

# **ANNUAL REPORT**

As at and for the year ended December 31, 2019



# Message from the President & CEO

April 13, 2020

First, I want to convey my sincere hope that everyone is well and continues to stay healthy at this difficult time.

2019 was a successful year for NXT. Our financial results included \$4.1 million of operating cash flow and net income of \$3.77 million or 6 cents per share derived primarily from the successful completion of the US\$8.9 million Nigerian SFD® survey of which 94% has been paid. The survey was both a financial and a technical success defined by successful drilling results on SFD® recommendations in multiple locations, the recent endorsement of the SFD® technology by respected agencies in Nigeria, and completion of additional R&D milestones.

NXT completed the Nigerian 5,000 line km SFD® survey in record time and we were able to recommend eight primary anomalies in April 2019. Soon after, drilling commenced at a location where a recommended SFD® anomaly coincided with one of the top seismic prospects and a well was successfully completed in late 2019. Preliminary results demonstrate that when two independent tools (seismic and SFD®), operating on different physical principles, recommend the same areas as prospective, the chance of success increases considerably. As a result of this, the Department of Petroleum Resources ("DPR"), a department under the Federal Republic of Nigeria's Ministry of Petroleum Resources responsible for the sustainable development of Nigeria's oil and gas resources, provided a written recommendation of NXT's SFD® technology, noting specifically; "in line with Federal Government aspiration to increase its Oil and Gas reserves base at a considerable reduced cost, risk and optimize exploration cycle, the Stress Field Detection SFD® technology is hereby adopted and recommended to be deployed as an independent data exploration tool for hydrocarbon exploration to identify and rank prospectlevel leads to focus exploration efforts in the Nigerian Oil and Gas industry". The DPR recommendation of our SFD® survey method is a significant milestone for NXT reflecting the superior value delivered in Nigeria by NXT and its partner, PE Energy, at a low cost and on an expedited time line. We expect that the recommendation from the Federal Republic of Nigeria, a regional leader in technological innovation, to resonate broadly throughout the African oil and gas industry. The adaptation of SFD® in the Nigerian exploration programs will expose the technology to multiple international oil companies which can be a game changer for NXT.

With respect to our 2017 SFD® Gulf of Mexico survey over the 2.1 bid-round offshore blocks, one of the areas indicated by SFD® as prospective has now been drilled by third parties. A commercial discovery resulted with early estimates of in place reserves greater than 200 million barrels of oil equivalent (MMBOE). Additionally, and perhaps just as important, from a capital expenditure allocation perspective, another seismic prospect, considered non-prospective by NXT, was drilled as part of the same campaign and was declared unsuccessful. Both positive and negative recommendations for prospects are important elements of the SFD methodology. The announcements concerning these drilling activities were reported by internationally recognized upstream data providers starting late 2019. The SFD® data for the 2.1 bid-round offshore blocks was submitted to, and has been available from, the National Hydrocarbon Commission of Mexico since mid-2018. These results highlight the value of adding SFD® to an upstream work program and evidences the efficacy of our geophysical method in recommending prospects with potential for hydrocarbon traps in conjunction with best available accumulated data. Under

NXT's Business Plan, effective integration of data and interpretive analysis will be important aspects of NXT's value equation. Drilling activities over SFD® recommendations are ongoing in numerous countries and NXT shall provide further updates as warranted.

On the R&D front, NXT received confirmation of a patent granted from the European Patent Office. This brings the total number of countries granting the patent to 44. A final step is for validation of the SFD® technology patent in select European countries. In addition, the Company is designing and building a new fleet of sensor systems for improved efficiency, better resolution and increased capacity.

In the first quarter of 2020, NXT finalized the first phase of its survey over the Queen Charlotte Fault ("QCF") located offshore British Columbia. The purpose of the continuing QCF study is to identify seismically active areas and to differentiate subsurface stress states in deep water settings. The Company is in the process of evaluating the acquired SFD® data.

In the month before travel restrictions were brought on by the novel coronavirus (2019-nCoV/COVID-19), my team and I completed a broad scale international market business development effort which included a signed memorandum of understanding with an independent oil company with interests in East-Central Africa. Though currently there are several challenges facing our world and industry, NXT is focused on minimizing risks and continues to advance discussions for SFD® survey opportunities within Nigeria, East-Central Africa, Mexico, and selected Asian countries primarily via video conferences. Our clients are still working and there are continuous discussions regarding the projects.

I also want to explain where the Company is positioned in the oil and gas sector today and what impact the current upstream value crisis is having on our business development. NXT has focused most of its business development on National Oil Companies ("NOCs") given their longer strategic planning time horizon, large fiscal resources, general stability, available land base and their relative insulation from the day to day happenings of the hydrocarbon markets. Our contract history to date, while slow and measured, has demonstrated the success of this effort. In many countries, the NOCs contribute significantly to the nation's economic well-being over the long term which means they have multiple reasons to continue with their exploration and production activities. Given the current fiscal state of the industry, they have to find ways to explore and produce more effectively and at lower costs. NXT provides the NOCs with a proven and patented upstream geophysical method that can be rapidly deployed at a highly competitive cost with the potential of significantly enhancing success while fitting effectively within the established exploration cycle.

In conclusion, notwithstanding COVID-19 and the unstable state of the hydrocarbon sector, we are advancing our initiatives in Africa, Asia and Latin America to secure SFD® surveys. We will continue delivering results and growth for 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 in these trying times. We wish the best of health to you and your families.

Best regards,

George Liszicasz President & CEO NXT Energy Solutions Inc.



**Management's Discussion and Analysis** 

For the year ended December 31, 2019

# **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 April 13, 2020 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, 2019. This MD&A covers the unaudited three month and twelve month periods ended December 31, 2019, with comparative totals for the unaudited three month and twelve month periods ended December 31, 2018.

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 in this MD&A constitute forward-looking information under applicable securities laws. These statements typically contain words such as "intends", "plans", "anticipates", "expects", "scheduled", "estimates", "believes", "forecasts" or other variations (including negative variations) of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved and relate primarily to:

- the Nigerian SFD® Survey (as defined below), the Co-operation Agreement (as defined below) and the Loan Arrangement (as defined below), and the performance and satisfaction of the obligations thereunder (including with respect to amounts payable to NXT);
- estimates related to our future financial position and liquidity; and
- general business strategies and objectives.

This 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).

These forward-looking statements are based on current expectations and are subject to a wide range of known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or

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achievements expressed or implied by such forward-looking statements. Known risks include, but are not limited to, risks related to:

- the ability of management to execute its business plan;
- health, safety and the environment (including risks related the novel coronavirus);
- the emergence of alternative competitive technologies;
- our ability to protect and maintain our intellectual property 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).

Although the Company has attempted to identify important factors and risks that could cause actual actions, events or results to differ materially from those described in the forward-looking statements, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. 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.

For more information relating to risks, see the section titled "Summary of Operating Results – 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 law, NXT assumes no obligation to update forward-looking information should circumstances or the Company's estimates or opinions change. Accordingly, the reader is cautioned not to place undue reliance on forward-looking statements.

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

NXT's accompanying consolidated financial statements are prepared in accordance with accounting principles generally accepted 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 improve its ability to assess liquidity at a point in time.

#### **Other Calculations**

Fair market values and market capitalizations referenced herein have been calculated in accordance with section 1.11(1) of National Instrument 62-104 *Take-over Bids and Issuer Bids* and section 1.1 of Multilateral Instrument 61-101 *Protection of Minority Security Holders in Special Transactions*, respectively.

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### **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 Energy Solutions Inc. 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 Q4-19 and YE-19 include are summarized below.

- In Q3-19 the Company completed its Nigerian SFD® survey for approximately US\$8.9 Million with PE Energy Limited ("PE"), a Nigerian oil and gas service company. PE had a contract with the Nigerian National Petroleum Company ("NNPC"), to provide 5,000-line kilometers of SFD® surveys in Nigeria.
- As of the date of this MD&A, the Company has received a total of US\$8.4 million payments in cash from PE for the SFD® survey in Nigeria, including US\$1.9 million in the Q4-19 and an additional US\$0.47 million in the first quarter of 2020. The final payment for contracted holdbacks amount to approximately \$0.5 million USD.
- NXT received confirmation of a patent granted from the European Patent Office. This brings the total number of countries granting the patent to 44. The final step is for the validation process of the SFD® technology patent in select European countries.
- In Q4-19 the Company completed the C\$1,250,000 targeted issuer bid, purchasing for cancellation 4,166,667 common shares in the capital of the Company representing approximately 6.08% of the total outstanding Common Shares as of November 14, 2019, at a price of C\$0.30 per Common Share.
- In February 2019, NXT entered into a Co-operative Agreement with Alberta Green Ventures Limited Partnership ("AGV"), for AGV to bring to proposal up to three SFD® surveys for cooperation with the Company within two years. The Co-operative Agreement is based on a cost-plus formula and a gross overriding royalty interest in oil and gas production arising on lands subject to the surveys. The Company received a US\$100,000 non-refundable deposit paid in connection with the Co-operative Agreement in Q2-19. Pursuant to the Co-operation Agreement, the deadline to complete at least one of three SFD® surveys is June 30, 2020.
- In Q3-2019, the Company advanced US\$250,000 (the "Principal Amount") to AGV for the purpose of furthering the shared objectives of NXT and AGV under the Co-operation Agreement (the "Loan Arrangement"). On April 13, 2020, NXT elected to receive and directed AGV to deliver US\$250,000 as repayment of the Principal Amount (the "Principal Repayment).
- Common share purchase warrants held by AGV have expired as of October 31, 2019.
- Cash and short-term investments at the end of the YE-19 were \$6.64 million.
- There was \$11.98 million of survey revenues recorded in YE-19.

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- Net income of \$3.77 million was recorded for YE-19, including amortization expense of \$1.78 million.
- A net loss of \$1.78 million was recorded for Q4-19, including amortization expense of \$0.49 million.
- Operating activities provided \$4.08 million of cash during YE-19 and net cash used for financing activities was \$1.39 million.
- Operating activities provided \$1.29 million of cash during Q4-19 and net cash used for financing activities was \$1.35 million.
- Net income per common share for YE-19 was \$0.06 basic and \$0.06 fully diluted.
- Net loss per common share for Q4-19 was (\$0.03) basic and (0.03) fully diluted.
- General and administrative costs for YE-19 as compared to YE-18 have been reduced by \$0.50 million or 13% mostly due a reduction in business development costs, lower headcount and costs and certain expenditures being recognized as direct survey costs, offset by higher professional fees and information technology costs.
- General and administrative costs for Q4-19 as compared to Q4-18 have increased by \$0.05 million or 6%, mostly due to an increase in business development offset by a reduction in headcount.

