey revenue	\$ -	\$ -	\$ 136,566	\$ 11,976,149
Expenses:				
Survey	304,553	308,374	1,091,587	2,611,086
General and administrative	687,974	926,919	3,172,594	3,497,785
Stock-based compensation	103,842	(28,724)	168,416	43,809
Amortization of property and equipment	445,122	449,015	1,780,806	1,781,181
	1,541,491	1,655,584	6,213,403	7,933,861
Other Expenses (income):				
Interest expense (income), net	5,510	(18,452)	(11,535)	(20,684)
Foreign exchange (gain) loss	137,081	99,136	(76,029)	233,231
Other expense	1,128	39,019	10,402	56,833
	143,719	119,703	(77,162)	269,380
Income (loss) before income taxes	(1,685,210)	(1,775,287)	(5,999,675)	3,772,908
Income tax expense				
	-	-	-	-
Net Income (loss) for the period	\$(1,685,210)	\$(1,775,287)	(5,999,675)	3,772,908
Net Income (loss) per share – basic				
	\$ (0.03)	\$ (0.03)	\$ (0.09)	\$ 0.06
Net Income (loss) per share – diluted				
	\$ (0.03)	\$ (0.03)	\$ (0.09)	\$ 0.06

**Annual operating results.** Net loss for YE-20 compared to YE-19 changed by \$9,772,583 or \$(0.15) per share-basic. YE-19 revenue was obtained from surveys conducted in Nigeria (the "Nigerian SFD® Survey"). In YE-20 revenue of \$136,566 was earned on the recognition of the forfeited deposit from the Co-Operation Agreement with AGV. In YE-20, aircraft costs were lower in YE-20 versus YE-19 as maintenance was performed on the aircraft before and after the Nigerian SFD® Survey during YE-19. In YE-20, less scheduled maintenance was required as less hours were flown on the aircraft. Survey project costs in YE-19 were the direct costs of the Nigerian SFD® Survey. G&A expenses decreased \$325,191, or 9%, in YE-20 compared to YE-19 as the Company participated in the CEWS, CERS and SR&ED programs and ceased all travel after Q1-20. Stock-based compensation expense ("SBCE") in YE-20 was higher compared to YE-19 by \$124,607 as the restricted share unit plan ("RSU"), ESP plan (defined below) and deferred share unit ("DSU") plan were implemented during YE-20. YE-20 net interest expense (income) decreased \$9,149 versus YE-19 as the Company had less short-term investments over comparative periods and locked in guaranteed investment certificates had overall lower average interest rates. For YE-20 the foreign exchange gain was the result of weakening of the CDN\$ versus the US\$ during Q1-20. This foreign exchange gain was reduced in the following 3 quarters as the CDN\$ strengthened. At June 30, 2019, the Company had a significant foreign exchange loss which was the result of the CDN dollar strengthening compared with May 2019 when several of the US dollar assets were initially recorded.

**Quarterly operating results.** Net loss for Q4-20 compared to Q4-19 decreased by \$90,077, or \$0.00 per share-basic. Survey costs were \$3,821 lower due to no direct survey costs in Q4-20, offset by higher

maintenance costs incurred due to major maintenance to prepare the aircraft for future SFD<sup>®</sup> surveys. G&A expenses decreased by \$238,945, or 26%, as compared to Q4-19, due primarily to decreased business development travel and the recognition of the CEWS and the CERS. SBCE in Q4-20 was higher compared to Q4-19 by \$132,566. In Q4-20 with the market price of the Company shares at \$0.79, the Company recognized additional RSU expense on liability classified awards. In addition the ESP commenced in Q4-20. Interest (income) expense decreased \$23,962 in Q4-20 versus Q4-19 as interest rates have decreased versus the prior year quarter as well as less cash was held in short-term investments. With respect to foreign exchange, the Company held significant assets in US\$ at December 31, 2020. At December 31, 2020, the CDN\$ strengthened as compared to the US\$ at September 30, 2020, resulting in the corresponding foreign exchange loss for Q4-20. Other expenses in Q4-19 related mostly to costs associated with the validation process for certain European SFD<sup>®</sup> patents.

Effective for the year ended December 31, 2020, the Company has presented stock based compensation expense of \$168,416 within general and administrative expenses and has recorded an immaterial correction to classify the stock based compensation expense for the 2019 and 2018 comparative years of \$43,809 and \$386,154, respectively, to be presented within general and administrative expenses. While ASC 718 does not identify a specific line item in the income statement for presentation of the expense related to share based compensation arrangements, the SEC has released guidance under SAB Topic 14.F that the expense related to share-based payment arrangements should be presented in the same line or lines as cash compensation paid to the same employees. The Company's presentation conforms to this guidance.

During 2020 the Company determined that the full amount previously presented in accumulated other comprehensive income of \$710,934 related to cumulative translation adjustment associated with foreign subsidiaries that were substantially liquidated prior to fiscal year 2018. Thus the Company has recorded an immaterial correction to reflect the release of the cumulative translation adjustment to earnings prior to the opening balance sheet by eliminating the accumulated other comprehensive income balance of \$710,934 and decreasing the deficit by the same amount.

### **Survey Expenses**

<b>Survey Expenses</b>	<b>Q4-20</b>	<b>Q4-19</b>	<b>Net change</b>
Aircraft lease costs	\$ 107,930	\$ 101,860	\$ 6,070
Aircraft operations	196,623	154,527	42,096
Survey projects	-	51,987	(51,987)
<b>Total survey expenses, net</b>	<b>304,553</b>	<b>308,374</b>	<b>(3,821)</b>

<b>Survey Expenses</b>	<b>YE-20</b>	<b>YE-19</b>	<b>Net change</b>
Aircraft lease costs	\$ 433,618	\$ 400,847	\$ 32,771
Aircraft operations	657,969	846,498	(188,529)
Survey projects	-	1,363,741	(1,363,741)
<b>Total survey expenses, net</b>	<b>1,091,587</b>	<b>2,611,086</b>	<b>(1,519,499)</b>

Survey expenses relate entirely to direct survey costs, lease expenses and aircraft handling and maintenance costs (net of charter hire reimbursements). In Q4-19, survey expenses included incremental travel related costs to present results for the Nigerian SFD® Survey. Fixed aircraft costs were higher in Q4-20 versus Q4-19 as scheduled maintenance was performed on the aircraft in Q4-20.

In YE-20, aircraft operations were incurred for aircraft handling and maintenance costs. Fixed aircraft costs were lower in YE-20 versus YE-19 as maintenance was performed on the aircraft before and after the Nigerian SFD® Survey during YE-19. In YE-20, less scheduled maintenance was required as less hours were flown on the aircraft. Survey project costs in YE-19 were the direct costs of the Nigerian SFD® Survey.

The aircraft is available for charter to third parties through our aircraft manager when it is not being used by NXT. Any charter hire reimbursements received are used to offset aircraft costs.

In April 2017, NXT completed a sale and leaseback agreement of its aircraft with a Calgary-based international aircraft services organization (the "Lessor"). NXT has leased the aircraft over an initial term of 60 months and retains all existing operating rights and obligations. NXT is required to make monthly payments to the Lessor of approximately US\$39,500. NXT has the option to extend the term of the lease by an additional two years for payments of approximately US\$22,500 per month. Should NXT want to repurchase the aircraft at the end of the initial lease term, the purchase price will be US\$1.45 million.

#### **General and Administrative Expenses**

<b>G&amp;A Expenses</b>	<b>Q4-20</b>	<b>Q4-19</b>	<b>Net change</b>	<b>%</b>
Salaries, benefits and consulting charges	\$ 369,390	\$ 406,300	\$(36,910)	(9)
Board and professional fees, public company costs	168,186	205,942	(37,756)	(18)
Premises and administrative overhead	146,432	193,661	(47,229)	(24)
Business development	3,966	121,016	(117,050)	(97)
<b>Total G&amp;A Expenses</b>	<b>687,974</b>	<b>926,919</b>	<b>(238,945)</b>	<b>(26)</b>

<b>G&amp;A Expenses</b>	<b>YE-20</b>	<b>YE-19</b>	<b>Net change</b>	<b>%</b>
Salaries, benefits and consulting charges	\$ 1,383,692	\$1,599,247	\$(215,555)	(13)
Board and professional fees, public company costs	920,666	857,556	63,110	7
Premises and administrative overhead	728,036	800,626	(72,590)	(9)
Business development	140,200	240,356	(100,156)	(42)
<b>Total G&amp;A Expenses</b>	<b>3,172,594</b>	<b>3,497,785</b>	<b>(325,191)</b>	<b>(9)</b>

G&A expenses decreased \$238,945, or 26%, in Q4-20 compared to Q4-19 for the following reasons:

- salaries, benefits and consulting charges decreased \$36,910, or 9%, due primarily to recording the CEWS;
- board and professional fees and public company costs decreased \$37,756, or 18%, due primarily to decreased legal fees. During Q4-19 legal fees were incurred for the Targeted Issuer Bid (as defined below);
- premises and administrative overhead costs decreased \$47,229, or 24%, due to the CERS; and

- business development costs decreased by \$117,050, or 97%, due primarily to the restrictions on travel from COVID-19 and therefore switching discussion to tele-conferences and on-line video conferencing.

G&A expenses decreased \$325,191, or 9%, in YE-20 compared to YE-19 for the following reasons:

- salaries, benefits and consulting charges decreased \$215,555, or 13%, due primarily to recording the CEWS, SR&ED and one less permanent headcount;
- board and professional fees and public company costs increased \$63,110, or 7%, due primarily to increased audit fees and consultant fees to process the SR&ED;
- premises and administrative overhead costs decreased \$72,590, or 9%, due primarily to recording of the CERS and decreased costs related to reduced office expenses; and
- business development costs decreased by \$100,156, or 42%, due primarily to the restrictions on travel from COVID-19 and therefore switching discussion to tele-conferences and on-line video conferencing.

### ***Stock-based Compensation Expenses***

<b>Stock-based Compensation Expenses</b>	<b>Q4-20</b>	<b>Q4-19</b>	<b>net change</b>	<b>% change</b>
Stock Option Expense	\$ 1,258	\$ 3,775	\$ (2,517)	(67%)
Deferred Share Units	3,750	-	3,750	100%
Restricted Stock Units	90,701	(32,499)	123,200	(379%)
Employee Share Purchase Plan	8,133	-	8,133	100%
<b>Total SBCE</b>	<b>103,842</b>	<b>(28,724)</b>	<b>132,566</b>	<b>(462%)</b>

<b>Stock-based Compensation Expenses</b>	<b>YE-20</b>	<b>YE-19</b>	<b>net change</b>	<b>% change</b>
Stock Option Expense	\$ 34,223	\$ 43,809	\$ (9,586)	(22%)
Deferred Share Units	15,000	-	15,000	100%
Restricted Stock Units	111,060	-	111,060	100%
Employee Share Purchase Plan	8,133	-	8,133	100%
<b>Total SBCE</b>	<b>168,416</b>	<b>43,809</b>	<b>124,607</b>	<b>284%</b>

SBCE varies in any given quarter or year as it is a function of several factors including the number of units of each type of stock based compensation plan issued in the period and the amortization term (based on the term of the contract and/or number of years for full vesting of the units, which is normally three years) of the resultant expense. Also, SBCE is a function of periodic changes in the inputs used in the Black-Scholes option valuation model, such as volatility in NXT's trailing share price and for cash-settled stock-based compensation awards variability will occur based on changes to observable prices.

