



NXT ENERGY SOLUTIONS INC.

Management's Discussion and Analysis

**For the three months ended
March 31, 2020**

Management's Discussion and Analysis

This discussion and analysis ("MD&A") was prepared by management of NXT Energy Solutions Inc. ("NXT", "we", "us", "our" or the "Company") based on information available as at May 14, 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 unaudited consolidated financial statements and related notes for the period ended March 31, 2020. This MD&A covers the unaudited three month period ended March 31, 2020 ("Q1-20"), with comparative totals for the three months ended March 31, 2019 ("Q1-19").

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), Drilling Results (as discussed under the heading) 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 successfully be approved for the Canada Emergency Wage Subsidy, the Canada Emergency Business Account, and the Canada Emergency Commercial Rent Assistance for Small Businesses.
- our ability to obtain insurance to mitigate the risk of default on client billings;
- the timing a receipt of payments on the Notes Receivable and Accounts receivable;
- foreign currency exchange and interest rates; and
- general business, economic and market conditions (including global commodity prices and other market conditions related to the novel corona virus).

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

- the impact of COVID-19
- 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.

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 Q1-20 are summarized below.

- 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\$0.47 million in the first quarter of 2020. The final payment for contracted holdbacks amount to approximately \$0.5 million USD is expected in the third quarter of 2020.
- Two SFD® recommendations, one in Nigeria and one in the Gulf of Mexico, have been drilled by independent third parties and have been confirmed as commercially successful.
- NXT received confirmation of a patent granted from the European Patent Office bringing the total number of countries granting the patent internationally to 44. The final step is for the validation process of the SFD® technology patent in select European countries.
- 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 directed AGV to deliver US\$250,000 as repayment of the Principal Amount (the "Principal Repayment"). AGV made the initial Principal Repayment of US\$50,000 on May 1, 2020.
- Cash and short-term investments at March 31, 2020 were \$6.24 million.
- There was \$Nil of survey revenues recorded in Q1-20.
- A net loss of \$1.33 million was recorded for Q1-20, including stock based compensation and amortization expense of \$0.47 million.
- Operating activities used \$0.63 million of cash during Q1-20.
- Net loss per common share for Q1-20 was (\$0.02) basic and (0.02) fully diluted.
- General and administrative costs for Q1-20, as compared to Q1-19 have increased by \$0.05 million or 6%, mostly due to an increase in business development offset by a reduction in headcount.

Discussion of Operations

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 (the "Nigerian SFD® Survey"). Data acquisition operations were completed on May 1, 2019 and NXT's recommendations were delivered in Q3-19.

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 in Q3- 20.

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".

Drilling Results

During the 2019 Nigerian SFD® Survey, NXT recommended eight primary anomalies. Drilling commenced at a location where one anomaly coincided with a seismic prospect, and the 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 commercial success rate increases considerably.

With respect to NXT's 2017 SFD® Gulf of Mexico survey over the 2.1 bid-round offshore blocks. A lead area, indicated by SFD® as prospective, has now been drilled by third parties and the results confirm that it is a commercial discovery with early estimates of volumes greater than 200 million barrels of oil equivalent (MMBOE). 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. 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 (CNH) 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. Drilling activities over SFD® recommendations are ongoing in numerous countries and NXT shall provide further updates as warranted.

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 months 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.

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

As of the date of this MD&A, 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, mandated that international travelers are to self-isolate for 14 days after return to Canada, and implemented hygiene and social distancing policies. NXT continues to communicate with employees and customers via available communication methods such as tele-conferences and on-line video conferencing. Demand for our services and prospective revenues may become adversely impacted the longer the Covid-19 pandemic continues. The impact of the continuation of the Covid-19 pandemic may hamper our ability to deliver SFD® 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 to tele-conferences or on-line video conferencing.

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

The Company has applied for both the Canada Emergency Wage Subsidy beginning with the April period and the Canada Emergency Business Account. It will use these programs to ensure staffing levels are maintained to continue to progress SFD® project discussions and marketing. The Company is also in discussions with its landlord to discuss both parties' eligibility for the Canada Emergency Commercial Rent Assistance for Small Businesses.

Notes Receivable

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 has begun accruing until the date on which payment in full of all amounts owing pursuant to the Notes Receivable are received by NXT. NXT and AGV have agreed on a bi-weekly repayment schedule beginning May 1, 2020 and ending June 26, 2020. The first payment of US\$50,000 was received on May 1, 2020.

NXT may change its Direction to Pay, in 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.

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-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.