#### **Selected Annual Information**

(\$M except per share)	YE-19	YE-18	YE-17
Total Assets	\$ 30,692,941	\$ 25,264,268	\$ 23,920,991
Long-term debt	2,691,217	510,661	741,408
Sales	11,976,149	-	-
Net earnings	3,772,908	(6,968,511)	(8,970,398)
Net earnings per share			
Basic	\$0.06	\$(0.11)	\$(0.16)
Diluted	\$0.06	\$(0.11)	\$(0.16)

# **Discussion of Operations**

#### **Co-operation Agreement**

In February 2019, NXT entered into the Co-operation Agreement with AGV, one of NXT's largest shareholders, to complete up to three SFD® surveys within two years. The compensation to be received by NXT for services rendered under the Co-operation Agreement is based on a cost plus formula and a gross overriding royalty interest in oil and gas production arising on lands surveyed, with US\$100,000 paid in advance as a non-refundable deposit.

Under the Co-operation Agreement, AGV committed to completing at least two SFD® surveys in North America and an additional SFD® survey internationally. The first SFD® survey was to be completed by August 31, 2019, with NXT and AGV agreeing to extend such deadline to December 31, 2019, and to further extend such deadline to June 30, 2020 (such further extension provided under the terms of the Targeted Issuer Bid). If the first SFD® survey is not completed by June 30, 2020, the US\$100,000 non-refundable deposit will be forfeited to NXT. AGV has also committed to completing an exploration drilling program on each of the lands subject to the SFD® surveys within two years of completion of the surveys.

#### Nigerian SFD® Survey

In March 2019, the Company signed an US\$8.9 million contract with PE to provide 5,000 line kilometers of SFD® surveys in Nigeria. As the Nigerian SFD® Survey was the Company's first project in Africa, the Company was required to deliver more than 10,000 pages of documents to NNPC and the Department of Petroleum Resources, a department under Nigeria's Ministry of Petroleum Resources, and complete a test flight as part of the qualification process which took seven months. Data acquisition operations were completed on May 1, 2019 and NXT's recommendations were delivered in Q3-19.

Prior to entering into the Nigerian SFD® Survey contract with PE, the Company conducted significant due diligence to ensure it understood the business environment in Nigeria and was in compliance with applicable laws in each of Canada, the United States of America and Nigeria. The Company also engaged Norton Rose Fulbright Canada LLP and Kreller Group as advisors to provide guidance and to ensure the integrity of its contract with PE, as well as PE's contract with NNPC.

The Company has received payments of US\$8.4 million for the Nigerian SFD® Survey as at the date hereof. The contracted holdback amount of approximately US\$0.5 million is expected to be paid to the Company upon the conclusion of negotiations for additional work under the current contract framework.

The Department of Petroleum Resources (the "DPR"), a department under the Federal Republic of Nigeria's Ministry of Petroleum Resources responsible for the sustainable development of Nigeria's oil and gas resources, provided written confirmation of their recommendation in favour of NXT's SFD® technology based on the recent survey results, noting specifically "in line with federal government aspiration to increase its Oil and Gas reserves base at a considerable reduced cost, risk and optimize exploration cycle, the Stress Field Detection SFD® technology is hereby adopted and recommended to be deployed as an independent data exploration tool for hydrocarbon exploration to identify and rank prospect-level leads to focus exploration efforts in the Nigerian Oil and Gas industry".

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MD&A for the year ended December 31, 2019

#### **Patents**

As of the date of this MD&A, SFD® patents have been granted in Russia (January 2017), Japan (July 2017), Canada (August 2017), Europe (September 2017) and the United States (November 2017), and notices of allowance have been also received from Mexico (July 2017) and China (March 2018), which are areas of prime commercial focus for the Company. NXT has recently received confirmation of a patent granted from the European Patent Office. This brings the total number of countries granting the patent to 44. The final step is for the validation process of the SFD® technology patent in select European countries. This is expected to take several month to complete. The SFD® patents serve an important purpose beyond the protection they provide to the proprietary SFD® technology. Our patents also serve as an independent third-party verification of the scientific principles that form the basis of the SFD® process and its application.

#### **Notes Receivable**

In September 2019, NXT entered into the Loan Arrangement with AGV and advanced to AGV the US\$250,000 Principal Amount, as evidenced by, and governed in accordance with the terms of, a promissory note dated September 6, 2019 (the "Notes Receivable"), for the purpose of providing AGV with additional funds necessary to continue advancing the common objectives of NXT and AGV under the Co-operation Agreement. Pursuant to the Notes Receivable, it was agreed and acknowledged, among other things, that:

- a) AGV was indebted to the Company and unconditionally promised to pay to, or to the order of, the Company on or before December 15, 2019 (the "Repayment Date"), the Principal Amount together with all interest payable at a rate of the greater of 2% and the rate prescribed under the *Income Tax Act* (Canada) from time to time in monthly arrears on the first day of each month commencing October 1, 2019 until the repayment of the Principal Amount in full (the "Interest");
- b) AGV had the right and privilege of prepaying the whole or any portion of the Principal Amount together with the Interest at any time or times without notice, bonus or penalty; and
- c) NXT, in its sole and absolute discretion, was entitled to elect to receive any payment made by AGV in accordance with the Notes Receivable by way of, in whole or in combination: (i) wire transfer or other immediately available funds ("Cash"), or (ii) delivery for cancellation to the Company of the equivalent number of Common Shares having a fair market value equal to the aggregate of such amounts, calculated using the volume weighted average price of the Common Shares as reported and traded on the Toronto Stock Exchange for the five trading days immediately preceding the repayment date (the "5-day VWAP").

On December 13, 2019, the last business and trading day before the Repayment Date, the Company elected to receive and directed AGV to:

a) in respect of the Principal Amount, deliver to the Company for cancellation 543,673 Common Shares, calculated as the product of US\$250,000 being the Principal Amount owing on the last business day before the Repayment Date, and 1.3183, being the daily average US\$/CDN\$ exchange rate as quoted on the Bank of Canada's website for December 13, 2019, the last business day for which a daily average exchange rate was published before the Repayment Date, divided by \$0.6062, being the 5-

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day VWAP, the delivery of such Common Shares to occur subject to and only upon receipt of confirmation from the Company that all necessary regulatory approvals had been received; and

b) in respect of the Interest, pay US\$1,366.12 by way of Cash. AGV paid this amount.

On April 13, 2020, NXT issued a Direction to Pay to AGV in which NXT has revoked the previous Direction to Pay dated December 13, 2019, and has now directed AGV to deliver US\$250,000 as repayment on the Principle Amount. Interest will begin to accrue until the date on which payment in full of all amounts owing pursuant to the Principle Amount are received by NXT.

The Company may change its election if it so decides, in its sole and absolute discretion to receive the Principal Repayment by way of Common Shares by application to the Alberta Securities Commission.

#### Targeted Issuer Bid

Between November 15, 2019 (the "TIB Commencement Date") and December 9, 2019 (the "TIB Completion Date"), NXT purchased for cancellation an aggregate of 4,166,667 Common Shares, representing approximately 6.08% of the 68,573,558 Common Shares outstanding as at the TIB Commencement Date. The purchase price of \$0.30 per Common Share represented a discount of approximately 22.9% relative to the market price of \$0.389 per Common Share as at the TIB Commencement Date. Gross proceeds received by AGV totaled approximately \$1,250,000.00, representing approximately 6.1% of the Company's market capitalization of approximately \$26,675,114.062 as at the TIB Commencement Date.

The terms of the Targeted Issuer Bid also provided that the 3,421,648 Warrants expired effective October 31, 2019, and that certain deadlines under the Co-operation Agreement be extended. AGV's registered ownership in the Company was reduced from 10,264,946 Common Shares and 3,421,648 Warrants, representing, on a fully diluted basis, approximately 20.0% of the 68,573,558 issued and outstanding Common Shares as at the TIB Commencement Date, to 6,098,279 Common Shares and nil Warrants, representing approximately 9.5% of the 64,406,891 issued and outstanding Common Shares as at the TIB Completion Date.

By strategically acquiring its Common Shares for cancellation in a private transaction at a discount to the then current market price, the Company improved the equity position of its other shareholders and provided AGV with additional funds necessary to continue advancing the common objectives of the parties under the Co-operation Agreement, while also avoiding a substantial decrease in the market price and liquidity of the Common Shares reasonably expected if AGV were to sell a substantial portion of its equity position into the open market.

The Targeted Issuer Bid was exempt from the formal valuation and disinterested shareholder approval requirements typically applicable to related party transactions under applicable securities laws as neither the fair market value of the Common Shares (approximately \$1,620,833.46) nor the consideration received by AGV for the Common Shares (approximately \$1,250,000.00) exceeded 25% of the Company's market capitalization at the TIB Commencement Date (approximately \$26,675,114.06).

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#### **Summary of Operating Results**

	Q4-19	Q4-18	YE-19	YE-18
Survey revenue	\$ -	\$ -	\$ 11,976,149	\$ -
Expenses:				
Survey	308,374	315,175	2,611,086	1,103,946
General and administrative	926,919	875,705	3,497,785	3,999,089
Stock-based compensation	(28,724)	(173,367)	43,809	386,154
Amortization of property and equipment	449,015	447,942	1,781,181	1,790,267
	1,655,584	1,465,455	7,933,861	7,279,456
Other Expenses (income):				
Interest income, net	(18,452)	(21,626)	(20,684)	(62,004)
Foreign exchange (gain) loss	99,136	(20,330)	233,231	(19,852)
Other expense (recovery)	39,019	(30,783)	56,833	(229,089)
	119,703	(72,739)	269,380	(310,945)
Income (loss) before income taxes	(1,775,287)	(1,392,716)	3,772,908	(6,968,511)
Income tax expense	-	-	-	-
·				
Net Income (loss) for the period	\$ (1,775,287)	\$ (1,392,716)	3,772,908	(6,968,511)
Net Income (loss) per share – basic	\$ (0.03)	\$ (0.02)	\$ 0.06	\$ (0.11)
Net Income (loss) per share – diluted	\$ (0.03)	\$ (0.02)	\$ 0.06	\$ (0.11)

Annual operating results. Net income for YE-19 compared to YE-18 increased by \$10,741,419, or \$0.17 per share basic. \$11,976,149 of revenue was recorded in YE-19 for the Nigerian SFD® Survey. Survey costs were higher by \$1,507,140 due to the Nigerian SFD® Survey. G&A expenses were reduced by \$501,304, or 13%, in YE-19 compared to YE-18 due primarily to a reduction in business development costs, lower headcount and costs and certain expenditures being recognized as direct survey costs. This was offset by higher professional fees and information technology costs. SBCE were lower in YE-19 as most outstanding options were vested before 2019 and therefore were fully expensed. Foreign exchange rates were unfavorable in YE-19 compared to YE-18 resulting in a \$253,084 loss as the Company held significant balances in US\$ in YE-19 and US\$ increased in value compared to CDN\$. US\$ balances held by NXT were significantly lower in YE-18. In YE-18, the Company determined that liabilities it had recorded before 2005 were no longer payable and, as a result, a gain of \$185,661 was recorded in other income on the extinguishment of the liability.