On August 25, 2020, shareholders of the Company and subsequently the Toronto Stock Exchange (the "TSX") approved, a new Employee Share Purchase Plan (the "ESP"). The ESP allows employees and other individuals determined by the Board to be eligible to contribute a minimum of 1% and a maximum of 10% of their earnings to the ESP for the purchase of common shares of NXT ("Common Shares"), of which the Company will make an equal contribution. Common Shares contributed by the Company may be issued from treasury or acquired through the facilities of the TSX. The Company began to issue Common Shares under the ESP during Q4-20. The Company will also match 100% of the employee contributions of up to 10% of their earnings in the first year of the plan if the employee does not withdrawal common shares from the ESP Plan in the first year of their participation, up to \$15,000 per employee. Further details on the ESP can be found in the 2020 Management Information Circular, available on NXT's website at [www.nxtenergy.com](http://www.nxtenergy.com) and on SEDAR at [www.sedar.com](http://www.sedar.com).

SBCE in Q4-20 was higher compared to Q4-19 by \$132,566. In Q4-20 with the market price of the Common Shares at \$0.79, the Company recognized additional RSU expense. In addition, the ESP commenced in Q4-20. In Q4-19, the Company's SBCE included a reversal of the RSU expense from Q3-19 as the expected granting of RSUs to employees was not formalized until Q3-20.

SBCE in YE-20 was higher compared to YE-19 by \$124,607 as the RSU, ESP and DSU were implemented during YE-20.

### Other Expenses

Other Expenses	Q4-20	Q4-19	Net change	%
Interest (income) expense, net	\$ 5,510	\$ (18,452)	\$ 23,962	(130)
Foreign exchange loss (gain)	137,081	99,137	37,944	38
IP and other	1,128	39,019	(37,891)	(97)
Total Other Expenses, net	143,719	119,704	24,015	20

Other Expenses	YE-20	YE-19	Net change	%
Interest (income) expense, net	\$ (11,535)	\$ (20,684)	\$ 9,149	(44)
Foreign exchange loss (gain)	(76,029)	233,231	(309,260)	(133)
IP, and other	10,402	56,833	(46,431)	(82)
Total Other Expenses, net	(77,162)	269,380	(346,542)	(129)

*Interest (income) expense, net.* This category of other expenses includes interest income earned on short-term investments netted by interest expense from lease obligations. Q4-20 interest (income) expense decreased \$23,962 versus Q4-19 as interest rates have decreased since the prior year quarter and less cash was held in short-term investments. YE-20 interest (income) expense net decreased \$9,149 versus YE-19 as the Company had less short-term investments over comparative periods and the Company's locked in guaranteed investment certificates had overall lower average interest rates. In addition, interest from lease obligations has been reduced in both Q4-20 and YE-20, as the outstanding lease obligations continues to decrease.

*Foreign exchange loss (gain).* This category of other expenses includes losses and gains caused by changes in the relative currency exchange values of US\$ and CDN\$. The Company held significant assets in US\$ at

December 31, 2020, including accounts receivable, cash and cash equivalents, short-term investments and the security deposit for the aircraft, all of which have an effect on the unrealized foreign exchange gain and loss. At December 31, 2020, the CDN\$ strengthened as compared to the US\$ at September 30, 2020, resulting in the corresponding foreign exchange loss for Q4-20.

For YE-20 the foreign exchange gain was the result of weakening of the CDN\$ versus the US\$ from December 31, 2019 to March 31, 2020 and large US\$ balances. This foreign exchange gain was reduced in the following three quarters as the CDN\$ strengthened. US\$ balances were also slowly reduced during each period in YE-20. At June 30, 2019, the Company had a significant foreign exchange loss which was the result of the CDN\$ strengthening compared with May 2019 when several of the US\$ assets were initially recorded.

The Company does not currently enter into hedging contracts, but uses strategies to reduce the volatility of US\$ assets including converting excess US\$ to CDN\$.

*IP and other.* This category of other expenses primarily includes costs related to IP filings, R&D activity related to the SFD® technology.

In all periods, the Company incurs periodic expenses to file patents and to maintain them. In addition, in Q4-19 and YE-19, these expenses related mostly to costs associated with the validation process for certain European SFD® patents.

Amortization Expenses	Q4-20	Q4-19	Net change	%
Property and equipment	\$ 23,939	\$ 27,832	\$ (3,893)	(14)
Intellectual property	421,183	421,183	-	-
Total Amortization Expenses	445,122	449,015	(3,893)	(1)

Amortization Expenses	YE-20	YE-19	Net change	%
Property and equipment	\$ 96,073	\$ 96,448	\$ (375)	0
Intellectual property	1,684,733	1,684,733	-	-
Total Amortization Expenses	1,780,806	1,781,181	(375)	0

*Property and equipment and related amortization expense.* Property and equipment amortization was higher in YE-19 compared to YE-20 due to additional assets becoming fully amortized during the period and the Company not acquiring new assets. Amortization also decreases each year as the Company uses the declining balance method of depreciation, thereby having the effect of lowering amortization each year on existing assets.

*Intellectual property and related amortization expense.* NXT acquired specific rights to utilize the proprietary SFD® technology in global hydrocarbon exploration applications from the inventor of the SFD® technology, NXT's Chairman, President and Chief Executive Officer, on August 31, 2015. The value attributed to the acquired IP assets was \$25.3 million. The IP assets are amortized on a straight-line basis over a 15-year period (future amortization expense of \$1,685,000 per year) and are also being subject to an ongoing assessment of potential indicators of impairment of the recorded net book value. No impairments were recognized in Q4-20, Q4-19, YE-20 or YE-19.

Income tax expense. There was no income tax expense in YE-20 or YE-19.

## **Competition**

Our SFD<sup>®</sup> airborne survey service is based upon a proprietary technology, which is capable of remotely identifying, from a survey aircraft, subsurface anomalies associated with potential hydrocarbon traps with a resolution that we believe is technically superior to other airborne survey systems. To our knowledge there is no other company employing technology comparable to our SFD<sup>®</sup> survey system for oil and natural gas exploration.

Seismic is the standard technology used by the oil & gas industry to image subsurface structures. It is our view that the SFD<sup>®</sup> survey system is highly complementary to seismic analysis. Our system may reduce the need for seismic in wide-area reconnaissance but will not replace the role of seismic in verifying structure, closure and selecting drilling locations. The seismic industry is very competitive with many international and regional service providers.

The SFD<sup>®</sup> system can be used as a focusing tool for seismic. With an SFD<sup>®</sup> survey, a large tract (i.e. over 5,000 square kilometers) of land can be evaluated quickly to identify locations with indications of reservoir potential. Seismic surveys, although effective in identifying these locations, are much more expensive, require significantly more time and impose a much greater negative impact on local communities and the environment than more traditional methods. An SFD<sup>®</sup> survey deployed first can provide necessary information to target a seismic program over a limited area of locations selected by SFD<sup>®</sup>. This approach can result in a more effective seismic program and reduce the overall cost, time, community resistance and environmental impact required to locate and qualify a prospect.

The industry uses other technologies for wide area oil and natural gas reconnaissance exploration, such as aeromagnetic and gravity surveys. These systems can provide regional geological information, such as basement depth, sedimentary thickness and major faulting and structural development.

## **Risk and Uncertainties**

Hydrocarbon exploration operations involve a number of risks and uncertainties that have affected our financial statements and are reasonably likely to affect them in the future. These risks and uncertainties are discussed further below.

Credit Risk. Credit risk arises from the potential that the Company may incur a loss if counterparty to a financial instrument fails to meet its obligation in accordance with agreed terms. The Company's financial instruments that are exposed to concentrations of credit risk consist primarily of cash and cash equivalents, short-term investments and accounts receivable. The carrying value of cash and cash equivalents, short-term investments, and accounts receivable reflects management's assessment of credit risk. At December 31, 2020, cash and cash equivalents and short-term investments included balances in bank accounts, term deposits and guaranteed investment certificates, placed with financial institutions with investment grade credit ratings. The majority of the Company's accounts receivable relate to sales to one customer in Nigeria and is exposed to foreign country credit risks. The Company manages this credit risk by requiring advance payments before entering into certain contract milestones and when possible accounts receivable insurance.



Foreign Exchange Risk. The Company is exposed to foreign exchange risk in relation to its holding of significant US\$ balances in cash and cash equivalents, short-term investments, accounts receivable, note receivable, deposits, accounts payables and accrued liabilities and entering into United States dollar revenue contracts. To mitigate exposure to fluctuations in foreign exchange, the Company does not currently enter into hedging contracts, but uses strategies to reduce the volatility of United States dollar assets including converting excess United States dollars to Canadian dollars. As at December 31, 2020, the Company held net U.S dollar assets totaling US\$2,164,285. Accordingly, a hypothetical 10% change in the value of one United States dollar expressed in Canadian dollars as at December 31, 2020 would have had an approximately \$276,000 effect on the unrealized foreign exchange gain or loss for the year.

Interest Rates. We periodically invest available cash in short term investments that generate interest income that will be affected by any change in interest rates.

Tax Rates. Changes in tax rates in the jurisdictions that we operate in would impact the amount of current taxes that we pay. In addition, changes to substantively enacted tax rates would impact the carrying balance of deferred tax assets and liabilities, potentially resulting in a deferred tax recovery or incremental deferred tax expense.

In addition to the above, we are exposed to risk factors that may impact the Company and our business. For further information on these risk factors, please refer to our Annual Information Form, available on NXT's website at [www.nxtenergy.com](http://www.nxtenergy.com) and on SEDAR at [www.sedar.com](http://www.sedar.com).

## Summary of Quarterly Results

A summary of operating results for each of the trailing eight quarters (including a comparison of certain key categories to each respective prior quarter) follows.

	Q4-20	Q3-20	Q2-20	Q1-20
Survey revenue	\$ -	\$ -	\$ 136,566	\$ -
Net income (loss)	(1,685,210)	(1,502,456)	(1,479,709)	(1,332,301)
Income (loss) per share – basic	\$ (0.03)	\$ (0.02)	\$ (0.02)	\$ (0.02)
Income (loss) per share – diluted	\$ (0.03)	\$ (0.02)	\$ (0.02)	\$ (0.02)

	Q4-19	Q3-19	Q2-19	Q1-19
Survey revenue	\$ -	\$ 1,021,532	\$10,954,618	\$ -
Net income (loss)	(1,775,287)	(774,373)	8,085,888	(1,763,320)
Income (loss) per share – basic	\$ (0.03)	\$ (0.01)	\$ 0.12	\$ (0.03)
Income (loss) per share – diluted	\$ (0.03)	\$ (0.01)	\$ 0.11	\$ (0.03)

During Q4-20 the Company received the CEWS and the CERS which reduced costs. In Q3-20 the Company received the CEWS and the SR&ED which also reduced costs. During Q2-20, revenue was earned on the recognition of the forfeited deposit from AGV, payable pursuant to the Co-operation Agreement. In Q2-19 and Q3-19, revenues were earned from the Nigerian SFD<sup>®</sup> Survey. There were no revenues in the other five quarters. Excluding Q2-19 and Q3-19, the Company incurred net losses in each of the other quarters primarily due to incurred survey costs (related to aircraft lease and aircraft maintenance costs), G&A expenses and non-cash items like SBCE, which can be a significant expense in any given quarter. More specific details are provided below:

- in Q4-20, costs were reduced primarily due to receiving the CEWS and the CERS, and reduced travel;
- in Q3-20, costs were reduced primarily due to receiving the CEWS and the SR&ED, and reduced travel;
- in Q2-20, revenue was earned on the recognition of the forfeited deposit from AGV, payable pursuant to the Co-Operation Agreement, and the Company incurred a \$135,991 foreign exchange loss partially offsetting the Q1-20 foreign exchange gain described below;
- in Q1-20, the Company incurred a \$409,517 foreign exchange gain as it held significant monetary assets in US dollars at March 31, 2020, including accounts receivable, cash and cash equivalents, short-term investments and the security deposit for the aircraft, and the CDN\$ devalued by approximately 9%;
- in Q4-19, survey costs were higher as final integration costs from the Nigerian SFD<sup>®</sup> Survey were incurred;

- in Q3-19, NXT recognized \$1,021,532 of revenue for services rendered in connection with the Nigerian SFD® Survey, compared to \$10,954,618 in Q2-19; and
- in Q1-19, survey costs were higher due to scheduled maintenance on the aircraft and significant legal and contract negotiation costs in preparing for the Nigerian SFD® Survey.