Summary of Operating Results

	Q1-20	Q1-19
Survey revenue	\$ -	\$ -
Expenses:		
Survey	301,961	377,733
General and administrative	974,334	921,749
Stock-based compensation	21,665	3,775
Amortization of property and equipment	448,381	443,697
	1,746,341	1,746,954
Other Expenses (income):		
Interest (income) expense, net	(12,647)	3,200
Foreign exchange (gain) loss	(409,517)	6,106
Other expense	8,124	7,060
	(414,040)	16,366
Loss before income taxes	(1,332,301)	(1,763,320)
Income tax expense	-	-
Net loss for the period	\$ (1,332,301)	\$ (1,763,320)
Net loss per share – basic	\$ (0.02)	\$ (0.03)
Net loss per share – diluted	\$ (0.02)	\$ (0.03)

Quarter operating results. Net loss for Q1-20 compared to Q1-19 decreased by \$431,019, or \$0.01 per share basic. No revenue was recorded in either period. Survey costs were higher in Q1-19 versus Q1-20 as a major maintenance was performed on the Company's aircraft before the Nigerian SFD® Survey. G&A expenses increased by \$52,585, or 6%, primarily due to an increase in business development activity in Africa offset by one lower headcount in Q1-2020. SBCE were higher in Q1-20 as a portion of director compensation was paid under the Deferred Share Unit Plan and the awarding of 30,000 fully vested stock options to a consultant. Interest (income) expense net changed \$15,847 versus Q1-19 as the Company had more than double the cash and short-term investments in Q1-20 and also locked in guaranteed investment certificates at an overall higher average interest rates. For foreign exchange the Company held significant monetary assets in US dollars at March 31, 2020, all of which have an effect on the unrealized foreign exchange gain and loss. At March 31, 2020, the CDN dollar weakened as compared to the US dollar and as compared to the end of Q1-19 resulting in an unrealized foreign exchange gain for the quarter.

Survey Expenses

Survey Expenses	Q1-20	Q1-19	Net change
Aircraft lease costs	\$ 102,596	\$ 98,453	\$ 4,143
Aircraft operations	194,183	279,440	(85,257)
Survey projects	5,182	(160)	5,342
Total survey expenses, net	301,961	377,733	(75,772)

Survey expenses relate entirely to the direct survey costs and aircraft handling and maintenance costs, net of charter hire revenue. In Q1-20, survey expenses were for subscription fees for mapping software. Fixed aircraft costs were lower in Q1-20 versus Q1-19 as the Phase 5 scheduled maintenance was performed on the aircraft in Q1-19. In Q1-20 less scheduled maintenance was required.

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, the purchase price will be US\$1.45 million.

General and Administrative Expenses

G&A Expenses	Q1-20	Q1-19	Net change	%
Salaries, benefits and consulting charges	\$ 439,027	\$475,395	\$(36,368)	(8)
Board and professional fees, public company costs	228,009	226,928	1,081	-
Premises and administrative overhead	175,642	178,113	(2,471)	(1)
Business development	131,656	41,313	90,343	219
Total G&A Expenses	974,334	921,749	52,585	6

G&A expenses increased by \$52,585, or 6%, in Q1-20 compared to Q1-19 for the following reasons:

- salaries, benefits and consulting charges decreased \$36,368, or 8%, due primarily to one less headcount and less benefit costs;
- board and professional fees and public company costs increased \$1,081, or 0%, due primarily to higher insurance costs given the increased business activity offset by lower regulatory fees;
- premises and administrative overhead decreased \$2,471, or 1%, due primarily to decreased costs related to rent and office expenses; and
- business development costs increased \$90,343, or 219%, due primarily to the negotiation of further African surveys. In Q1-19 Company resources were focused on the implementation of the Nigerian SFD® Survey.

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 Q1-20 was higher compared to Q1-19 by \$17,890. The increase is the result of a portion of director compensation being paid under the shareholder approved Deferred Share Unit Plan, and the awarding of 30,000 fully vested stock options to a consultant.

Other Expenses

Other Expenses	Q1-20	Q1-19	Net change	%
Interest (income) expense, net	\$ (12,647)	\$ 3,200	\$ (15,847)	(100)
Foreign exchange loss (gain)	(409,517)	6,106	(415,623)	(100)
IP and other	8,124	7,060	1,064	(15)
Total Other Expenses, net	(414,040)	16,366	(430,406)	(100)

Interest (income) expense, net. This category of other expenses includes interest income earned on short-term investments netted by interest expense from financial lease obligations. Q1-20 interest (income) expense net changed \$15,847 versus Q1-19 as the Company had more than double the cash and short-term investments in Q1-20 and also locked in guaranteed investment certificates at an overall higher average interest rates.

Foreign exchange loss (gain). 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 March 31, 2020, including accounts receivable, cash and cash equivalents, short-term investments and the security deposit for the aircraft, all of which have an effect on the unrealized foreign exchange gain and loss. At March 31, 2020, the CDN dollar weakened as compared to the US dollar and as compared to the end of Q1-19 resulting in an unrealized foreign exchange gain for the quarter. 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.

IP and other. 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 Q1-20 and Q1-19, the Company's IP, R&D and ARO expenses related mostly to costs associated with the maintaining patents.