Quarterly operating results. Net loss for Q4-19 compared to Q4-18 increased by \$382,571 or \$0.01 per share-basic. No revenue was recorded in Q4-19. Survey costs were lower by \$6,801 due to the major phase 5 maintenance in Q4-18. G&A expenses were increased by \$51,214, or 6%, as compared to Q4-18, due primarily to increased business development travel offset by a reduction in headcount and favorable headcount cost mix. Stock-based compensation expense ("SBCE") was negative in both Q4-19 and Q4-18. In Q4-19, restricted stock unit ("RSU") expense from the previous quarter was derecognized as the expected granting of RSUs to employees was not formalized. In Q4-18, 333,333 vested options were forfeited resulting in the negative expense. Amortization expense was \$1,073 higher in Q4-19 because

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the Company acquired transponder technology known as Automatic Dependent Surveillance – Broadcast ("ADS-B") during the year. Foreign exchange rates were unfavorable in Q4-19 compared to Q4-18 resulting in a \$119,467 loss as the Company held significant balances in US\$ in Q4-19 and US\$ increased in value compared to CDN\$. US\$ balances held by NXT were lower in Q4-18. For Q4-19 and YE-19, the Company's intellectual property ("IP"), research and development ("R&D") and asset retirement obligation ("ARO") expenses were mostly for costs to begin the validation process for certain European SFD® patents. In YE-18, R&D expenses were negative as the Company incurred less costs from a provider of R&D services than originally estimated.

#### Survey Expenses

Survey Expenses	Q4-19	Q4-18	Net change
Aircraft lease costs	\$ 101,860	\$ 154,397	\$ (52,537)
Amortization of deferred gain	-	(38,826)	38,826
Aircraft operations	154,527	199,342	(44,815)
Survey projects	51,987	262	51,725
Total survey expenses, net	308,374	315,175	(6,801)

Survey Expenses	YE-19	YE-18	Net change
Aircraft lease costs	\$ 400,847	\$ 610,029	\$ (209,182)
Amortization of deferred gain	-	(155,301)	155,301
Aircraft operations	846,498	648,783	197,715
Survey projects	1,363,741	435	1,363,306
Total survey expenses, net	2,611,086	1,103,946	1,507,140

Survey expenses relate entirely to the direct survey costs and aircraft handling and maintenance costs, net of charter hire revenue. In Q4-19, survey expenses included incremental travel related costs to present results for the Nigerian SFD® Survey. Fixed aircraft costs were lower in Q4-19 versus Q4-18 as scheduled maintenance was performed on the aircraft in Q4-18.

In YE-19, survey expenses included direct incremental survey costs for the Nigerian SFD® Survey incurred which include aircraft and hanger operating costs, staff costs to support the survey, and mobilization/demobilization costs. Also these costs include staff costs to interpret and integrate the survey, and their travel costs. Aircraft operations costs in YE-19 were higher than YE-18 as additional scheduled maintenance was required after the Nigerian SFD® Survey, net of charter hire revenue.

The aircraft is available for charter to third parties through our aircraft manager when it is not being used by NXT. Any charter fees 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. Should NXT want to repurchase the aircraft at the end of the initial lease term,

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the purchase price will be US\$1.45 million. Under the new lease accounting standard, the amortization of the deferred gain is now classified within "lease and lease interest costs".

### **General and Administrative Expenses**

G&A Expenses	Q4-19	Q4-18	Net change	%
Salaries, benefits and consulting charges	\$ 406,300	\$ 510,491	\$(104,191)	(20)
Board and professional fees, public company costs	205,942	139,039	66,903	48
Premises and administrative overhead	193,661	191,277	2,384	1
Business development	121,016	38,463	82,553	215
Bolivian overhead	-	(3,565)	3,565	(100)
Total G&A Expenses	926,919	875,705	51,214	6

G&A Expenses	YE-19	YE-18	Net change	%
Salaries, benefits and consulting charges	\$ 1,599,247	\$2,046,886	\$(447,639)	(22)
Board and professional fees, public company costs	857,556	781,330	76,226	10
Premises and administrative overhead	800,626	753,380	47,246	6
Business development	240,356	382,146	(141,790)	(37)
Bolivian overhead	-	35,347	(35,347)	(100)
Total G&A Expenses	3,497,785	3,999,089	(501,304)	(13)

G&A expenses increased \$51,214, or 6%, in Q4-19 compared to Q4-18 for the following reasons:

- salaries, benefits and consulting charges decreased \$104,191, or 20%, due primarily to a change to a lower cost mix in corporate staff and two less headcount;
- board and professional fees and public company costs increased \$66,903, or 48%, due primarily
  to higher professional fees given the increase in business activity and the addition of one board
  member;
- premises and administrative overhead costs increased \$2,384, or 1%, due primarily to increased
  costs related to the improvement of the Company's information systems security (partially offset
  by the lower headcount and the related overhead costs);
- business development costs increased by \$82,553, or 215%, as the Company's resources were again focused on business development activities in Q4-19 vs Q4-18 where resources were focused on closing the Nigerian SFD® Survey; and
- Bolivian overhead costs decreased by \$3,565, or 100%, as the Company officially closed its offices and ceased operations in that country in Q4-18.

G&A expenses decreased by \$501,304, or 13%, in YE-19 compared to YE-18 for the following reasons:

 salaries, benefits and consulting charges decreased \$447,639, or 22%, due primarily to a change to a lower cost mix in corporate staff, two less headcount and allocation of direct salary costs to survey costs;

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- board and professional fees and public company costs increased \$76,226, or 10%, due primarily
  to higher professional fees paid in connection with the Nigerian SFD® Survey and higher insurance
  costs given the increased business activity (partially offset by termination costs to suspend the
  Advisory Board in YE-18);
- premises and administrative overhead increased \$47,246, or 6%, due primarily to increased costs related to the improvement of the Company's information systems security;
- business development costs decreased \$141,790, or 37%, due primarily to increased costs related to the negotiation and implementation of the Nigerian SFD® Survey; and
- Bolivian overhead costs decreased by \$35,347, or 100%, as the Company officially closed its offices and ceased operations in that country in Q4-18.

# **Stock-based Compensation Expenses**

SBCE varies in any given quarter or year as it is a function of several factors including the number of stock options issued in the period and the period of amortization (based on the term of the contract and/or number of years for full vesting of the options, 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.

SBCE in Q4-19 was higher compared to Q4-18 by \$144,643. In Q4-18, significant unvested stock options were forfeited by a former employee which resulted in a credit to the expense. In Q4-19, the Company's SBCE represented costs for the part of the remaining unvested options and a reversal of the RSU expense in Q3-19 as the expected granting of RSUs to employees was not formalized.

SBCE in YE-19 was lower compared to YE-18 by \$342,345. In Q1-18, 333,333 options vested resulting in substantial SBCE. In YE-19, most options previously issued by the Company had vested resulting in minimal SBCE, partially offset by 100,000 options awarded to a consultant.

### Other Expenses

Other Expenses	Q4-19	Q4-18	Net change	%
Interest (income) expense, net	\$ (18,452)	\$ (21,626)	\$ 3,174	(15)
Foreign exchange loss (gain)	99,137	(20,330)	119,467	(588)
IP and other	39,019	(30,783)	69,802	(216)
Total Other Expenses, net	119,704	(72,739)	192,443	(265)

Other Expenses	YE-19	YE-18	Net change	%
Interest (income) expense, net	\$ (20,684)	\$ (62,004)	\$ 41,320	(67)
Foreign exchange loss (gain)	233,232	(19,852)	253,084	(1275)
IP, and other	56,833	(43,428)	100,261	(231)
Gain on extinguishment of liability	-	(185,661)	185,661	(100)
Total Other Expenses, net	269,381	(310,945)	580,326	(187)

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<u>Interest (income) expense, net.</u> This category of other expenses includes interest income earned on short-term investments netted by interest expense from financial lease obligations. Since January 1, 2019 interest on finance leases is included in this account under the new lease accounting standard. Q4-19 interest (income) expense net was \$3,174 less than Q4-18, and YE-19 interest (income) expense net was \$41,320 less than YE-18, as lease interest expense has offset income earned on guaranteed investment certificates.

<u>Foreign exchange loss (gain)</u>. This category of other expenses includes losses and gains caused by changes in the relative currency exchange values of US dollars and CDN dollars. The Company held significant assets in US dollars at December 31, 2019, 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, 2019, the CDN dollar strengthened as compared to the US dollar and as compared to the end of Q3-19 resulting in an unrealized foreign exchange loss for the quarter. At December 31, 2019, the Company had a significant foreign exchange loss which was the result of the CDN dollar strengthening compared to May 2019 when several of the US dollar assets were initially recorded. The Company does not currently have the ability to enter hedging contracts, but uses strategies to reduce the volatility of US dollar assets including converting excess US dollars to CDN dollars.

<u>IP and other</u>. This category of other expenses primarily includes costs related to IP filings, R&D activity related to the SFD® technology and ARO costs for certain non-recurring "project" activities.

In Q4-19 and YE-19, the Company's IP, R&D and ARO expenses related mostly to costs associated with the validation process for certain European SFD® patents. In YE-18, these costs were negative as the Company renegotiated fees from a provider of R&D services.