## Liquidity and Capital Resources

### ***Going Concern***

The consolidated financial statements for YE-20 have been prepared on a going concern basis. The going concern basis of presentation assumes that NXT will continue in operation for the foreseeable future and will be able to realize its assets and discharge its liabilities and commitments in the normal course of business.

The events described in the following paragraphs highlight that there is substantial doubt about NXT's ability to continue as a going concern within one year after the date that these financial statements have been issued.

The Company's current cash position is not expected to be sufficient to meet the Company's obligations and planned operations for the 12 month period beyond the date that these financial statements have been issued.

The Company is taking further steps to reduce operating costs including payroll and other G&A costs and is evaluating alternatives to reduce other costs. If required, further financing options that may or may not be available to the Company include issuance of new equity, debentures or bank credit facilities. The need for any of these options will be dependent on the timing of securing new SFD® survey contracts and obtaining financing on terms that are acceptable to both the Company and the financier.

NXT continues to develop its pipeline of opportunities to secure new revenue contracts. However, the Company's longer-term success remains dependent upon its ability convert these opportunities into successful SFD® survey contracts to continue to attract new client projects ultimately to expand the revenue base to a level sufficient to exceed fixed operating costs and generate positive cash flow from operations. The occurrence and timing of these events cannot be predicted with certainty.

The consolidated financial statements do not reflect adjustments that would be necessary if the going concern basis was not appropriate. If the going concern basis were not appropriate for these consolidated financial statements, then adjustments would be necessary in the carrying value of the assets and liabilities, the reported revenues and expenses and the balance sheet classifications used. These adjustments could be material.

NXT's cash and cash equivalents plus short-term investments at December 31, 2020 totaled \$3.03 million. Net working capital (see Non-GAAP Measures) totaled \$2.73 million.

Risks related to having sufficient ongoing net working capital to execute survey project contracts are mitigated through our normal practice of obtaining advance payments and progress payments from

customers throughout the course of the projects, which often span three to four months. In addition, where possible, risk of default on client billings has been mitigated through the use of export insurance programs offered by Export Development Canada.

The Company does not have provisions in its leases, contracts, or other arrangements that would trigger additional funding requirements or early payments except that if the Company were to default on its office lease, the current month rent plus the next three months become immediately due. If the Company were to default on the aircraft lease, the Company would be required to deliver the aircraft back to the Lessor.

### **Net Working Capital**

<b>Net Working Capital</b>	<b>Dec 31, 2020</b>	<b>Dec 31, 2019</b>	<b>Net Change</b>	<b>%</b>
Current assets (current liabilities)				
Cash, cash equivalents and short-term investments	\$3,031,407	\$ 6,639,757	\$(3,608,350)	(54)
Accounts receivable	965,548	1,384,315	(418,767)	(30)
Note receivable	-	324,700	(324,700)	(100)
Prepaid expenses and deposits	77,532	97,132	(19,600)	(20)
Accounts payable and accrued liabilities	(440,538)	(448,928)	8,390	(2)
Contract obligations	(127,507)	(131,386)	3,879	3
Current portion of lease obligation	(773,465)	(736,408)	(37,057)	5
<b>Total Net Working Capital</b>	<b>2,732,977</b>	<b>7,129,182</b>	<b>(4,396,205)</b>	<b>(62)</b>

NXT had no secured debt and had net working capital of \$2,732,977 as at December 31, 2020.

The decrease in net working capital at December 31, 2020 versus December 31, 2019 was due to cash used in operating activities.

### **Accounts Payable**

<b>Accounts Payable</b>	<b>Dec 31, 2020</b>	<b>Dec 31, 2019</b>	<b>Net Change</b>	<b>%</b>
Trade accounts payable	\$ (62,872)	\$ (181,790)	\$ 118,918	(65)
Deferred director and advisor payable	(23,908)	(24,352)	444	(2)
Accrued liabilities	(161,742)	(136,257)	(25,485)	19
Vacation pay accrued	(71,699)	(106,529)	34,830	(33)
Payroll W/H Payable	(120,317)	-	(120,317)	(100)
<b>Total Accounts Payable</b>	<b>(440,538)</b>	<b>(448,928)</b>	<b>8,390</b>	<b>(2)</b>

Accounts payable decreased by \$8,390, or 2%, in December 31, 2020 compared to December 31, 2019 for the following reasons:

- trade accounts payable decreased by \$118,918, or 65%, due primarily to the reduced legal fees;
- deferred director and advisor fees decreased by \$444, or 2%, as director fees have been fully paid (the remaining payable is for advisor board fees incurred prior to 2019);

- accrued liabilities increased by \$25,485, or 19%, due to timing of invoice receipts, which is in line with the decrease in accounts payable;
- vacation pay accrued decreased by \$34,830, or 33%, as employees vacations were taken and paid during the year; and
- payroll related accruals increased by \$120,317 as accruals were made for the liability classified equity compensation plan.

### Cash Flow

Cash Flow - from / (used in)	Q4-20	Q4-19	YE-20	YE-19
Operating activities	\$(926,996)	\$1,206,437	\$(3,452,925)	\$4,052,406
Financing activities	7,592	(1,354,121)	(34,923)	(1,385,787)
Investing activities	1,049,241	257,236	3,436,691	(173,927)
Effect of foreign exchange on cash	(87,066)	83,028	(116,942)	26,021
Net source (use) of cash	42,771	192,580	(168,099)	2,518,713
Cash and cash equivalents, start of period	2,647,375	2,665,665	2,858,245	339,532
Cash and cash equivalents, end of period	2,690,146	2,858,245	2,690,146	2,858,245
Cash and cash equivalents	2,690,146	2,858,245	2,690,146	2,858,245
Short-term investments	341,261	3,781,512	341,261	3,781,512
Total Cash and Short-Term Investments	3,031,407	6,639,757	3,031,407	6,639,757

The overall net changes in cash balances in each of the years noted above is a function of several factors including any inflows (outflows) due to changes in net working capital balances and net of any cash transferred into/out of short-term investments. Further information on the net changes in cash, by each of the operating, financing and investing activities, is as follows:

Operating Activities	Q4-20	Q4-19	YE-20	YE-19
Net income (loss) for the period	\$(1,685,210)	\$(1,775,287)	\$(5,999,675)	\$3,772,908
Total non-cash expense items and ARO liabilities settled	669,125	300,766	1,920,981	1,751,559
	(1,016,085)	(1,474,521)	(4,078,694)	5,524,467
Change in non-cash working capital balances	89,089	2,680,958	625,769	(1,472,061)
Total Cash from (used in) Operating Activities	(926,996)	1,206,437	(3,452,925)	4,052,406

Operating cash flow decreased by \$2,133,433 in Q4-20 as compared to Q4-19 and decreased by \$7,505,331 in YE-20 as compared to YE-19 because of the milestone payments received from the Nigerian SFD® Survey during Q4-19 and in YE-19.

Financing Activities	Q4-20	Q4-19	YE-20	YE-19
Net funds used-in Targeted Issuer Bid	\$ -	\$(1,343,184)	\$ -	\$(1,343,184)
Repayment of capital lease obligation	-	(10,937)	(42,515)	(42,603)
Employee stock purchase plan	7,592	-	7,592	-
Total Cash from (used in) Financing Activities	7,592	(1,354,121)	(34,923)	(1,385,787)

In Q4-20, the financing activity was for employee contributions under the ESP. Financing payments in both YE-20 and YE-19 were for payments on the finance lease for office equipment. In Q2-20, the Company terminated the finance lease for office equipment with a final payment of approximately \$20,000. During Q4-19 the Company completed its targeted issuer bid for \$1,250,000 plus costs of \$93,184 to repurchase 4,166,667 Common Shares, at a price of \$0.30 per Common Share (the "Targeted Issuer Bid").

Investing Activities	Q4-20	Q4-19	YE-20	YE-19
Purchase of property and equipment	\$ -	\$ -	\$ -	\$ (216,691)
Decrease (increase) in short-term investments	1,049,241	257,236	3,436,691	42,764
Total Cash from (used in) Investing Activities	1,049,241	257,236	3,436,691	(173,927)

Short-term investments decreased in Q4-20 and YE-20 as the Company used investments held in guaranteed investment certificates to fund operations.

### **Contractual Commitments**

The estimated minimum annual commitments for these leases are as follows, as at December 31, 2020:

For the period ended December 31	Office Premises
2021	\$ 228,091
2022	228,091
2023	228,091
2024	228,091
2025	171,069
	1,083,433

### **Off-balance Sheet Arrangements**

The Company has no off-balance sheet arrangements as of the date of this MD&A other than office premise non-lease operating costs with Interloq Capital (the "Landlord"). If the Company were to default on its office lease the current month rent including operation costs plus the next three months become immediately due. Operating cost amounts are disclosed under the heading "*Liquidity and Capital Resources – Contractual Commitments*". NXT pays an estimated operating cost during the current year, but has the obligation to pay the actual operating costs incurred as defined in the office lease with the Landlord early in the first quarter of the preceding year if the estimate was low, or will receive a refund if the estimate was too high. Currently, the Company believes that the current operating cost estimate is reasonable and is constant with discussions with the Landlord.

## Transactions with Related Parties

In addition to the related party transactions discussed elsewhere herein (i.e. the Co-operation Agreement, the Sales Representative Agreement, the Loan Arrangement and the Targeted Issuer Bid), one of the members of NXT's Board, Thomas Valentine, is a partner in the law firm Norton Rose Fulbright Canada LLP which provides legal advice to NXT. Legal fees incurred with Norton Rose Fulbright Canada LLP were as follows:

	Q4-20	Q4-19	YE-20	YE-19
Legal Fees	\$ 3,100	\$ 111,562	\$ 224,479	\$ 276,261

Accounts payable and accrued liabilities include a total of \$1,570 (\$146,197 as at December 31, 2019) payable to Norton Rose Fulbright Canada LLP. A company owned by a family member of an executive officer was contracted to provide design services to the Company for a total cost of US\$3,000.

## Critical Accounting Estimates

The key elements and assumptions are substantially unchanged from those described in NXT's annual audited consolidated financial statements as at and for the year-ended December 31, 2019 other than as described below.