<u>Gain on extinguishment of liability</u>. In Q3-18, the Company determined that liabilities it had recorded before 2005 were no longer payable. As a result, a gain of \$185,661 was recorded in other income on the extinguishment of the liability. No cash was paid to settle the liability.

Amortization Expenses	Q4-19	Q4-18	Net change	%
Property and equipment	\$ 27,832	\$ 26,759	\$ 1,073	4
Intellectual property	421,183	421,183	-	-
Total Amortization Expenses	449,015	447,942	1,073	-

Amortization Expenses		YE-19	YE-18	Net change	%
Property and equipment	\$	96,448	\$ 105,534	\$ (9,086)	(9)
Intellectual property	1	,684,733	1,684,733	-	-
Total Amortization Expenses	1	,781,181	1,790,267	(9,086)	(1)

<u>Intellectual property and related amortization expense.</u> 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 being 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 ongoing tests of potential impairment of the recorded net book value. No impairments were recognized in Q4-19 or Q4-18.

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<u>Property and equipment and related amortization expense</u>. Property and equipment amortization was higher in YE-19 compared to YE-18 due to the Company acquiring and installing in its aircraft a new transponder technology known as ADS-B. The U.S. Federal Aviation Administration (the "FAA") and European Aviation Safety Agency have mandated that all aircraft flying in designated controlled airspaces must be equipped with ADS-B by January 1, 2020 (US airspace) and June 7, 2020 (European airspace). Total costs for installing the ADS-B was approximately \$208,000. This amortization was partially offset as the Company uses the declining balance method of depreciation, thereby having the effect of lowering amortization each year on existing assets.

*Income tax expense.* There was no income tax expense in YE-19 or YE-18.

#### Competition

Our SFD® 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® 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® 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® system can be used as a focusing tool for seismic. With a SFD® 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. A SFD® survey deployed first can provide necessary information to target a seismic program over a limited area of locations selected by SFD®. 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.

<u>Exchange Rates</u>. Revenues and costs incurred in currencies other than Canadian dollars expose us to exchange rate fluctuations between the Canadian dollar and foreign currencies. In addition, exchange rate changes impact the Canadian equivalent carrying balances for our assets and liabilities, and for foreign

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currency denominated monetary assets (such as cash and cash equivalents), the impact of changes in exchange rates is recorded in net earnings as a foreign exchange gain or loss.

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

<u>Tax Rates</u>. 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 and on SEDAR at 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.

		Q4-19		Q3-19		Q2-19		Q1-19		
Survey revenue	\$	-	\$	1,021,532	\$10,95	54,617	\$	-		
Net income (loss)	(1,7	(1,775,287)		(1,775,287) (774,		(774,373)		35,888	(1,7	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)		

		Q4-18		Q3-18		Q2-18		Q1-18
Survey revenue	\$	-	\$	-	\$	-	\$	-
Net income (loss)	(1,3	(1,392,716)		(1,660,031)		(1,961,114)		54,650)
		()	4	/>		<b>/</b> \		()
Income (loss) per share – basic	Ş	(0.02)	Ş	(0.02)	Ş	(0.03)	\$	(0.03)
Income (loss) per share – diluted	\$	(0.02)	\$	(0.02)	\$	(0.03)	\$	(0.03)

In Q4-19, survey costs were higher as final integration costs from the Nigerian SFD® Survey were incurred. SBCE was lower as most outstanding options were fully vested. In Q3-19, NXT recognized \$1,021,532 of revenue for services rendered in connection with the Nigerian SFD® Survey, compared to \$10,954,617 in Q2-19. There were no revenues in the previous five quarters, rather, the Company incurred net losses in each due primarily to 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, as detailed more specifically below:

- in Q1-19, survey costs were higher due to scheduled maintenance on the aircraft and significant legal and contract negation costs in preparing for the Nigerian SFD® Survey;
- in Q4-18, SBCE was lower by \$283,811 as unvested options were forfeited. In addition, G&A expenses decreased \$156,271 for two reasons: (i) business development decreased as most of the business development work was centered in Calgary supporting the Nigerian SFD® Survey negotiations; and (ii) there was a decrease in public company costs as the previous quarter had significant costs related to reviewing equity financing options (offsetting the decreases in SBCE and G&A expenses was an increase of \$44,010 in survey expenses as NXT's aircraft incurred a scheduled major maintenance in December 2018);
- in Q3-18, a gain of \$185,661 was recognized on the extinguishment of a liability from 2005 that was no longer payable, and interest income of \$26,171 was earned on cash received from equity financings; and
- in Q1-18, G&A expenses were lower as NXT began to recognize the full extent of cost reductions started in the prior quarter.

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### **Liquidity and Capital Resources**

#### **Going Concern**

The consolidated financial statements for YE-19 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.

NXT's financial statements for YE-18 included disclosure related to the use of the "going concern" basis of presentation. In YE-19, NXT has had positive cash flow from operations which has resulted in a significant strengthening of the Company's liquidity and working capital position. As a consequence, management is of the view that removal of the "going concern" disclosure in respect of its YE-19 disclosure is warranted on the basis than the Company currently has sufficient funds to maintain operations for the next 12 months as of the date of these financial statements.

In the preparation of the YE-19 financial statements, management determined that there are no existing conditions or reasonably foreseeable events that raise substantial doubt about the Company's ability to continue as a going concern. However, NXT's future financial results and its longer term success remains dependent upon the ability to continue to attract and execute client projects to build its revenue base. 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 and to continue to attract new client projects and expand the revenue base to a level sufficient to exceed fixed operating costs and continue to generate positive cash flow from operations. The occurrence and timing of these events cannot be predicted with certainty.

NXT's cash and cash equivalents plus short-term investments at December 31, 2019 totaled \$6.64 million. Net working capital totaled \$7.13 million.

As NXT is operating on a going concern basis, NXT's short-term ability to generate sufficient cash depends on the success of signing contracts and receiving advance payments pursuant to the terms of such agreements. NXT's longer-term success remains dependent upon our ability to continue to attract new client projects and expand the revenue base to a level sufficient to exceed G&A expenses and generate excess net cash flow from operations. Proceeds from past equity financings have been used to provide NXT with funds to pursue, close and implement commercial transactions currently in negotiation, develop additional revenue streams including multi-client data sales and strategic partnerships and for general corporate and net working capital purposes.

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.

In YE-19, NXT continued to make progress in strengthening its liquidity and net working capital by completing the Nigerian SFD® Survey and reducing corporate costs by reducing the number of staff and by implementing new human resource policies to reduce staffing costs. Please see the discussion under

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"Summary of Operating Results – General and Administrative Expenses" for the results of these cost reductions.

As of the date of this MD&A, NXT has sufficient funds to maintain its operations for more than 12 months.

The Company does not have provisions in its leases, contracts, or other arrangements that would trigger additional funding requirements or early payments.

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**

Net Working Capital	YE-19	YE-18	Net Change	%
Current assets (current liabilities)				
Cash, cash equivalents and short-term investments	\$6,639,757	\$ 4,239,532	\$2,400,225	57
Accounts receivable	1,384,315	61,279	1,323,036	2,159
Note receivable	324,700	-	324,700	100
Prepaid expenses and deposits	97,132	65,159	31,973	49
Accounts payable and accrued liabilities	(448,928)	(499,535)	50,607	(10)
Contract obligations	(131,386)	-	(131,386)	(100)
Current portion of lease obligation	(736,408)	(42,603)	(693,805)	1,629
Total Net Working Capital	7,129,182	3,823,832	3,305,350	86

NXT had no secured debt and had net working capital of \$7,129,182 as at December 31, 2019.

The increase in net working capital in YE-19 was due to recognizing accounts receivable, cash from the Nigerian SFD® Survey and the note receivable in respect of the Loan Arrangement. This increase was offset due to the recognition of the current portion of lease obligations under ASC Topic 842 ("Topic 842") and contract obligations (deposit) received from AGV for the Co-operation Agreement.

#### **Accounts Payable**

Accounts Payable	YE-19	YE-18	Net Change	%
Trade accounts payable	\$ (181,790)	\$ (138,509)	\$ (43,281)	31
Deferred gain on sale of aircraft	-	(155,301)	155,301	(100)
Deferred director and advisor payable	(24,352)	(48,079)	23,727	(49)
Accrued liabilities	(136,257)	(110,375)	(25,882)	23
Vacation pay accrued	(106,529)	(47,271)	(59,258)	125
Total Accounts Payable	(448,928)	(499,535)	50,607	(10)

Accounts payable increased by \$50,607, or 10%, in YE-19 compared to YE-18 for the following reasons:

trade accounts payable increased by \$43,281, or 31%, due primarily to increased professional fees
payable in connection with the Targeted Issuer Bid (payables are considered current at December
31, 2019 other than minor disputed items);

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- the deferred gain on sale of aircraft was reclassified under current lease obligations;
- deferred director and advisor fees decreased by \$23,727, or 49%, as director fees have been fully paid (the remaining payable is for advisor fees from prior to YE-18 which are in the process of being settled);
- accrued liabilities increased by \$25,882, or 23%, due to timing of invoice receipts, which is consistent with the decrease in accounts payable; and
- vacation pay accrued increased by \$59,258, or 125%, as employees vacations were deferred to complete the Nigerian SFD® Survey.

The overall net changes in cash balances in each of the periods 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:

#### Cash Flow

Cash Flow - from / (used in)	Q4-19	Q4-18	YE-19	YE-18
Operating activities	\$1,289,465	\$(1,162,392)	\$ 4,078,427	\$(6,043,919)
Financing activities	(1,354,121)	(12,187)	(1,385,787)	9,176,839
Investing activities	257,236	1,100,000	(173,927)	(2,960,006)
Net source (use) of cash	192,580	(74,579)	2,518,713	172,914
Cash and cash equivalents, start of period	2,665,665	414,111	339,532	166,618
Cash and cash equivalents, end of period	2,858,245	339,532	2,858,245	339,532
Cash and cash equivalents	2,858,245	339,532	2,858,245	339,532
Short-term investments	3,781,512	3,900,000	3,781,512	3,900,000
Total Cash and Short-Term Investments	6,639,757	4,239,532	6,639,757	4,239,532

Operating Activities	Q4-19	Q4-18	YE-19	YE-18
Net income (loss) for the period	\$(1,775,287)	\$(1,392,716)	\$ 3,772,908	\$(6,968,511)
Total non-cash expense items	383,794	184,362	1,777,580	1,782,762
	(1,391,493)	(1,208,354)	5,550,488	(5,185,749)
Change in non-cash working capital balances	2,680,958	45,962	(1,472,061)	(858,170)
Total Cash from (used in) Operating Activities	1,289,465	(1,162,392)	4,078,427	(6,043,919)

Operating cash flow increased by \$2,451,858 in Q4-19 as compared to Q4-18 and by \$10,122,347 in YE-19 as compared to YE-18 because of payments received from the Nigerian SFD® Survey net of payments for survey costs.