### **Revenue**

The performance obligation for NXT is the acquisition, processing, interpretation and integration of SFD<sup>®</sup> data. Revenue from the sale of SFD<sup>®</sup> survey contracts (net of any related foreign sales taxes) is recognized over time by measuring the progress toward satisfaction of its performance obligation to the customer. All funds received or invoiced in advance of recognition of revenue are reflected as contract obligations and classified as a current liability on our balance sheet.

The Company uses direct survey costs as the input measure to recognize revenue in any fiscal period. The percentage of direct survey costs incurred to date over the total expected survey costs to be incurred, provides an appropriate measure of the stage of the performance obligation being satisfied over time.

### **IP Assets**

Intellectual property acquired is recorded at cost, less accumulated amortization, which is recorded over the estimated minimum useful life of the assets. The Company incurs periodic expenses to file patents and to maintain them.

The Company reviews long-lived assets, which includes property, equipment and intellectual property for impairment whenever events or changes in circumstances indicate the carrying value may not be recoverable. The Company considers both internal and external factors when assessing for potential indicators of impairment, and with respect to intellectual property, the Company's assessment includes consideration of historical and forecasted project survey revenues, market capitalization, market capitalization control premiums, and the project survey revenue multiples compared to industry peers.

When indicators of impairment exist, the Company first compares the total of the estimated undiscounted future cash flows or the estimated sale price to the carrying value of an asset. If the carrying value exceeds these amounts, an impairment loss is recognized for the excess of the carrying value over the estimated fair value of the asset.

## Changes in Accounting Policies

### ***Measurement of Credit Losses on Financial Instruments***

In June 2016, the FASB issued new guidance that changes how entities measure credit losses for most financial assets and certain other financial instruments that are not measured at fair value through net income. The new guidance amends the impairment model of financial instruments, basing it on expected losses rather than incurred losses. These expected credit losses will be recognized as an allowance rather than as a direct write-down of the amortized cost basis. The new guidance was effective January 1, 2020 and was applied using a modified retrospective approach. The adoption of this new guidance did not have a material impact on the Company's consolidated financial statements.

### ***Government Grants***

Government grants are recognized when there is reasonable assurance that the grant will be received, and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as an expense reduction in the period in which the costs are incurred. Where the grant relates to an asset, it is recognized as a reduction to the net book value of the related asset and then subsequently in net loss over the expected useful life of the related asset through lower charges to depreciation and impairment. During period ended December 31, 2020, the Company received government grants through the CEWS and the CERS. The CEWS and CERS were recognized as a reduction to G&A expenses.

	Q4-20	Q4-19	YE-20	YE-19
CEWS	\$ 64,579	\$ -	\$ 292,160	\$ -
CERS	58,526		58,526	
Government grants recognized	123,105	-	350,686	-

## Financial Instruments

The Company's non-derivative financial instruments consist of cash and cash equivalents, short-term investments, accounts receivable, accounts payable and accrued liabilities and leases. The carrying value of these financial instruments approximates their fair values due to their short terms to maturity. NXT is not exposed to significant interest arising from these financial instruments, but is exposed to significant credit risk with accounts receivable. For accounts receivable, where possible, NXT requests advance payments and utilizes risk mitigation products offered by entities such as Export Development Canada



including, for example, insurance coverage of contract accounts receivable, guarantee support for contract performance bonds and wrongful call insurance for such bonds.

NXT is exposed to foreign exchange risk as a result of holding foreign denominated financial instruments. Any unrealized foreign exchange gains and losses arising on such holdings are reflected in earnings at the end of each period.

As at December 31, 2020 and December 31, 2019, the Company held no derivate financial instruments. For more information relating to risks, see the section titled "*Liquidity and Capital Resources – Net Working Capital*".

### Outstanding Share Capital

	March 30, 2021	December 31, 2020	December 31, 2019
Common Shares	64,494,356	64,437,790	64,406,891
Stock Options	421,000	421,000	1,169,500
Deferred Share Units	37,354	37,354	-
Restricted Stock Units	1,200,000	1,200,000	-
ESP Plan Bonus Shares	39,796	23,532	-
Total Share Capital and Dilutive Securities	66,192,506	66,119,676	65,576,391

### Disclosure Controls and Procedures ("DCPs") and Internal Controls over Financial Reporting ("ICFR")

NXT's Chief Executive Officer and Chief Financial Officer (together the "Responsible Officers") are responsible for establishing and maintaining DCPs, or causing them to be designed under their supervision, for NXT to provide reasonable assurance that material information relating to the Company is made known to the Responsible Officers by others within the organization, particularly during the period in which the Company's year-end consolidated financial statements and MD&A are being prepared.

DCPs and other procedures are designed to ensure that information required to be disclosed in reports that are filed is recorded, summarized and reported within the time periods specified by the relevant security authority in either Canada or the United States of America. DCPs include controls and procedures designed to ensure that information required to be disclosed in our reports is communicated to management, including our Responsible Officers, to allow timely decisions regarding required disclosure.

The Company has established and maintains ICFR using the criteria that were set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control – Integrated Framework (2013). The control framework was designed or caused to be designed under the supervision of the Responsible Officers to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with US GAAP.

In evaluating the effectiveness of the Company's DCPs as defined under the rules adopted by the Canadian securities regulatory authorities and by the United States Securities and Exchange Commission, the

Company's Responsible Officers concluded that there are material weaknesses in the Company's ICFR that have a direct impact on the Company's DCPs:

- due to the limited number of staff, it is not feasible to achieve adequate segregation of incompatible duties – NXT partially mitigates this deficiency by adding management and Audit Committee review procedures over the areas where inadequate segregation of duties are of the greatest concern; and
- NXT does not have a sufficient level of staff with specialized expertise to adequately conduct separate preparation and a subsequent independent review of certain complex or highly judgmental accounting issues – NXT partially mitigates this deficiency by preparing financial statements with their best judgments and estimates of the complex accounting matters and relies on reviews by management, external consultants and the Audit Committee for quality assurance.

From time to time to reduce these risks and to supplement a small corporate finance function, the Company engages various outside experts and advisors to assist with various accounting, controls and tax issues in the normal course.

Given the small size of the Company's finance team, management has established a practice of increased engagement of the Company's Disclosure Committee and Audit Committee in reviewing the public disclosure and has increased engagement of external consultants and legal counsel as well.

The Responsible Officers concluded that, as at December 31, 2020, its ICFR are not effective and as a result its DCPs are not sufficiently effective. NXT reached this conclusion based upon its assessment that there is a more than remote likelihood that its ICFR will not prevent or detect material misstatements if they should exist in the Company's consolidated financial statements. The Responsible Officers continue to take certain actions to mitigate these material weaknesses including: (i) the implementation of controls with regards to the review procedures surrounding its disclosure; and (ii) engagement of third-party specialists. In addition, the Chief Financial Officer engages subject matter consultants as the need arises.

It should be noted that a control system, including the Company's DCPs and ICFR, no matter how well conceived, can provide only reasonable, but not absolute assurance that the objectives of the control system will be met, and it should not be expected that the DCPs and ICFR will prevent all errors or fraud.

### **Additional Information**

Additional information related to the Company, including the Company's Annual Information Form, is available on NXT's website at [www.nxtenergy.com](http://www.nxtenergy.com) and on SEDAR at [www.sedar.com](http://www.sedar.com).



# **NXT ENERGY SOLUTIONS INC.**

## **Consolidated Financial Statements**

**For the years ended  
December 31, 2020, 2019 and 2018**



KPMG LLP  
205 5th Avenue SW  
Suite 3100  
Calgary AB T2P 4B9  
Tel (403) 691-8000  
Fax (403) 691-8008  
www.kpmg.ca

## **REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Shareholders and Board of Directors NXT Energy Solutions Inc.

### *Opinion on the Consolidated Financial Statements*

We have audited the accompanying consolidated balance sheets of NXT Energy Solutions Inc. (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of income (loss) and comprehensive income (loss), changes in shareholders' equity and cash flows for each of the years in the three year period ended December 31, 2020, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of operations and its cash flows for each of the years in the three year period ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

### *Going Concern*

The accompanying consolidated financial statements have been prepared assuming the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company's current and forecasted cash and cash equivalents and short-term investments position is not expected to be sufficient to meet its obligations that raises substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

### *Change in Accounting Principle*

As discussed in Note 2 to the consolidated financial statements, the Company has changed its method of accounting for leases as of January 1, 2019 due to the adoption of Accounting Standards Codification Topic 842, Leases.

### *Basis for Opinion*

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



laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

#### *Critical Audit Matters*

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

#### *Indicators of impairment for the intellectual property*

As discussed in Note 9 to the consolidated financial statements, the Company has \$16,285,333 of intellectual property as of December 31, 2020. As discussed in Note 2 to the consolidated financial statements, the Company assesses the recoverability of the intellectual property whenever events or changes in circumstances indicate that its carrying amount may not be recoverable. Since the inception of the Company's operations, there has been inconsistency in both the amount and timing of survey project revenue. The Company's assessment of indicators of impairment for the intellectual property includes the consideration of the carrying amount of the Company's net assets to a range of indicative fair values determined using the following inputs and significant assumptions:

- the Company's market capitalization and applying publicly available control premiums for comparable entities, and
- the Company's historical and forecasted survey project revenue and applying publicly available trading revenue multiples for comparable entities.



We identified the assessment of indicators of impairment for the intellectual property as a critical audit matter. The inconsistency in survey project revenue indicated a higher risk that the intellectual property may not be recoverable, and therefore involved challenging auditor judgment. The market capitalization control premiums, forecasted survey project revenue and trading revenue multiples assumptions used to determine a range of indicative fair values of the Company net assets were challenging to test as they represented subjective determinations of conditions that were also sensitive to variations. Minor changes to those assumptions could have had a significant effect on the Company's assessment of indicators of impairment. Additionally, the evaluation of the Company's determination of market capitalization control premiums and trading revenue multiples required specialized skills and knowledge.

The following are the primary procedures we performed to address the critical matter. We evaluated the Company's forecasted survey project revenue by comparing to contracted and noncontracted future survey project revenue and related documentation, including Company press releases and board minutes. We involved a valuation professional with specialized skills and knowledge, who assisted in:

- evaluating the Company's determination of the control premiums by comparing management selected control premiums to a range that was independently developed using publicly available market data for comparable entities.
- evaluating the Company's determination of the trading revenue multiples applied to historical and forecasted survey project revenue by comparing management selected trading revenue multiples to a range that was independently developed using publicly available market data from comparable entities.

We have served as the Company's auditor since 2006.

*KPMG LLP*

Chartered Professional Accountants

Calgary, Canada

March 30, 2021

# NXT ENERGY SOLUTIONS INC.

## Consolidated Balance Sheets

(Expressed in Canadian dollars)

	December 31, 2020	December 31, 2019
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 2,690,146	\$ 2,858,245
Short-term investments (Note 3)	341,261	3,781,512
Accounts receivable (Note 4)	965,548	1,384,315
Note receivable (Note 5)	-	324,700
Prepaid expenses	77,532	97,132
	<u>4,074,487</u>	<u>8,445,904</u>
Long term assets		
Deposits (Note 6)	526,561	535,554
Property and equipment (Note 7)	707,326	677,647
Right of Use Assets (Note 8)	2,415,430	3,063,769
Intellectual property (Note 9)	16,285,333	17,970,067
	<u>\$ 24,009,137</u>	<u>\$ 30,692,941</u>
<b>Liabilities and Shareholders' Equity</b>		
Current liabilities		
Accounts payable and accrued liabilities (Note 10, 24)	\$ 440,538	\$ 448,928
Contract obligations (Note 11)	127,507	131,386
Current portion of lease obligations (Note 13)	773,465	736,408
	<u>1,341,510</u>	<u>1,316,722</u>
Long-term liabilities		
Long-term lease obligation (Note 13)	1,896,277	2,669,736
Asset retirement obligation (Note 12)	22,741	21,481
	<u>1,919,018</u>	<u>2,691,217</u>
	<u>3,260,528</u>	<u>4,007,939</u>
Shareholders' equity		
Common shares (Note 15): - authorized unlimited		
Issued: 64,437,790 (2019 - 64,406,891) common shares	95,327,123	95,313,064
Contributed capital	9,355,716	9,306,493
Deficit (Note 2)	(83,934,230)	(77,934,555)
	<u>20,748,609</u>	<u>26,685,002</u>
	<u>\$ 24,009,137</u>	<u>\$ 30,692,941</u>

Going Concern (Note 1)  
Commitments (Note 14)

Signed "George Liszicasz"  
Director

Signed "Bruce G. Wilcox"  
Director

The accompanying notes are an integral part of these consolidated financial statements.

# NXT ENERGY SOLUTIONS INC.

## Consolidated Statements of Income (Loss) and Comprehensive Income (Loss)

(Expressed in Canadian dollars)

	For the Year ended December 31		
	2020	2019	2018
<b>Revenue</b>			
Survey revenue (Note 21)	\$ 136,566	\$ 11,976,149	-
<b>Expenses</b>			
Survey costs (Note 22)	1,091,587	2,611,086	1,103,946
General and administrative expenses (Note 17, 23 & 24)	3,341,010	3,541,594	4,385,243
Amortization	1,780,806	1,781,181	1,790,267
	<u>6,213,403</u>	<u>7,933,861</u>	<u>7,279,456</u>
<b>Other expenses (income)</b>			
Interest (income) expense, net	(11,535)	(20,684)	(62,004)
Foreign exchange loss (gain)	(76,029)	233,231	(19,852)
Intellectual property and other (Note 9)	10,402	56,833	(43,428)
Gain on extinguishment of liability (Note 25)	-	-	(185,661)
	<u>(77,162)</u>	<u>269,380</u>	<u>(310,945)</u>
<b>Income (loss) before income taxes</b>	<u>(5,999,675)</u>	<u>3,772,908</u>	<u>(6,968,511)</u>
<b>Income tax expense (Note 18)</b>	<u>-</u>	<u>-</u>	<u>-</u>
<b>Net income (loss) and comprehensive income (loss)</b>	<u>\$ (5,999,675)</u>	<u>\$ 3,772,908</u>	<u>\$ (6,968,511)</u>
Net income (loss) per share (Note 16)			
Basic	\$ (0.09)	\$ 0.06	\$ (0.11)
Diluted	\$ (0.09)	\$ 0.06	\$ (0.11)

The accompanying notes are an integral part of these consolidated financial statements.



# NXT ENERGY SOLUTIONS INC.

## Condensed Consolidated Interim Statements of Cash Flows

(Expressed in Canadian dollars)

For the Year ended December 31

	2020	2019	2018
<b>Cash provided by (used in):</b>			
<b>Operating activities</b>			
Net income (loss)	\$ (5,999,675)	\$ 3,772,908	\$ (6,968,511)
Items not affecting cash:			
Stock based compensation expense (Note 17)	168,416	43,809	386,154
Amortization	1,780,806	1,781,181	1,790,267
Non-cash changes to asset retirement obligation	2,069	2,068	(29,925)
Non-cash lease and interest (Note 25)	(171,300)	(171,056)	(155,301)
Unrealized foreign exchange (gain) loss	141,799	95,557	(44,765)
Deferred rent	-	-	(2,919)
Gain on extinguishment of liability (Note 25)	-	-	(185,661)
Change in non-cash working capital balances (Note 20)	625,769	(1,464,695)	(858,170)
ARO liabilities settled (Note 12)	(809)	(7,366)	-
	<u>2,546,750</u>	<u>279,498</u>	<u>899,680</u>
Net cash from (used in) operating activities	<u>(3,452,925)</u>	<u>4,052,406</u>	<u>(6,068,831)</u>
<b>Financing activities</b>			
Proceeds from the Employee Share Purchase plan	7,592	-	-
Net funds used in targeted issuer bid (Note 15)	-	(1,343,184)	-
Proceeds from exercise of stock options	-	-	5,067
Net proceeds from Private Placement	-	-	9,211,351
Repayment of lease obligation	(42,515)	(42,603)	(39,579)
Net cash from (used in) financing activities	<u>(34,923)</u>	<u>(1,385,787)</u>	<u>9,176,839</u>
<b>Investing activities</b>			
Purchase of property and equipment, net	-	(216,691)	(10,006)
Decrease (increase) in short-term investments	3,436,691	42,764	(2,950,000)
Net cash from (used in) investing activities	<u>3,436,691</u>	<u>(173,927)</u>	<u>(2,960,006)</u>
Effect of foreign exchange rate changes on cash and cash equivalents	<u>(116,942)</u>	<u>26,021</u>	<u>24,912</u>
Net increase (decrease) in cash and cash equivalents	<u>(168,099)</u>	<u>2,518,713</u>	<u>172,914</u>
Cash and cash equivalents, beginning of the year	<u>2,858,245</u>	<u>339,532</u>	<u>166,618</u>
Cash and cash equivalents, end of the year	<u>\$ 2,690,146</u>	<u>\$ 2,858,245</u>	<u>\$ 339,532</u>
<b>Supplemental information</b>			
Cash interest (received)	(21,422)	(16,724)	(58,889)
Cash taxes paid	-	-	-

The accompanying notes are an integral part of these consolidated financial statements.

# NXT ENERGY SOLUTIONS INC.

## Condensed Consolidated Interim Statements of Shareholders' Equity

(Unaudited-expressed in Canadian dollars)

For the Year ended December 31

	2020	2019	2018
<b>Common Shares (Note 15)</b>			
Balance at beginning of the year	\$ 95,313,064	\$ 96,656,248	\$ 88,121,286
Shares purchased and retired during the year	-	(1,343,184)	-
Issuance of common stock on the Employee Share Purchase Plan	14,059	-	-
Issuance of common stock on Private Placement	-	-	8,387,451
Finder's fee	-	-	136,003
Issued upon exercise of stock options	-	-	5,067
Transfer from contributed capital upon exercise of stock options	-	-	6,441
Balance at end of the year	<u>95,327,123</u>	<u>95,313,064</u>	<u>96,656,248</u>
<b>Contributed Capital</b>			
Balance at beginning of the year	9,306,493	9,262,684	8,195,075
Issuance of warrants on Private Placement (Note 15)	-	-	687,896
Recognition of stock based compensation expense (Note 17)	49,223	43,809	386,154
Contributed capital transferred to common shares upon exercise of stock options	-	-	(6,441)
Balance at end of the year	<u>9,355,716</u>	<u>9,306,493</u>	<u>9,262,684</u>
<b>Deficit</b>			
Balance at beginning of the year	(77,934,555)	(81,707,463)	(74,738,952)
Net (loss) income	(5,999,675)	3,772,908	(6,968,511)
Balance at end of the year	<u>(83,934,230)</u>	<u>(77,934,555)</u>	<u>(81,707,463)</u>
<b>Total Shareholders' Equity at end of the year</b>	<u>\$ 20,748,609</u>	<u>\$ 26,685,002</u>	<u>\$ 24,211,469</u>

The accompanying notes are an integral part of these consolidated financial statements.

# NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2020, 2019 and 2018

(Expressed in Canadian dollars unless otherwise stated)

## 1. The Company and Going Concern

NXT Energy Solutions Inc. (the "Company" or "NXT") is a publicly traded company based in Calgary, Alberta Canada.

NXT's proprietary Stress Field Detection ("SFD®") technology is an airborne survey system that is used in the oil and natural gas exploration industry to identify subsurface trapped fluid accumulations.

These consolidated financial statements of NXT have been prepared by management in accordance with U.S. GAAP.

These consolidated financial statements reflect adjustments, all of which are normal recurring adjustments that are, in the opinion of management, necessary to reflect fairly the financial position and results of operations for the respective periods.

These consolidated financial statements have been prepared on a going concern basis. The going concern basis of presentation assumes that NXT will continue in operation for the foreseeable future and will be able to realize its assets and discharge its liabilities and commitments in the normal course of business.

The events described in the following paragraphs highlight that there is substantial doubt about NXT's ability to continue as a going concern within one year after the date that these financial statements have been issued.

The Company's current cash position is not expected to be sufficient to meet the Company's obligations and planned operations for a year beyond the date that these financial statements have been issued.

The Company is taking further steps to reduce operating costs including payroll and other general and administrative costs, and is evaluating alternatives to reduce other costs. If required, further financing options that may or may not be available to the Company include issuance of new equity, debentures or bank credit facilities. The need for any of these options will be dependent on the timing of securing new SFD® survey contracts and obtaining financing on terms that are acceptable to both the Company and the financier.

NXT continues to develop its pipeline of opportunities to secure new revenue contracts. However, the Company's longer-term success remains dependent upon its ability to convert these opportunities into successful contracts, to continue to attract new client projects, ultimately to expand the revenue base to a level sufficient to exceed fixed operating costs and generate positive cash flow from operations. The occurrence and timing of these events cannot be predicted with sufficient certainty.

The consolidated financial statements do not reflect adjustments that would be necessary if the going concern basis was not appropriate. If the going concern basis were not appropriate for these consolidated financial statements, then adjustments would be necessary in the carrying value of the assets and liabilities, the reported revenues and expenses and the balance sheet classifications used. These adjustments could be material.

# NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2020, 2019 and 2018

(Expressed in Canadian dollars unless otherwise stated)

## **Covid-19 (2019-nCoV/COVID-19) Pandemic**

As of the date of these consolidated financial statements the Covid-19 pandemic continues to be a risk to the operations of the Company. The Company has made provisions so employees can work safely in the office or if necessary from home, suspended all travel, followed all Alberta Services and Health Canada recommendations, and implemented hygiene and physical distancing policies. NXT continues to communicate with employees and customers via available communication methods such as tele-conferences and on-line video conferencing. Demand for our services and prospective revenues may become adversely impacted the longer the Covid-19 pandemic continues. The impact of the continuation of the Covid-19 pandemic may hamper our ability to deliver SFD<sup>®</sup> surveys contracts in the following ways. If restrictions on international travel continue, our aircraft and personal will not be able to perform surveys. An outbreak of the virus among our staff or our customers' personnel could delay any survey in progress. Business development may be delayed when in-person meetings and technical presentations may be a superior delivery method to tele-conferences or on-line video conferencing.

The situation is dynamic and the ultimate duration and magnitude of the impact on the economy and the financial effect to the Company is not known at this time. Estimates and judgments made by management in the preparation of these consolidated financial statements are subject to a higher degree of measurement uncertainty during this volatile period.

## **2. Significant Accounting Policies and Changes**

### **Basis of Presentation**

These consolidated financial statements have been prepared by management in accordance with generally accepted accounting principles of the United States of America ("US GAAP").

### **Consolidation**

These consolidated financial statements reflect the accounts of the Company and its wholly owned subsidiaries (all of which are inactive). All significant inter-company balances and transactions among NXT and its subsidiaries have been eliminated and are therefore not reflected in these consolidated financial statements.