Financing Activities	Q4-19	Q4-18	YE-19		YE-18
Net funds used-in targeted issuer bid	\$(1,343,184)	\$ -	\$(1,343,184)	\$	-
Proceeds from exercise of stock options	-	-	-		5,067
Net proceeds from equity financings	-	(2,033)	-	9,	211,351
Repayment of capital lease obligation	(10,937)	(10,154)	(42,603)	(	(39,579)
Total Cash from (used in) Financing Activities	(1,354,121)	(12,187)	(1,385,787)	9,	176,839

During Q4-19 the Company completed the TIB for \$1,250,000 plus costs of \$93,184 to repurchase 4,166,667 TIB Common Shares, at a price of \$0.30 per.

NXT recorded a net cash financing outflow of \$10,937 in Q4-19 and \$42,603 in YE-19 on payments for its finance leases. The YE-18 inflows were received in connection with equity financings.

Investing Activities	Q4-19	Q4-18	YE-19	YE-18
Purchase of property and equipment	\$ -	\$ -	\$ (216,691)	\$ (10,006)
Decrease (increase) in short-term investments	257,236	1,100,000	42,764	(2,950,000)
Total Cash from (used in) Investing Activities	257,236	1,100,000	(173,927)	(2,960,006)

Short-term investments in Q4-19 and YE-19 increased as the Company invested excess funds from operations into Guaranteed Investment Certificates. The decrease in short-term investments in Q4-18 was for cash to finance operating costs. The increase in short-term investments in YE-18 was from the cash received from equity financings.

#### **Contractual Commitments**

Associated with the adoption of Topic 842, all operating leases were recognized on the Consolidated Balance Sheet. Accordingly, operating leases are not included in the commitments table below. The table below is the non-lease operating cost components associated with the building lease.

The estimated minimum annual commitments for these leases are as follows, as at December 31, 2019:

For the period ended December 31	Office Premises
2020	\$ 222,069
2021	222,501
2022	222,501
2023	222,501
2024	222,501
	1,112,073
2025	166,876
	1,278,949

# **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 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:

	Q4-19	Q4-18	YE-19	YE-18
Legal Fees	\$ 111,562	\$ 7,796	\$ 276,261	\$ 249,218

Accounts payable and accrued liabilities includes a total of \$146,197 (\$5,999 as at December 31, 2018) payable to Norton Rose Fulbright Canada LLP. Interest of \$1,809 was received from AGV during the year.

### **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, 2018 other than as described below.

#### Revenue

The performance obligation for NXT is the acquisition, processing, interpretation and integration of SFD® data. Revenue from the sale of SFD® 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

The value attributed to the IP assets acquired in 2015 was \$25.3 million. The IP assets are being amortized on a straight-line basis over a 15-year period (future amortization expense of \$1,685,000 per year) and are also subject to ongoing tests of potential impairment of the recorded net book value. No impairments were recognized in Q4-19 and Q4-18. Any adverse change in competition, patent protection and the oil and gas market could substantially change the useful life of the IP asset.

#### **Changes in Accounting Policies**

#### Leases

On January 1, 2019, NXT adopted Topic 842, Leases 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 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; and
- b) the use of hindsight in determining the lease term where the contract contains terms to extend or terminate the lease.

In accordance with Topic 842, NXT recognized a Right Of Use ("ROU") asset and corresponding lease liability for all operating leases on the Consolidated Balance Sheet. Prior to the adoption of Topic 842, operating leases were not recognized on the Consolidated Balance Sheet. There was no impact to finance leases on transition to Topic 842. The impact from recognizing operating leases on NXT's Consolidated Balance Sheet is as follows:

		As reported		Balance on Adoption
Account	Notes	December 31, 2018	Adjustments	as at January 1, 2019
Property and equipment	i	\$683,157	\$(139,725)	\$543,432
Right of Use	ii	-	3,535,919	3,535,919
Total Assets		\$25,264,268	\$3,396,194	\$28,660,462
Accounts payable and accrued	iii	\$499,535	\$(155,301)	\$344,234
liabilities				
Current portion of capital lease	i	42,603	(42,603)	-
obligations				
Current portion of lease	iv	-	672,087	672,087
obligations				
Capital lease obligations	i	42,515	(42,515)	-
Long-term lease obligations	ii	-	3,405,894	3,405,894
Other liabilities	iv	362,368	(362,368)	-
Deferred charges	V	79,000	(79,000)	-
<b>Total Liabilities and Shareholders'</b>		\$25,264,268	\$3,396,194	\$28,660,462
Equity				

#### Notes:

- i) Reclassify previously recognized finance leases: Leases accounted for as finance leases were reclassified to ROU assets and lease liabilities from property, plant and equipment and capital lease obligations, respectively.
- ii) Right of use: Right of use assets have been recognized for the building lease, aircraft lease and office equipment. Upon transition the building and aircraft right of use assets were calculated on the net present value of future lease payments less deferred charges for the building. The office equipment lease was previously recorded as a finance lease. The unamortized portion of the leased asset was reclassified to right of use assets.

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- iii) Lease liabilities: The Company recognized lease liabilities in relation to leases which had previously been classified as operating. Under the principles of the new standard these leases have been measured at the present value of the remaining lease payments, discounted using the Company's estimated incremental borrowing rates or implied interest rate in the lease contract. Rates varied between 7.4% and 15.7%. Total lease liabilities of \$4,077,981 were recorded as at January 1, 2019, of which \$672,087 was the current portion.
- iv) Account payable and other accrued liabilities, Other liabilities: The deferred gain on sale of the aircraft was reclassified from Accounts payable and other accrued liabilities, and Other liabilities to Current portion of lease obligations and Long-term lease obligations.
- v) Deferred charges: The Deferred charges for the office lease have been reclassified to ROU assets and are being amortized on a straight line basis over the remaining period of the lease.

Although Topic 842 does not have a material impact on the Consolidated Statements of Income (loss) and Comprehensive Income (Loss) or Cash Flows, the change in the accounting of the aircraft lease now has interest expense of \$15,095 and \$69,776 for the three and twelve months ended December 31, 2019 being recorded, whereas under Topic 840 that amount was recorded under survey costs. In the Consolidated Statements of Cash Flows under Operating Activities, amortization of deferred gain on sale of aircraft and deferred charges are now presented as Non-cash lease and interest expense, under Topic 842.

Leases entered into for the use of an asset are classified as either operating or finance, which is determined at contract inception. Upon commencement of the lease, a ROU asset and corresponding lease liability are recognized on the Consolidated Balance Sheet for all operating and finance leases. NXT has elected the short-term lease exemption, which does not require a ROU asset or lease liability to be recognized on the Consolidated Balance Sheet when the lease term is 12 months or less and does not include an option to purchase the underlying asset that the lessee is reasonably certain to exercise.

Upon commencement of the lease, ROU assets are measured at the initial measurement of the lease liability adjusted for any lease payments made before commencement date of the lease, less any lease incentives received and include any initial direct costs incurred. Lease liabilities are initially measured at the present value of future minimum lease payments over the lease term. The discount rate used to determine the present value is the rate implicit in the lease unless that rate cannot be determined, in which case NXT's incremental borrowing rate is used.

Operating lease ROU assets and liabilities are subsequently measured at the present value of the lease payments not yet paid and discounted at the initial discount rate at commencement of the lease, less any impairments to the ROU asset. Operating lease expense and revenue from any subleases are recognized in the Consolidated Statement of Income (Loss) and Comprehensive Income (Loss) on a straight line basis over the lease term. Finance lease ROU assets are amortized over the estimated useful life of the asset if the lessee is reasonably certain to exercise a purchase option or ownership of the leased asset transfers at the end of the lease term, otherwise the leased assets are amortized over the lease term. Operating leases include office building, aircraft and printer. Finance leases include office equipment. Currently, there are no subleases.

NXT's lease contracts include rights to extend leases after the initial term. Rights to extend or terminate a lease are included in the lease term when there is reasonable certainty the right will be exercised. Factors used to assess reasonable certainty of rights to extend or terminate a lease include current and forecasted survey plans, anticipated changes in strategies, historical practice in extending similar contracts and current market conditions.

NXT Energy Solutions Inc.

#### **Financial Instruments**

The Company's non-derivative financial instruments consist of cash and cash equivalents, short-term investments, accounts receivable, notes 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 and notes 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. For the notes receivable, NXT has secured the note receivable against assets of AGV's affiliates.

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, 2019 and December 31, 2018, 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**

	April 13, 2020	December 31, 2019	December 31, 2018
Common Shares	64,406,891	64,406,891	68,573,558
Stock options	932,600	1,169,500	1,297,000
Warrants	-	-	3,421,646
Total Share Capital and Dilutive Securities	65,339,491	65,576,391	73,292,204

All 3,421,648 Warrants issued in 2018 expired as of October 31, 2019, pursuant to the terms of the Targeted Issuer Bid.

# 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 quarterly and 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 an evaluation of 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 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 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.

The small size of the Company's finance team has resulted in control deficiencies in maintaining DCPs and ICFR that in turn have led to a recurrence of previously identified deficient disclosure. Given the small size of the Companies finance team and in order to improve ICFR moving forward, 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.

NXT Energy Solutions Inc.

MD&A for the year ended December 31, 2019

NXT's efforts to mitigate the risks associated with the above-mentioned deficiencies has resulted in continuous improvements in its DCPs. The Responsible Officers concluded that, as at December 31, 2019, the Company's ICFR have improved, but are still not effective and as a result its DCPs are still 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. NXT continues a process of continuous improvement in financial reporting and disclosure policies and responsibilities from which the Company expects to see continued benefits in 2020. The Responsible Officers continue to take certain actions to remediate these material weaknesses including: (i) the implementation of new controls with regards to the review procedures surrounding its disclosure; and (ii) engagement of third-party specialists. In addition, the Company has appointed its Corporate Controller as the new Chief Financial Officer as of August 1, 2019. The Chief Financial Officer engages subject matter consultants as the need arises.

The new controls over financial reporting and disclosure policies and responsibilities have been performed over seven quarterly periods. Material weaknesses cannot be considered remediated until the remedial controls operate for a sufficient period of time and Responsible Officers have concluded through testing that these controls are operating effectively.

It should be noted that a control system, including the Company's DCPs and ICFR procedures, 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 and on SEDAR at www.sedar.com.



# **Consolidated Financial Statements**

For the year ended December 31, 2019



KPMG LLP 205 5th Avenue SW Suite 3100 Calgary AB T2P 4B9 Telephone (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, 2019 and 2018, 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, 2019, 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, 2019 and 2018, and the results of operations and its cash flows for each of the years in the three year period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

#### 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.

**Chartered Professional Accountants** 

KPMG LLP

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

Calgary, Canada April 13, 2020

# Consolidated Balance Sheets (Expressed in Canadian dollars)

	December 31,	December 31,
	2019	2018
Assets		
Current assets		
Cash and cash equivalents	\$ 2,858,245	\$ 339,532
Short-term investments (Note 3)	3,781,512	3,900,000
Accounts receivable (Note 4)	1,384,315	61,279
Note receivable (Note 5)	324,700	-
Prepaid expenses	97,132	65,159
Long term assets	8,445,904	4,365,970
Deposits (Note 6)	535,554	560,341
Property and equipment (Note 7)	677,647	683,157
Right of use of assets (Note 8)	3,063,769	-
Intellectual property (Note 9)	17,970,067	19,654,800
	\$ 30,692,941	
Liabilities and Shareholders' Equity		
Current liabilities		
Accounts payable and accrued liabilities (Note 10)	\$ 448,928	\$ 499,535
Contract obligations (Note 11)	131,386	-
Current portion of lease obligation (Note 13)	736,408	42,603
	1,316,722	542,138
Long-term liabilities	2 ((0 72(	42 545
Long-term lease obligation (Note 13) Other liabilities	2,669,736	42,515 362,368
Asset retirement obligation (Note 12)	21,481	26,778
Deferred charges	21,401	79,000
belefied charges	2,691,217	510,661
	4,007,939	1,052,799
Commitments (Note 14)		
Shareholders' equity		
Common shares (Note 15): - authorized unlimited	05 343 354	06.656.340
Issued: 64,406,891 (2018 - 68,573,558) common shares	95,313,064	96,656,248
Contributed capital	9,306,493	9,262,684
Deficit	(78,645,489)	
Accumulated other comprehensive income	710,934	710,934
	26,685,002	24,211,469
	\$ 30,692,941	\$ 25,264,268

Signed "George Liszicasz"
Director

Signed "Bruce G. Wilcox"
Director

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

Consolidated Statements of Income (Loss) and Comprehensive Income (Loss)
(Expressed in Canadian dollars)

# For the Year ended December 31

	2019	2018	2017
Revenue			
Survey revenue (Note 21)	\$ 11,976,149	\$ - \$	-
Expenses			
Survey costs, net (Note 22) General and administrative expenses Stock based compensation expense (Note 17) Amortization expense (Notes 7 & 8)	2,611,086 3,497,785 43,809 1,781,181 7,933,861	3,999,089 386,154 1,790,267	1,289,429 4,960,961 581,356 1,897,576 8,729,322
Other expenses (income) Interest (income) expense, net Foreign exchange loss (gain) Intellectual property and other Gain on extingishment of liability (Note 24)	(20,684 233,231 56,833 - 269,380	(19,852) (43,428) (185,661)	4,485 69,676 91,370 - 165,531
Income (loss) before income taxes	3,772,908	(6,968,511)	(8,894,853)
Income tax expense (Note 18) Current	-	-	75,545
Net income (loss) and comprehensive income (loss)	\$ 3,772,908	\$ (6,968,511) \$	75,545 (8,970,398)
Net income (loss) per share (Note 16) Basic Diluted	\$ 0.06 \$ 0.06	· , , , ,	(0.16) (0.16)

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

# Consolidated Statements of Cash Flows (Expressed in Canadian dollars)

# For the Year ended December 31

	2019	2018	2017
Cash provided by (used in):			
Operating activities			
Comprehensive income (loss) for the period	\$ 3,772,908	\$ (6,968,511)	\$ (8,970,398)
Items not affecting cash:			
Stock based compensation expense (Note 17) Amortization expense (Notes 8 & 9)	43,809	386,154	581,356
Settlement of payable with shares	1,781,181	1,790,267	1,897,576 95,181
Non-cash changes to asset retirement obligation	2,068	(29,925)	1,462
Non-cash lease and interest expense	(171,056)	-	, -
Valuation allowance of Bolivian Tax Credits	-	-	207,682
Unrealized Foreign Exchange	121,578	(19,853)	-
Amortization of deferred gain on sale of aircraft	-	(155,301)	(103,534)
Deferred rent	-	(2,919)	(3,018)
Gain on settlement of liabilities	- (1 464 605)	(185,661)	920.014
Change in non-cash working capital balances (Note 20) ARO liabilities settled	(1,464,695) (7,366)	(858,170)	829,014
And liabilities settled	305,519	924,592	3,505,719
		324,332	3,303,713
Net cash from (used in) operating activities	4,078,427	(6,043,919)	(5,464,679)
Financing activities			
Net funds used in targeted issuer bid (Note 15)	(1,343,184)	-	-
Proceeds from exercise of stock options	-	5,067	35,995
Net Proceeds from Rights Offering	-	-	2,029,867
Cost of equity-based transaction with non-employee	-	<b>-</b>	(6,149)
Net Proceeds from Private Placement	- (10.000)	9,211,351	- (0.0 = 0.0)
Repayment of lease obligation	(42,603)	(39,579)	(36,769)
Net cash from (used in) financing activities	(1,385,787)	9,176,839	2,022,944
Investing activities			
Proceeds/(use) from sale/purchase of equipment, net	(216,691)	(10,006)	3,133,531
(Increase) in Deposits	-	-	(518,765)
Decrease (Increase) in short-term investments	42,764	(2,950,000)	503,091
Net cash from (used in) investing activities	(173,927)	(2,960,006)	3,117,857
Net increase (decrease) in cash and cash equivalents	2,518,713	172,914	(323,878)
Cash and cash equivalents, beginning of the period	339,532	166,618	490,496
Cash and cash equivalents, end of the period	\$ 2,858,245	\$ 339,532	\$ 166,618
Supplemental information			
Cash interest (received)	(16,724)	(58,889)	4,487
Cash taxes paid	(10,724)	(30,009)	4,487 72,587
cash takes pala			12,301

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

# Consolidated Statements of Shareholders' Equity (Expressed in Canadian dollars)

For the Year ended December 31

	Tor the real chaca becember 31		
	2019	2018	2017
Common Shares			
Balance at beginning of the period (Note 15)	\$ 96,656,248 \$	88,121,286	\$ 85,966,393
Shares purchased and retired during the year (Note 15)	(1,343,184)	-	-
Issuance of Common Stock on Private Placement (Note 15)	-	8,387,451	-
Rights Offering (Note 15)	-	- - 067	2,029,867
Issued upon exercise of stock options Transfer from contributed capital upon exercise of stock options	-	5,067	35,995
Equity-based transaction with non-employee	-	6,441	89,031
Finder's fee (Note 15)	-	136,003	-
Balance at end of the period	95,313,064	96,656,248	88,121,286
Contributed Capital			
Balance at beginning of the period	9,262,684	8,195,075	7,613,719
Issuance of warrants on Private Placement (Note 15)	-	687,896	-
Recognition of stock based compensation expense Contributed capital transferred to common shares	43,809	386,154	581,356
upon exercise of stock options	-	(6,441)	-
Balance at end of the period	9,306,493	9,262,684	8,195,075
Deficit			
Balance at beginning of the period	(82,418,397)	(75,449,886)	(66,479,488)
Net income (loss) and comprehensive income (loss) for the period	3,772,908	(6,968,511)	(8,970,398)
Balance at end of the period	(78,645,489)	(82,418,397)	(75,449,886)
•		. , -,1	( , -,-,-,-
Accumulated Other Comprehensive Income			
Balance at beginning and end of the period	710,934	710,934	710,934
Total Shareholders' Equity at end of the period	\$ 26,685,002 \$	24,211,469	\$ 21,577,409
lotal Shareholders' Equity at end of the period	\$ 26,685,002 \$	24,211,469	\$ 21,5//,40

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

#### 1. The Company and future operations

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

## 2. Significant Accounting Policies

#### **Basis of Presentation**

These consolidated financial statements for the year ended December 31, 2019 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. 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 GICs with an original maturity less than 90 days from the date of acquisition.

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (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.

#### **Fair Value of Derivative Instruments**

#### **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, 2019 and 2018, 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.

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.

## **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% (

30% declining balance

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

Aircraft 10% declining balance Furniture and other equipment 20% declining balance Leasehold improvements 10% declining balance

## **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. When indictors 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.

## **Intellectual Property**

Intellectual property acquired is recorded at cost, less accumulated amortization, which is recorded over the estimated minimum useful life of the assets. Intellectual property is also subject to ongoing tests of potential impairment of the recorded net book value.

## **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 2019, 2018 and 2017.

#### **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. Shareholders' equity accounts are translated into Canadian dollars using the exchange rates in effect at the time of the transaction. Monetary assets and liabilities are translated into Canadian dollars at the exchange rate in effect 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.