### **Estimates and Judgements**

Estimates made relate primarily to the use of the going concern assumption, estimated useful lives and the valuation of intellectual property and property and equipment, the measurement of stock-based compensation expense, valuation of deferred income tax assets, and estimates for asset retirement obligations. The estimates and assumptions used are based upon management's best estimate as at the date of the consolidated financial statements. Estimates and assumptions are reviewed periodically and the effects of revisions are reflected in the period when determined. Actual results may differ from those estimates.

### **Cash and Cash Equivalents**

Cash and cash equivalents consist of cash on hand and short term Guaranteed Investment Certificates ("GIC's") with an original maturity less than 90 days from the date of acquisition.

# NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements  
As at and for the years ended December 31, 2020, 2019 and 2018  
(Expressed in Canadian dollars unless otherwise stated)

## Short Term Investments

Short term investments consist of short term GICs, with original maturity dates greater than 90 days and up to one year.

## Derivative Instruments

Derivative instruments are recognized on the balance sheet at fair value with any changes in fair value between periods recognized in the determination of net income (loss) for the period. NXT does not apply hedge accounting to any of its derivatives. As at December 31, 2020 and 2019, NXT had no outstanding derivative instruments.

## Fair Value Measures

For any balance sheet items recorded at fair value on a recurring basis or non-recurring basis, the Company is required to classify the fair value measure into one of three categories based on the fair value hierarchy noted below.

In Level I, the fair value of assets and liabilities is determined by reference to quoted prices in active markets for identical assets and liabilities that the Company has the ability to assess at the measurement date.

At December 31, 2020, the fair value of the RSU liability was determined using Level 1 inputs.

In Level II, determination of the fair value of assets and liabilities is based on the extrapolation of inputs, other than quoted prices included within Level I, for which all significant inputs are observable directly or indirectly. Such inputs include published exchange rates, interest rates, yield curves and stock quotes from external data service providers. Transfers between Level I and Level II would occur when there is a change in market circumstances.

In Level III, the fair value of assets and liabilities measured on a recurring basis is determined using a market approach based on inputs that are unobservable and significant to the overall fair value measurement. Assets and liabilities measured at fair value can fluctuate between Level II and Level III depending on the proportion of the value of the contract that extends beyond the time frame for which inputs are considered to be observable. As contracts near maturity and observable market data becomes available, the contracts are transferred out of Level III and into Level II.

## Measurement of credit losses on financial instruments

In June 2016, the FASB issued new guidance that changes how entities measure credit losses for most financial assets and certain other financial instruments that are not measured at fair value through net income. The new guidance amends the impairment model of financial instruments, basing it on expected losses rather than incurred losses. These expected credit losses are recognized as an allowance rather than as a direct write-down of the amortized cost basis. The new guidance was effective January 1, 2020 and was applied using a modified retrospective approach. The adoption of this new guidance did not have a material impact on the Company's consolidated financial statements.

# NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2020, 2019 and 2018

(Expressed in Canadian dollars unless otherwise stated)

## Deposits

Deposits consist of security payments made to lessors for the Company's office and aircraft lease. They are classified as long term if the lease end date is greater than one year.

## Property and Equipment

Property and equipment is recorded at cost, less accumulated amortization, which is recorded over the estimated service lives of the assets using the following annual rates and methods:

Computer hardware (including survey equipment)	30% declining balance
Aircraft	10% declining balance
Furniture and other equipment	20% declining balance
Leasehold improvements	10% declining balance

## Intellectual Property

Intellectual property acquired is recorded at cost, less accumulated amortization, which is recorded over the estimated minimum useful life of the assets. The Company incurs periodic expenses to file patents and to maintain them.

## Impairment of Long-Lived Assets

The Company reviews long-lived assets, which includes property, equipment and intellectual property for impairment whenever events or changes in circumstances indicate the carrying value may not be recoverable. The Company considers both internal and external factors when assessing for potential indicators of impairment, and with respect to intellectual property, the Company's assessment includes consideration of historical and forecasted project survey revenues, market capitalization, market capitalization control premiums, and the project survey revenue multiples compared to industry peers.

When indicators of impairment exist, the Company first compares the total of the estimated undiscounted future cash flows or the estimated sale price to the carrying value of an asset. If the carrying value exceeds these amounts, an impairment loss is recognized for the excess of the carrying value over the estimated fair value of the asset.

## Research and Development Expenditure

Research and development ("R&D") expenditures incurred to develop, improve and test the SFD® survey system and related components are expensed as incurred. Any intellectual property that is acquired for the purpose of enhancing research and development projects, if there is no alternative use for the intellectual property, is expensed in the period acquired. No significant external R&D was incurred in the years ended 2020, 2019 and 2018.

## Foreign Currency Translation

The Company's functional currency is the Canadian dollar. Revenues and expenses denominated in foreign currencies are translated into Canadian dollars at the average exchange rate for the applicable period. Monetary assets and liabilities are translated into Canadian dollars at the exchange rate in effect

# NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2020, 2019 and 2018

(Expressed in Canadian dollars unless otherwise stated)

at the end of the applicable period. Non-monetary assets and liabilities are recorded at the relevant exchange rates for the period in which the balances arose. Any related foreign exchange gains and losses resulting from these translations are included in the determination of net income (loss) for the period.

During 2020 the Company determined that the full amount previously presented in accumulated other comprehensive income of \$710,934 related to cumulative translation adjustment associated with foreign subsidiaries that were substantially liquidated prior to fiscal year 2018. Thus the Company has recorded an immaterial correction to reflect the release of the cumulative translation adjustment to earnings prior to the opening balance sheet by eliminating the accumulated other comprehensive income balance of \$710,934 and decreasing the deficit by the same amount.

## **Income Taxes**

NXT follows the asset and liability method of accounting for income taxes. This method recognizes deferred income tax assets and liabilities based on temporary differences in reported amounts for financial statement and income tax purposes, at the income tax rates expected to apply in the future periods when the temporary differences are expected to be reversed or realized. The effect of a change in income tax rates on deferred income tax assets and deferred income tax liabilities is recognized in income in the period when the tax rate change is enacted. Valuation allowances are provided when necessary to reduce deferred tax assets to the amount that is more likely than not to be realized.

## **Stock Based Compensation**

NXT follows the fair value method of accounting for stock options, restricted stock units, deferred stock units, and the employee share purchase plan (the "Share Compensation Plans") that are granted to acquire common shares under NXT's Share Compensation Plans. For equity-settled stock-based compensation awards, fair values are determined at the grant date and the expense, net of estimated forfeitures, is recognized over the requisite service period with a corresponding increase recorded in contributed capital. An adjustment is made to compensation expense for any difference between the estimated forfeitures and the actual forfeitures. For cash-settled stock-based compensation awards, fair values, based on observable prices, are determined at each reporting date and periodic changes are recognized as compensation costs, with a corresponding change to liabilities.

Upon exercise or realization of the Share Compensation Plans, the consideration received by NXT, and the related amount which was previously recorded in contributed capital, is recognized as an increase in the recorded value of the common shares of the Company.

## **Income (Loss) Per Share**

Basic income (loss) per share amounts are calculated by dividing net income (loss) by the weighted average number of common shares that are outstanding for the fiscal period. Shares issued during the period are weighted for the portion of the period that the shares were outstanding. Diluted income per share, in periods when NXT has net income, is computed using the treasury stock method, whereby the weighted average number of shares outstanding is increased to include any additional shares that would be issued from the assumed exercise of stock options and common share purchase warrants. The incremental number of shares added under the treasury stock method assumes that outstanding stock options and warrants that are exercisable at exercise prices below the Company's average market price (i.e. they were "in-the-money") for the applicable fiscal period are exercised and then that number of

# NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2020, 2019 and 2018

(Expressed in Canadian dollars unless otherwise stated)

incremental shares is reduced by the number of shares that could have been repurchased by the Company from the issuance proceeds, using the average market price of the Company's shares for the applicable fiscal period.

No addition to the basic number of shares is made when calculating the diluted number of shares if the diluted per share amounts become anti-dilutive (such as occurs in the case where there is a net loss for the period).

## Revenue

The performance obligation for NXT is the acquisition, processing, interpretation and integration of Stress Field Detection (SFD<sup>®</sup>) data. Revenue from the sale of SFD<sup>®</sup> survey contracts (excluding of any related foreign value added taxes) is recognized over time by measuring the progress toward satisfaction of its performance obligation to the customer. All funds received or invoiced in advance of recognition of revenue are reflected as contract obligations and classified as a current liability on our balance sheet.

The Company uses direct survey costs as the input measure to recognize revenue in any fiscal period. The percentage of direct survey costs incurred to date over the total expected survey costs to be incurred, provides an appropriate measure of the stage of the performance obligation being satisfied over time.

## Leases

On January 1, 2019, NXT adopted ASC Topic 842, Leases ("Topic 842") and related amendments, using the modified retrospective approach recognizing a cumulative effect adjustment at the beginning of the reporting period in which Topic 842 was applied. Results for reporting periods beginning after January 1, 2019, are presented in accordance with Topic 842, while prior periods have not been restated and are reported in accordance with ASC Topic 840, Leases ("Topic 840"). On transition, NXT elected certain practical expedients permitted under Topic 842 which include:

- a) No reassessment of the classification of leases previously assessed under Topic 840.
- b) The use of hindsight in determining the lease term where the contract contains terms to extend or terminate the lease.

The adoption of Topic 842 resulted in the initial recognition of right-of-use assets of approximately \$3.5 million, current lease liabilities of approximately \$0.7 million, and non-current lease liabilities of approximately \$3.4 million as at January 1, 2019.

The policy and disclosures required under Topic 842 are included in Note 13, Leases.

## Government grants

Government grants are recognized when there is reasonable assurance that the grant will be received, and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as an expense reduction in the period in which the costs are incurred. Where the grant relates to an asset, it is recognized as a reduction to the net book value of the related asset and then subsequently in net loss over the expected useful life of the related asset through lower charges to depreciation and



# NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2020, 2019 and 2018

(Expressed in Canadian dollars unless otherwise stated)

impairment. During the year ended December 31, 2020, the Company received government grants through the Canada Emergency Wage Subsidy (“CEWS”) for \$292,161 and Canada Emergency Rent Subsidy (“CERS”) for \$58,526.

### 3. Short-term investments

Short-term investments consist of GIC’s with originally maturity dates of 90 days to one year from the date of purchase. As at December 31, 2020 and 2019 all GIC’s had less than one year left before maturity. For December 31, 2020, interest rates ranged from 0.50% to 1.75%. For December 31, 2019, interest rates ranged from 1.70% to 2.15%.

Days to maturity	December 31, 2020	December 31, 2019
Less than 90 days	\$ 191,261	\$ 1,754,302
91 to 183 days	-	1,218,724
184 days to one year	150,000	808,486
	341,261	3,781,512

### 4. Accounts Receivable

Accounts receivable are all current as at December 31, 2020.

	December 31, 2020	December 31, 2019
Trade receivables	\$ 804,059	\$1,297,792
Other receivables	161,489	86,523
	965,548	1,384,315
Allowance for doubtful accounts	-	-
Net accounts receivable	965,548	1,384,315

The entire trade receivable is with one client.

### 5. Note Receivable

On September 6, 2019, NXT and Alberta Green Ventures Limited Partnership (“AGV”) entered into a loan arrangement whereby NXT loaned to AGV US\$250,000 for the purpose of providing AGV with additional funds necessary to continue advancing the common objectives of the parties under the Co-operation Agreement and the Sales Representative Agreement. The note receivable was fully collected in the year.

# NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2020, 2019 and 2018

(Expressed in Canadian dollars unless otherwise stated)

## 6. Deposits

Security deposits have been made to the lessors of the office building and the aircraft. The aircraft deposit is held in United States dollars.

	December 31, 2020	December 31, 2019
Building	\$ 43,309	\$ 43,309
Aircraft	483,252	492,245
	526,561	535,554

## 7. Property and equipment

	December 31, 2020		
	Cost Base	Accumulated amortization	Net book value
Survey equipment	\$892,637	\$676,442	\$216,195
Computers and software	1,265,045	1,232,844	32,200
Furniture and other equipment	528,419	513,001	15,419
Leasehold improvements	1,084,573	641,061	443,512
	3,770,674	3,063,348	707,326

  

	December 31, 2019		
	Cost Base	Accumulated amortization	Net book value
Survey equipment	\$892,637	\$646,953	\$245,684
Computers and software	1,265,045	1,219,045	46,000
Furniture and other equipment	528,419	509,146	19,273
Leasehold improvements	965,108	598,418	366,690
	3,651,209	2,973,562	677,647

# NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2020, 2019 and 2018

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## 8. Right of use assets

	December 31, 2020		
	Cost Base	Accumulated Amortization	Right of Use
Aircraft	\$1,578,774	\$556,891	\$1,021,883
Office Building	1,799,626	415,559	1,384,067
Printer	17,794	8,314	9,480
Office equipment	-	-	-
	<u>3,396,194</u>	<u>980,794</u>	<u>2,415,430</u>

	December 31, 2019		
	Cost Base	Accumulated Amortization	Right of Use
Aircraft	\$1,578,774	\$256,778	\$1,321,996
Office Building	1,799,626	197,426	1,602,200
Printer	17,794	3,973	13,821
Office equipment	139,725	13,973	125,752
	<u>3,535,919</u>	<u>472,150</u>	<u>3,063,769</u>

## 9. Intellectual property

During 2015, NXT acquired the rights to the SFD® technology for use in the exploration of hydrocarbons from Mr. George Liszicasz, the Chief Executive Officer of the Company and Director, and recorded the acquisition as an intellectual property asset on the balance sheet. The asset was recorded at the fair value of the consideration transferred, including the related tax effect of approximately \$25.3 million.

The asset is being amortized on a straight line basis over its estimated useful life of 15 years. The annual amortization expense expected to be recognized in each of the next five years is approximately \$1.7 million per year for a 5 year aggregate total of \$8.5 million.

	December 31, 2020	December 31, 2019
Intellectual property acquired	\$ 25,271,000	\$ 25,271,000
Accumulated amortization	(8,985,667)	(7,300,933)
	<u>16,285,333</u>	<u>17,970,067</u>

# NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements  
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## 10. Accounts payable and accrued liabilities

	December 31, 2020	December 31, 2019
Accrued liabilities related to:		
Consultants and professional fees	\$183,920	\$311,635
Payroll	120,318	-
Vacation Accrued	71,699	106,529
	375,937	418,164
Trade payables and other	64,601	30,764
	440,538	448,928

## 11. Contract Obligations

In December, 2020 the Company received a deposit of US\$100,000 to sell pre-existing SFD® data. The SFD® data is expected to be delivered to the customer in the second quarter of 2021.

In 2019, the Company received a non-refundable deposit of \$100,000USD from AGV to be applied to an SFD® survey which was to be completed by June 30, 2020. The deposit was forfeited by AGV on June 30, 2020 as AGV did not complete a SFD® survey prior to this date. The amount was recognized as other revenue within the year (Note 21).

	December 31, 2020	December 31, 2019
Contract obligations	\$ 127,507	\$ 131,386

# NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

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## 12. Asset Retirement Obligation

Asset retirement obligations ("ARO") relate to minor non-operated interests in oil and natural gas wells in which NXT has outstanding abandonment and reclamation obligations in accordance with government regulations. The estimated future abandonment liability is based on estimates of the future timing and costs to abandon, remediate and reclaim the well sites within the next five years. The net present value of the ARO is as noted below, and has been calculated using an inflation rate of 2.0% and discounted using a credit-adjusted risk-free interest rate of 2.5%.

	2020	2019	2018
ARO balance, beginning of the year	\$ 21,481	\$ 26,778	\$56,702
Accretion expense	2,069	2,069	2,069
Costs incurred	(809)	(7,366)	-
Change in ARO estimates	-	-	(31,993)
ARO balance, end of the year	22,741	21,481	26,778

## 13. Lease obligation

	December 31, 2020	December 31, 2019
Aircraft	\$1,220,425	\$ 1,680,103
Office Building	1,440,085	1,669,953
Printer	9,232	13,573
Office equipment	-	42,515
	2,669,742	3,406,144
Current Portion of lease obligations	(773,465)	(736,408)
Long-term lease obligations	1,896,277	2,669,736

### Maturity of lease liabilities:

2021	\$1,018,789
2022	1,135,510
2023	367,185
2024	367,185
2025	275,389
Total lease payments	3,164,058
Less imputed interest	(494,316)
Total discounted lease payments	2,669,742
Current portion of lease obligations	(773,465)
Non-current portion of lease obligations	1,896,277

In June 2020, the Company exercised an option for an early buy-out option on its office equipment lease for \$20,000.

# NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

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## 14. Commitments

The table below is the non-lease operating cost components associated with the costs of the building lease.

<b>For the fiscal year ending December 31,</b>	<b>Office Premises</b>
2021	\$ 228,091
2022	228,091
2023	228,091
2024	228,091
2025	171,069
	<hr/> 1,083,433 <hr/>

In April 2017, NXT completed a sale and leaseback agreement of its aircraft with a Calgary based international aircraft services organization. The terms of the agreement resulted in NXT selling its Cessna Citation aircraft that was purchased in 2015 for US\$2,000,000 for the sum of US\$2,300,000. NXT has leased the aircraft over an initial term of 60 months and retains all existing operating rights and obligations. Net proceeds to NXT from the sale were approximately \$2.7 million, after payment of all commissions and fees. The net book value of the asset of \$2.4 million was derecognized and the resulting gain on disposition of \$776,504 was deferred. In 2017 and 2018 the amortized gain of \$155,301 was recognized as a reduction to the Company's lease expense in the Consolidated Statement of Income and Comprehensive Income (Loss).

# NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

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## 15. Common shares

The Company is authorized to issue an unlimited number of common shares, of which the following are issued and outstanding:

	December 31, 2020		For the years ended December 31, 2019	
	# of shares	\$ amount	# of shares	\$ amount
As at the beginning of the year	64,406,891	\$95,313,064	68,573,558	\$96,656,248
Issuance for Employee Stock Purchase Plan	30,899	14,059	-	-
Shares retired during the year	-	-	(4,166,667)	(1,343,184)
As at the end of the year	64,437,790	95,327,123	64,406,891	95,313,064

	For the Year Ended December 31, 2018	
	# of shares	\$ amount
As at the beginning of the year	58,161,133	\$88,121,286
Shares issued during the year:		
Issuance of Common Stock from the Private Placement	10,264,946	8,387,451
Finder's fee	140,812	136,003
Exercise of stock options	6,667	5,067
Transfer from contributed capital on the exercise of stock options	-	6,441
As at the end of the year	68,573,558	96,656,248

In 2019 the Company purchased 4,166,667 common shares in the capital of the Company at a price of \$0.30 per common share for total gross costs of \$1.25 million plus related costs of \$93,184 through a targeted issuer bid. The 4,166,667 shares were cancelled immediately after they were purchased.

In July 2018, the company completed a private placement. In total, AGV purchased 10,264,946 Units at a price of \$0.924 per Unit for total gross proceeds of approximately \$9,484,810 comprising one share and a third of a warrant. All of AGV's 3,421,648 warrants expired as of October 31, 2019. A finder's fee of 3% of the total amount of the Private Placement, which was paid one half in shares and one half in cash in 2018.

# NXT ENERGY SOLUTIONS INC.

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## 16. Earnings (Loss) per share

	For the years ended December 31,		
	2020	2019	2018
Net income (loss) for the year	\$(5,999,675)	\$3,772,908	\$(6,968,511)
Weighted average number of shares outstanding for the year:			
Basic	64,409,170	68,156,059	65,455,325
Diluted	64,409,170	68,156,059	65,455,325
Net Income (loss) per share – Basic	\$(0.09)	\$0.06	\$(0.11)
Net Income (loss) per share – Diluted	\$(0.09)	\$0.06	\$(0.11)

In years in which a loss results, all outstanding stock options are excluded from the diluted loss per share calculations as their effect is anti-dilutive.

## 17. Share based compensation

The Company has an equity compensation program in place for its executives, employees and directors. Executives and employees are given equity compensation grants that vest based on a recipient's continued employment. The Company's stock-based compensation awards outstanding as at December 31, 2020, include stock-options, restricted stock units ("RSUs") and deferred share units ("DSUs"). The following tables provide information about stock option, RSU and DSU activity.

	For the years ended December 31,		
	2020	2019	2018
Stock Option Expense	\$ 34,223	\$ 43,809	\$ 386,154
Deferred Share Units	15,000	-	-
Restricted Stock Units	111,060	-	-
Employee Share Purchase Plan	8,133	-	-
Total Stock Based Compensation Expense	168,416	43,809	386,154



# NXT ENERGY SOLUTIONS INC.

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## Stock Options:

The following is a summary of stock options which are outstanding as at December 31, 2020.

<b>Exercise price per share</b>	<b># of options outstanding</b>	<b>#of options exercisable</b>	<b>Average remaining contractual life (in years)</b>
\$0.51	16,000	16,000	4.7
\$0.52	100,000	100,000	3.5
\$0.55	30,000	30,000	4.1
\$0.59	150,000	150,000	2.8
\$1.45	37,500	37,500	1.0
\$1.48	37,500	37,500	0.5
\$1.50	50,000	50,000	0.6
	<b>421,000</b>	<b>421,000</b>	<b>2.5</b>

A continuity of the number of stock options which are outstanding at the end of the current year and as at the prior fiscal years ended December 31, 2019 and 2018 is as follows:

	<b>For the year ended, December 31, 2020</b>		<b>For the year ended, December 31, 2019</b>	
	<b># of stock options</b>	<b>weighted average exercise price</b>	<b># of stock options</b>	<b>weighted average exercise price</b>
Options outstanding, start of the year	1,169,500	\$1.48	1,297,000	\$1.58
Granted	46,000	\$0.54	100,000	\$0.52
Expired	(794,500)	\$(1.77)	(47,500)	\$(1.51)
Forfeited	-	-	(180,000)	\$(1.70)
Options outstanding, end of the year	421,000	\$0.83	1,169,500	\$1.48
Options exercisable, end of the year	421,000	\$0.83	1,119,500	\$1.52

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	<b>For the year ended, December 31, 2018</b>	
	# of stock options	weighted average exercise price
Options outstanding, start of the year	1,648,667	\$1.60
Granted	1,150,000	\$1.06
Exercised	(6,667)	\$0.76
Expired	(65,000)	(\$1.17)
Forfeited	(1,430,000)	(\$1.21)
Options outstanding, end of the year	1,297,000	\$1.58
Options exercisable, end of the year	1,197,000	\$1.67

Stock options granted generally expire, if unexercised, five years from the date granted and entitlement to exercise them generally vests at a rate of one-third at the end of each of the first three years following the date of grant.