#### **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.

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

#### **Stock Based Compensation Expense**

NXT follows the fair value method of accounting for stock options that are granted to acquire common shares under NXT's stock option plan. Under this method, an estimate of the fair value of the cost of stock options that are granted to employees, directors and consultants is calculated using the Black-Scholes option pricing model and charged to income over the future vesting period of the stock options, with a corresponding increase recorded in contributed capital. Upon exercise of the stock options, 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 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®) data. Revenue from the sale of SFD® survey contracts (net 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

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

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

In accordance with Topic 842, NXT recognized a ROU asset and corresponding lease liability for all operating leases on the Consolidated Balance Sheet. Prior to the adoption of Topic 842, operating leases were not recognized on the Consolidated Balance Sheet. There was no impact to finance leases on transition to Topic 842. The impact from recognizing operating leases on NXT's Consolidated Balance Sheet is as follows:

Account	Notes	As reported December 31, 2018	Adjustments	Balance on Adoption as at January 1, 2019
Property and equipment	i	\$683,157	\$(139,725)	\$543,432
Right of Use	ii	7003,137	3,535,919	3,535,919
Total Assets	"	\$25,264,268	\$3,396,194	\$28,660,462
Accounts payable and accrued liabilities	iii	\$499,535	\$(155,301)	\$344,234
Current portion of capital lease obligations	i	42,603	(42,603)	-
Current portion of lease obligations	iv	-	672,087	672,087
Capital lease obligations	i	42,515	(42,515)	-
Long-term lease obligations	iii	-	3,405,894	3,405,894
Other liabilities	iv	362,368	(362,368)	-
Deferred charges	V	79,000	(79,000)	-
Total Liabilities and		\$25,264,268	\$3,396,194	\$28,660,462
Shareholders' Equity				

## Notes:

- i) Reclassify previously recognized finance leases:
  - Leases accounted for as finance leases were reclassified to Right of Use Assets and lease liabilities from property, plant and equipment and capital leases, respectively.
- ii) Right of use:

Right of use assets have been recognized for the building lease, aircraft lease and office equipment. Upon transition the building and aircraft right of use assets were calculated on the net present value of future lease payments less deferred charges for the building.

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

The office equipment lease was previously recorded as a finance lease. The unamortized portion of the leased asset was reclassified to right of use assets.

iii) Lease liabilities:

The Company recognized lease liabilities in relation to leases which had previously been classified as operating. Under the principles of the new standard these leases have been measured at the present value of the remaining lease payments, discounted using the Company's estimated incremental borrowing rates or implied interest rate in the lease contract. Rates varied between 7.4% and 15.7%. Total lease liabilities of \$4,077,981 were recorded as at January 1, 2019, of which \$672,087 was the current portion.

iv) Account payable and other accrued liabilities, Other liabilities:

The deferred gain on sale of the aircraft was reclassified from Accounts payable and other accrued liabilities and Other liabilities to Current portion of lease obligations and Longterm Lease Obligations.

v) Deferred charges:

The Deferred charges for the office lease have been reclassified to Right of use assets and are being amortized on a straight line basis over the remaining period of the lease.

Although Topic 842 does not have a material impact on the Consolidated Statements of Income (loss) and Comprehensive Income (Loss) or Cash Flows, the change in the accounting of the aircraft lease now has interest expense of \$69,776 for the year ended December 31, 2019 being recorded, whereas under Topic 840 that amount was recorded under survey costs. In the Consolidated Statements of Cash Flows under Operating Activities, amortization of deferred gain on sale of aircraft and deferred charges are now presented as Non-cash lease and interest expense, under Topic 842.

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

#### 3. Short-term investments

Short-term investments consist of Guaranteed Investment Certificates ("GIC's") with originally maturity dates of 90 days to one year from the date of purchase. As at December 31, 2019 all GIC's had less than one year left before maturity. For December 31, 2019, interest rates ranged from 1.70% to 2.15%. For December 31, 2018, interest rates ranged from 2.10% to 2.15%.

	For the year ended		
	December 31,	December 31,	
Days to maturity	2019	2018	
Less than 90 days	\$ 1,754,302	\$ -	
91 to 183 days	1,218,724	-	
183 days to one year	808,486	3,900,000	
	3,781,512	3,900,000	

#### 4. Accounts Receivable

Accounts receivable are all current as at December 31, 2019.

	For the year ended		
	December 31,	December 31,	
	2019	2018	
Trade receivables	\$1,297,792	\$ -	
Other receivables	86,523	61,279	
	1,384,315	61,279	
Allowance for doubtful accounts	-	-	
Net accounts receivable	1,384,315	61,279	

The entire Trade receivable is with one client. In March 2020, US\$466,000 (CAD\$619,128) was received on the outstanding trade receivable as at December 31, 2019.

#### 5. Notes Receivable

NXT advanced \$250,000 USD (the "Note Receivable") to Alberta Green Ventures Limited Partnership ("AGV") on a secured basis in September 2019. The interest rate on the Notes Receivable is the greater of 2% and the rate prescribed under the *Income Tax Act* (Canada) from time to time, payable monthly in arrears. All interest was collected as at December 31, 2019. AGV secured the Notes Receivable with common shares previously held by AGV.

As per the terms of the Note Receivable, NXT, in its sole and absolute discretion, was entitled to elect to receive any payment made by AGV by way of cash payment, or delivery for cancellation to NXT of the equivalent number of Common Shares having a fair market value equal to the aggregate of such amounts,

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

calculated using the volume weighted average price of the Common Shares as reported and traded on the Toronto Stock Exchange for the five trading days immediately preceding the repayment date.

On December 13, 2019 NXT issued a Direction to Pay to AGV, in which the principle of the Note Receivable would be settled in shares of NXT, however, this did not occur. On April 13, 2020, NXT has cancelled the previous Direction to Pay and has issued a new Direction to Pay to AGV. The April 13, 2020 Direction to Pay has now directed AGV to deliver US\$250,000 in cash proceeds as repayment on the principle amount of US\$250,000. Interest will begin to accrue until the date on which payment in full of all amounts owing pursuant to the Notes Receivable are received by NXT. NXT may change its Direction to Pay, if NXT so decides, at its sole and absolute discretion to receive the principal repayment by way of Common Shares by application to the Alberta Securities Commission.

Based on the fair market value of the common shares held as collateral the Note Receivable is fully collateralized.

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (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.

	For	For the year ended		
	December 31,	December 31,		
	2019	2018		
Building	\$43,309	\$43,310		
Aircraft	492,245	517,031		
	535,554	560,341		

## 7. Property and equipment

	Cost	Accumulated	Net book
For the period ended December 31, 2019	Base	amortization	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

	Cost	Accumulated	Net book
For the period ended December 31, 2018	Base	amortization	value
Survey equipment	\$684,890	\$628,037	\$56,853
Computers and software	1,256,101	1,201,047	55,054
Furniture and other equipment	528,420	504,328	24,092
Leasehold improvements	1,165,108	617,950	547,158
	3,634,519	2,951,362	683,157

## 8. Right of use assets

	Cost	Accumulated	Right of
For the period ended December 31, 2019	Base	Amortization	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
	3,535,919	472,150	3,063,769

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

## 9. Intellectual property

During 2015, NXT acquired the permanent rights to the SFD® technology for use in the exploration of hydrocarbons from Mr. George Liszicasz 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.

	For the year ended		
	December 31,	December 31,	
	2019	2018	
Intellectual property acquired	\$ 25,271,000	\$ 25,271,000	
Accumulated amortization	(7,300,933)	(5,616,200)	
	17,970,067	19,654,800	

## 10. Accounts payable and accrued liabilities

	For the year ended		
	December 31,	December 31,	
	2019	2018	
Accrued liabilities related to:			
Consultants and professional fees	\$311,635	\$151,427	
Board of Directors' fees	-	22,500	
Deferred gain on sale of aircraft (current)	-	155,301	
Payroll (wages payable and vacation pay)	106,529	47,271	
	418,164	376,499	
Trade payables and other	30,764	123,036	
	448,928	499,535	

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

## 11. Contract Obligations

The Company has received a deposit of \$100,000USD from Alberta Green Ventures Limited Partnership ("AGV") to be applied to an SFD® survey which is scheduled to be completed by June 30, 2020.

	For	For the year ended		
	December 31,	December 31, Decemb		
	2019		2018	
Contract obligations	\$131,386	\$	-	

## 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 approximately \$22,000 which 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%.

	2019	2018
ARO balance, beginning of the year	\$ 26,778	\$ 56,702
Accretion expense	2,068	2,069
Costs incurred	(7,365)	-
Change in ARO estimates	-	(31,993)
ARO balance, end of the year	21,481	26,778

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

#### 13. Lease obligation

	December 31, 2019	December 31, 2018
Aircraft	\$1,680,103	\$ -
Office Building	1,669,953	-
Printer	13,573	-
Office equipment	42,515	85,118
	3,406,144	85,118
Current Portion of lease obligations	(736,408)	(42,603)
Long-term lease obligations	2,669,736	42,515
Maturity of lease liabilities:		
2020		\$1,057,776
2021		1,018,789
2022		587,536
2023		367,185
2024		367,185
After 2024		799,333
Total lease payments		4,197,804
Less imputed lease payments		(791,660)
Total discounted lease payments		3,406,144
Current portion of lease obligations		(736,408)
Non-current portion of lease obligations		2,669,736

Leases entered into for the use of an asset are classified as either operating or finance, which is determined at contract inception. Upon commencement of the lease, a ROU asset and corresponding lease liability are recognized on the Consolidated Balance Sheet for all operating and finance leases. NXT has elected the short-term lease exemption, which does not require a ROU asset or lease liability to be recognized on the Consolidated Balance Sheet when the lease term is 12 months or less and does not include an option to purchase the underlying asset that the lessee is reasonably certain to exercise.

Upon commencement of the lease, ROU assets are measured at the initial measurement of the lease liability adjusted for any lease payments made before commencement date of the lease, less any lease incentives received and include any initial direct costs incurred. Lease liabilities are initially measured at the present value of future minimum lease payments over the lease term. The discount rate used to determine the present value is the rate implicit in the lease unless that rate cannot be determined, in which case NXT's incremental borrowing rate is used.

Operating lease ROU assets and liabilities are subsequently measured at the present value of the lease payments not yet paid and discounted at the initial discount rate at commencement of the lease, less any impairments to the ROU asset. Operating lease expense and revenue from any subleases are recognized in the Consolidated Statement of Income (Loss) and Comprehensive Income (Loss) on a straight line basis over the lease term. Finance lease ROU assets are amortized over the estimated useful life of the asset if the lessee is reasonably certain to exercise a purchase option or ownership of the leased asset transfers

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

at the end of the lease term, otherwise the leased assets are amortized over the lease term. Operating leases include office building, aircraft and printer. Finance leases include office equipment. Currently there are no subleases.

NXT's lease contracts include rights to extend leases after the initial term. Rights to extend or terminate a lease are included in the lease term when there is reasonable certainty the right will be exercised. Factors used to assess reasonable certainty of rights to extend or terminate a lease include current and forecasted survey plans, anticipated changes in strategies, historical practice in extending similar contracts and current market conditions.