Stock based compensation expense ("SBCE") is calculated based on the fair value attributed to grants of stock options using the Black-Scholes valuation model and utilizing the following weighted average assumptions:

<b>For the year ended</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>
Expected dividends paid per common share	Nil	Nil	Nil
Expected life in years	5.0	5.0	5.0
Weighted average expected volatility in the price of common shares	138%	65%	65%
Weighted average risk free interest rate	1.12%	1.68%	1.75%
Weighted average fair market value per share at grant date	\$0.54	\$0.52	\$1.06
Intrinsic (or "in-the-money") value per share of options exercised	\$ -	\$ -	\$0.59

## Deferred Stock Units ("DSUs"):

The Company's first grant of DSU's began in 2020. A continuity of the number of DSUs which are outstanding at the end of the current year is as follows:

	<b>2020</b>
DSUs outstanding, start of the year	-
Granted	37,354
Closing balance	37,354

The DSUs plan is a long-term incentive plan that permits the grant of DSUs to qualified directors. DSUs entitle the holder to receive the underlying number of shares of the Company's Common Stock upon

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vesting of such units. DSUs granted under the DSUs plan are to be settled at the retirement, resignation or death of the Board member holding the DSUs.

## Restricted Stock Units ("RSUs"):

The Company's first grant of RSU's began in 2020. RSUs entitle the holder to receive, at the option of the Company, either the underlying number of shares of the Company's Common Stock upon vesting of such units or a cash payment equal to the value of the underlying shares. The RSUs vest at a rate of one-third at the end of each of the first three years following the date of grant. The Company intends to settle the RSUs in cash. In the year ended December 31, 2020, the Company granted 1,200,000 RSU's to employees and officers.

A continuity of the number of RSUs, including fair value ("FV") which are outstanding at the end of the current year is as follows:

	<b>2020</b>	
	# of RSUs	FV/Unit
RSUs outstanding, start of the year	-	\$ -
Granted	1,200,000	\$ 0.45
Converted	-	\$ -
Forfeited	-	\$ -
RSUs outstanding, end of the year	1,200,000	\$ 0.79

## Employee Share Purchase Plan ("ESP Plan"):

On August 25, 2020, shareholders of the Company and subsequently the Toronto Stock Exchange (the "TSX") approved, the ESP Plan. The ESP Plan allows employees and other individuals determined by the Board to be eligible to contribute a minimum of 1% and a maximum of 10% of their earnings to the plan for the purchase of common shares in the capital of the Company, of which the Company will make an equal contribution. Common shares contributed by the Company may be issued from treasury or acquired through the facilities of the TSX. During 2020 the Company elected to issue common shares from treasury.

	<b>2020</b>	
	# of shares	\$ amount
Purchased by employees	16,686	\$ 7,592
Matched by the Company	14,213	6,467
Total Common Shares issued	30,899	14,059

The Company will also match 100% of the employee contributions of up to 10% of their earnings in the first year of the plan if the employee does not withdrawal common shares from the ESP Plan in the first year of their participation, up to \$15,000 per employee (the "Bonus Match"). As at December 31, 2020 the Company has accrued \$1,666 for the Bonus Match.

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Effective for the year ended December 31, 2020, the Company has presented stock based compensation expense of \$168,416 within general and administrative expenses and has recorded an immaterial correction to classify the stock based compensation expense for the 2019 and 2018 comparative years of \$43,809 and \$386,154, respectively, to be presented within general and administrative expenses. While ASC 718 does not identify a specific line item in the income statement for presentation of the expense related to share based compensation arrangements, the SEC has released guidance under SAB Topic 14.F that the expense related to share-based payment arrangements should be presented in the same line or lines as cash compensation paid to the same employees. The Company's presentation conforms to this guidance.

## 18. Income Tax Expense

NXT periodically earns revenues while operating outside of Canada in foreign jurisdictions. Payments made to NXT for services rendered to clients and branch offices in certain countries may be subject to foreign income and withholding taxes. Such taxes incurred are only recoverable in certain limited circumstances, including potential utilization in Canada as a foreign tax credit, or against future taxable earnings from the foreign jurisdictions.

Income tax expense is different from the expected amount that would be computed by applying the statutory Canadian federal and provincial income tax rates to NXT's income (loss) before income taxes as follows:

	For the years ended December 31,		
	2020	2019	2018
Income (loss) before income taxes	\$(5,999,675)	\$3,772,908	\$(6,968,551)
Canadian statutory income tax rate	24.0 %	26.5 %	27.0 %
Income tax (recovery) at statutory income tax rate	(1,439,922)	999,821	(1,881,509)
Effect of non- deductible expenses and other items:			
Stock-based compensation and other expenses	44,225	11,609	99,919
Change in statutory tax rates	(131,242)	918,821	-
Foreign exchange adjustments	29,910	82,433	(131,555)
Other (expired losses)	258,091	43,592	(221,978)
	(1,238,938)	2,056,276	(2,135,123)
Change in valuation allowance	1,238,938	(2,056,276)	2,135,123
Income tax expense (recovery)	-	-	-

Effective July 1, 2020, the Province of Alberta decreased its corporate tax rate from 10% to 8%.

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A valuation allowance has been provided for the Company's deferred income tax assets due to uncertainty regarding the amount and timing of their potential future utilization, as follows:

	2020	2019	2018
Net operating losses carried forward:			
Canada (expiration dates 2027 to 2040)	\$ 7,809,363	\$ 6,840,817	\$ 9,563,701
USA (expiration dates 2021 to 2026)	1,223,212	1,494,711	1,569,976
Timing differences on property & equipment, Right of Use Assets, Lease obligations and financing costs	1,944,011	1,810,789	2,109,557
SRED Expenditures	369,522	348,341	396,020
Foreign Tax Credit	285,772	285,772	371,133
	11,631,880	10,780,430	14,010,387
Intellectual property	(3,745,627)	(4,133,115)	(5,306,796)
	7,886,253	6,647,315	8,703,591
Less valuation allowance	(7,886,253)	(6,647,315)	(8,703,591)
	-	-	-

## 19. Financial instruments

### 1) Non-derivative financial instruments:

The Company's non-derivative financial instruments consist of cash and cash equivalents, short-term investments, accounts receivable, note receivable, deposits, accounts payables and accrued liabilities and lease obligations. The carrying value of these financial instruments, excluding leases, approximates their fair values due to their short terms to maturity.

#### Credit Risk

Credit risk arises from the potential that the Company may incur a loss if counterparty to a financial instrument fails to meet its obligation in accordance with agreed terms. The Company's financial instruments that are exposed to concentrations of credit risk consist primarily of cash and cash equivalents, short-term investments and accounts receivable. The carrying value of cash and cash equivalents, short-term investments, and accounts receivable reflects management's assessment of credit risk. At December 31, 2020, cash and cash equivalents and short-term investments included balances in bank accounts, term deposits and guaranteed investment certificates, placed with financial institutions with investment grade credit ratings. The majority of the Company's accounts receivable relate to sales to one customer in Nigeria and is exposed to foreign country credit risks. The Company manages this credit risk by requiring advance payments before entering into certain contract milestones and when possible accounts receivable insurance.

#### Foreign Exchange Risk

The Company is exposed to foreign exchange risk in relation to its holding of significant US\$ balances in cash and cash equivalents, short-term investments, accounts receivable, note receivable, deposits, accounts payables and accrued liabilities and entering into United States dollar revenue contracts. To mitigate exposure to fluctuations in foreign exchange, the Company does not currently enter into hedging

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contracts, but uses strategies to reduce the volatility of United States Dollar assets including converting excess United States dollars to Canadian dollars. As at December 31, 2020, the Company held net U.S dollar assets totaling US\$2,164,285. Accordingly, a hypothetical 10% change in the value of one United States dollar expressed in Canadian dollars as at December 31, 2020 would have had an approximately \$276,000 effect on the unrealized foreign exchange gain or loss for the year.

## 2) Derivative financial instruments

As at December 31, 2020 and December 31, 2019, the Company held no derivative financial instruments.

## 20. Change in non-cash working capital

The changes in non-cash working capital balances are comprised of:

	For the years ended December 31,		
	2020	2019	2018
Accounts receivable	\$406,114	(\$1,339,408)	(\$1,252)
Note receivable	324,700	(332,175)	-
Prepaid expenses and deposits	19,600	(31,973)	42,204
Accounts payable and accrued liabilities	(120,767)	104,745	(899,122)
Contractual obligations	(3,878)	134,116	-
	625,769	(1,464,695)	(858,170)
Portion attributable to:			
Operating activities	625,769	(1,464,695)	(858,170)
Financing activities	-	-	-
Investing activities	-	-	-
	625,769	(1,464,695)	(858,170)

## 21. Geographic information

The Company generates revenue from its SFD® survey projects that assists the Company's clients in the determination of where to focus their hydrocarbon exploration decisions concerning land commitments, data acquisition expenditures and prospect prioritization on areas with the greatest potential. NXT conducts all of its survey operations from its head office in Canada, and occasionally maintains administrative offices in foreign locations if and when needed. Revenue fluctuations are a normal part of SFD® survey system sales and can vary significantly year-over-year.

Revenues for the year ended December 31, 2020 were the result of the forfeiture of the non-refundable deposit from AGV. See Note 11.

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Revenues by geographic area were generated solely in Nigeria during 2019, entirely from a single client.

	<b>For the years ended December 31,</b>		
	<b>2020</b>	<b>2019</b>	<b>2018</b>
Nigeria	\$ -	\$11,976,149	\$ -
Other	136,566	-	-
	136,566	11,976,149	-

## 22. Survey Expenses

Survey Expenses include the following:

	<b>2020</b>	<b>2019</b>	<b>2018</b>
<b>Aircraft Operations</b>			
Charter hire reimbursements	\$ (662,383)	\$ (613,038)	\$ (698,211)
Lease payments	433,618	400,847	454,729
Operating expenses	1,320,352	1,459,536	1,347,428
	1,091,587	1,247,345	1,103,946
<b>Survey Projects</b>			
	-	1,363,741	-
	1,091,587	2,611,086	1,103,946

## 23. Government Grants

During the year ended December 31, 2020, the Company received government grants through CEWS and the CERS. The CEWS and CERS were recognized as a reduction to general and administrative expenses.

	<b>For the years ended</b>	
	<b>December 31,</b>	<b>December 31,</b>
	<b>2020</b>	<b>2019</b>
CEWS	\$ 292,161	\$ -
CERS	58,526	-
Government grants recognized	\$ 350,687	\$ -

# NXT ENERGY SOLUTIONS INC.

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## 24. Other related party transactions

One of the members of NXT's Board of Directors is a partner in a law firm which provides legal advice to NXT. Legal fees (including costs related to share issuances) incurred with this firm were as follows:

	2020	2019	2018
Legal Fees	\$ 224,479	\$ 276,261	\$249,218

Accounts payable and accrued liabilities includes a total of \$1,570 (\$146,197 as at December 31, 2019) payable to this law firm. A company owned by a family member of an executive officer was contracted to provide design services to the Company for a total cost of US\$3,000.

## 25. Gain on extinguishment of liability

In 2018 NXT determined that liabilities it had recorded before 2005 were no longer payable. As a result a gain of \$185,661 has been recognized on the extinguishment of the liability. No cash was paid.