#### 14. Commitments

Associated with the adoption of Topic 842, all operating leases were recognized on the Consolidated Balance Sheet. Accordingly, operating leases are not included in the commitments table below. The table below is the non-lease operating cost components associated with the costs of the building lease. See Notes 2 and 13 for additional disclosures on leases.

For the fiscal period ending	Office
December 31,	Premises
2020	\$ 222,069
2021	222,501
2022	222,501
2023	222,501
2024	222,501
	1,112,073
2025	166,876
	1,278,949

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

#### 15. Common shares

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

-or	tne	Year	Ended

	31-Dec-19		31-D	ec-18
	# of shares	\$ amount	# of shares	\$ amount
As at the beginning of the year	68,573,558	\$96,656,248	58,161,133	\$88,121,286
Shares retired during the year	(4,166,667)	(1,343,184)	-	-
Shares issued during the year:				
Issuance of Common Stock				
on the Private Placement	-	-	10,264,946	8,387,451
Exercise of stock options	-	-	6,667	5,067
Transfer from contributed capital				
on the exercise of stock options	-	-	-	6,441
Finder's fee	-	-	140,812	136,003
As at the end of the period	64,406,891	95,313,064	68,573,558	96,656,248

# For the Year Ended 31-Dec-17

	# of shares	\$ amount
As at the beginning of the year	53,856,509	\$85,966,393
Shares issued during the year:		
Exercise of stock options	7,334	5,710
Rights Offering, net of issue costs	4,187,290	2,029,867
Stock options proceeds receivable	-	30,285
Shares for Debt	110,000	89,031
As at the end of the period	58,161,133	88,121,286

During the fourth quarter of 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 from AGV. The 4,166,667 shares were cancelled immediately after they were purchased. This transaction was approved by the Toronto Stock Exchange and the Alberta Securities Commission. AGV's 3,421,648 warrants expired as of October 31, 2019.

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.

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 during the third quarter of 2018.

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

On November 3, 2017, NXT closed the Rights Offering that had been announced to existing shareholders on September 26, 2017. The Company issued 4,187,290 common shares a price of \$0.50 per common share, for aggregate gross proceeds of \$2,093,645. Share issue costs of \$63,778 were recorded as a reduction to share capital.

During 2017, the Company settled certain accounts payable to a consultant totaling \$78,980 by way of issuing 110,000 common shares at a price per share of \$0.718. The cost of issuing these shares of \$6,149 were recorded as a reduction to share capital.

## 16. Earnings (Loss) per share

	2019	2018	2017
Comprehensive income (loss) for the year	\$3,772,908	\$(6,968,511)	\$(8,970,398)
Weighted average number of shares outstanding for the year:			
Basic	68,156,059	65,455,325	54,523,113
Diluted	68,156,059	65,455,325	54,523,113
Net Income (loss) per share – Basic	\$0.06	\$(0.11)	\$(0.16)
Net Income (loss) per share – Diluted	\$0.06	\$(0.11)	\$(0.16)

In periods in which a loss results, all outstanding stock options are excluded from the diluted loss per share calculations as their effect is anti-dilutive. During 2019 all stock options were out of the money and are not included in the Diluted weighted average number of shares.

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

## 17. Share based compensation

## **Stock Options:**

The following is a summary of stock options which are outstanding as at December 31, 2019.

			Average remaining
Exercise price	# of options	#of options	contractual
per share	outstanding	exercisable	life (in years)
\$0.52	100,000	100,000	4.5
\$0.59	150,000	100,000	3.8
\$1.35	236,900	236,900	0.0
\$1.45	37,500	37,500	2.0
\$1.48	37,500	37,500	1.5
\$1.50	50,000	50,000	1.6
\$1.57	30,000	30,000	0.1
\$1.73	92,600	92,600	0.9
\$1.82	135,000	135,000	0.8
\$2.10	300,000	300,000	0.7
	1,169,500	1,119,500	1.4

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

	For the year ended December 31, 2019		For the year ended December 31, 2018	
		weighted		weighted
	# of stock	average	# of stock	average
	options	exercise price	options	exercise price
Options outstanding, start of the period	1,297,000	\$1.58	1,648,667	\$1.60
Granted	100,000	\$0.52	1,150,000	\$1.06
Exercised	-	-	(6,667)	\$0.76
Expired	(47,500)	\$(1.51)	(65,000)	\$1.17
Forfeited	(180,000)	\$(1.70)	(1,430,000)	\$1.21
Options outstanding, end of the period	1,169,500	\$1.48	1,297,000	\$1.58
Options exercisable, end of the period	1,119,500	\$1.52	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.

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

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:

For the period ended	2019	2018	2017
Expected dividends paid per common share	Nil	Nil	Nil
Expected life in years	5.0	5.0	-
Expected volatility in the price of common shares	65%	65%	-
Risk free interest rate	1.68%	1.75%	-
Weighted average fair market value per share at grant date	\$0.52	\$1.06	\$ -
Intrinsic (or "in-the-money") value per share of options exercised	\$ -	\$0.59	\$ -

The unamortized portion of SBCE related to the non-vested portion of stock options, which will be recognized in 2020, is approximately \$12,582.

#### 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:

	2019	2018	2017
Net loss before income taxes	\$3,772,908	\$(6,968,551)	\$(8,894,853)
Canadian statutory income tax rate	26.5 %	27.0 %	27.0 %
Income tax (recovery) at statutory income tax rate	999,821	(1,881,509)	(2,401,610)
Effect of non- deductible expenses and other items:			
Stock-based compensation and other expenses	11,609	99,919	156,966
Change in statutory tax rates	918,821	-	962,486
Foreign exchange adjustments	82,433	(131,555)	110,121
Foreign tax credit benefit	-	-	-
Non-taxable portion of capital gain	-	-	(50,525)
<u>Other</u>	43,592	(221,978)	91,668
	2,056,276	(2,135,123)	(1,130,894)
Change in valuation allowance	(2,056,276)	2,135,123	1,130,894
	-	-	-
Income taxes in foreign jurisdictions	-	-	75,545
Income tax expense (recovery)	-	-	75,545

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

Effective July 1, 2019 the Province of Alberta decreased its corporate tax rate to 11%, with a further reductions to 10% on January 1, 2020, 9% on January 1, 2021 and 8% on January 1, 2022. On December 22, 2017, The Tax Cuts and Jobs Act (the "Act") was enacted in the United States. This has resulted in a decrease in the US Federal tax rate from 35% to 21%.

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

	2019	2018	2017
Net operating losses carried forward:			
Canada (expiration dates 2027 to 2039)	\$ 6,840,817	\$ 9,563,701	\$ 8,180,209
USA (expiration dates 2020 to 2026)	1,494,711	1,569,976	1,443,729
Timing differences on property & equipment			
and financing costs	1,810,789	2,109,557	2,012,709
SRED Expenditures	348,341	396,020	215,303
Foreign Tax Credit	285,772	371,133	371,133
	10,780,430	14,010,387	12,223,083
Intellectual property	(4,133,115)	(5,306,796)	(5,761,674)
	6,647,315	8,703,591	6,461,409
Less valuation allowance	(6,647,315)	(8,703,591)	(6,461,409)

#### 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, accounts payables and accrued liabilities and leases. The carrying value of these financial instruments, excluding leases, approximates their fair values due to their short terms to maturity. NXT is exposed to significant interest or credit risks arising from accounts receivable and notes receivable. For accounts receivable NXT has received advance payments and does not release results of surveys until a substantial portion of the accounts receivable has been paid. For the notes receivable, NXT has secured the note receivable.

NXT is exposed to foreign exchange risk as a result of periodically 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.

## 2) Derivative financial instruments

As at December 31, 2019 and 2018, the Company held no derivative financial instruments.

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

## 20. Change in non-cash working capital

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

	Fo	or the year ended	December 31
	2019	2018	2017
Accounts receivable	\$(1,339,408)	\$ (1,252)	\$ (61,657)
Note receivable	(332,175)	-	-
Prepaid expenses and deposits	(31,973)	42,204	59,439
Accounts payable and accrued liabilities	104,745	(899,122)	986,533
Deferred gain	-	-	(155,301)
Contractual obligations	134,116	-	-
	(1,464,695)	(858,170)	829,014
Portion attributable to:			
Operating activities	(1,464,695)	(858,170)	829,014
Financing activities	-	-	-
Investing activities	-	-	-
	(1,464,695)	(858,170)	829,014

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

#### 21. Geographic information

The Company generates revenue from its SFD® survey system that enables the clients 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 by geographic area were generated solely in Nigeria in 2019, entirely from a single client. There were no revenues in 2018 and 2017.

	2019	2018	2017
Nigeria	\$ 11,976,149	\$ -	\$ -
	11,976,149	-	-

## 22. Survey Expenses

Survey Expenses include the following:

	2019	2018	2017
Aircraft Operations			
Charter Hire Revenue Earned	\$ (613,038)	\$ (698,211)	\$ (470,982)
Lease payments	400,847	454,729	304,410
Operating Expenses	1,459,536	1,347,428	1,084,432
	1,247,345	1,103,946	917,860
Survey Projects	1,363,741	-	371,569
	2,611,086	1,103,946	1,289,429

## 23. 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 issuance) incurred with this firm were as follows:

	2019	2018	2017
Legal Fees	\$276,261	\$249,218	\$172,199

Accounts payable and accrued liabilities includes a total of \$146,197 (\$5,999 as at December 31, 2018) payable to this law firm. Interest of \$1,809 was received from AGV during the year.

Notes to the Audited Consolidated Financial Statements As at and for the years ended December 31, 2019, 2018 and 2017 (Expressed in Canadian dollars unless otherwise stated)

In addition, accounts payable and accrued liabilities includes \$NIL (\$7,461 as at December 31, 2018) related to re-imbursement of expenses owing to an Officer of NXT.

## 24. 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.

## 25. Subsequent events

#### Covid-19

As of the report date of these consolidated financial statements the Covid-19 pandemic has not had a material effect on the operations of the Company. The Company has made provisions so employees can work from home, suspended all travel, international travelers are to self-isolate for 14 days after return to Canada, and hygiene and social distancing policies are in effect if present in the office. NXT continues to communicate with employees and customers via available communication methods such as teleconferences 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® 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 would delay any survey in progress. Business development may be delayed when in-person meetings and technical presentations may be a superior delivery method.