Amortization Expenses	Q1-20	Q1-19	Net change	%
Property and equipment	\$ 27,198	\$ 22,514	\$ 4,684	21
Intellectual property	421,183	421,183	-	-
Total Amortization Expenses	448,381	443,697	4,684	1

Property and equipment and related amortization expense. Property and equipment amortization was higher in Q1-20 compared to Q1-19 due to the Company acquiring and installing in its aircraft a new transponder technology known as ADS-B in Q3-19. 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.

Intellectual property and related amortization expense. NXT acquired specific rights to utilize the proprietary SFD[®] technology in global hydrocarbon exploration applications from the inventor of the SFD[®] technology, NXT's Chairman, President and Chief Executive Officer, on August 31, 2015. The value attributed to the acquired IP assets was \$25.3 million. The IP assets are 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 Q1-20 or Q1-19.

Income tax expense. There was no income tax expense in Q1-20 or Q1-19.

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.

Exchange Rates. 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 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.

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

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

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

	Q1-20	Q4-19	Q3-19	Q2-19
Survey revenue	\$ -	\$ -	\$1,021,532	\$ 10,954,617
Net income (loss)	(1,332,301)	(1,775,287)	(774,373)	8,085,888
Income (loss) per share – basic	\$ (0.02)	\$ (0.03)	\$ (0.01)	\$ 0.12
Income (loss) per share – diluted	\$ (0.02)	\$ (0.03)	\$ (0.01)	\$ 0.11

	Q1-19	Q4-18	Q3-18	Q2-18
Survey revenue	\$ -	\$ -	\$ -	\$ -
Net income (loss)	(1,763,320)	(1,392,716)	(1,660,031)	(1,961,114)
Income (loss) per share – basic	\$ (0.03)	\$ (0.02)	\$ (0.02)	\$ (0.03)
Income (loss) per share – diluted	\$ (0.03)	\$ (0.02)	\$ (0.02)	\$ (0.03)

- Except for Q2-19 and Q3-19, there were no revenues in the six of the previous eight quarters, The Company incurred net losses in each primarily due 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 Q1-20, the Company incurred a \$409,517 exchange gain as it held significant monetary assets in US dollars at March 31, 2019, including accounts receivable, cash and cash equivalents, short-term investments and the security deposit for the aircraft. At the same time the Canadian dollar devalued by approximately 9% all of which have an effect on the foreign exchange gain;
- 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 negotiation 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); and

- 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.

Liquidity and Capital Resources

Future Operations

The consolidated financial statements for Q1-20 have been prepared on a going concern basis. The going concern basis of presentation assumes that NXT will continue in operation for the foreseeable future and will be able to realize its assets and discharge its liabilities and commitments in the normal course of business.

Management is of the view that the Company currently has sufficient funds to maintain operations for the next 12 months as of the date of these financial statements.

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, develop its pipeline of opportunities to secure new revenue contracts and convert these opportunities into successful contracts 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 March 31, 2020 totaled \$6.24 million. Net working capital totaled \$6.16 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.

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	Mar 31, 2020	Dec 31, 2019	Net Change	%
Current assets (current liabilities)				
Cash, cash equivalents and short-term investments	\$6,242,719	\$6,639,757	\$(397,038)	(6)
Accounts receivable	822,371	1,384,315	(561,944)	(41)
Note receivable	354,675	324,700	29,975	9
Prepaid expenses and deposits	111,300	97,132	14,168	15
Accounts payable and accrued liabilities	(486,861)	(448,928)	(37,933)	8
Contract obligations	(139,776)	(131,386)	(8,390)	6
Current portion of lease obligation	(744,880)	(736,408)	(8,472)	1
Total Net Working Capital	6,159,548	7,129,182	(969,634)	(14)

NXT had no secured debt and had net working capital of \$6,159,548 as at March 31, 2020.

The decrease in net working capital in Q1-20 versus December 31, 2019 was due to operating activities offset by a payment of US\$466,000 received from the 2019 Nigerian SFD® Survey.

Accounts Payable

Accounts Payable	Mar 31, 2020	Dec 31, 2019	Net Change	%
Trade accounts payable	\$(322,150)	\$(181,790)	\$140,360	77
Deferred director and advisor payable	(26,601)	(24,352)	2,249	9
Accrued liabilities	(125,653)	(136,257)	(10,604)	(8)
Vacation pay accrued	(12,457)	(106,529)	(94,072)	(88)
Total Accounts Payable	(486,861)	(448,928)	37,933	8

Accounts payable increased by \$37,933 or 8%, in Q1-20 compared to December 31, 2019 for the following reasons:

- trade accounts payable increased by \$140,360, or 77%, due primarily to the purchase of an annual license of geophysical and geological information at the end of March and year end professional fees;
- deferred director and advisor fees increased by \$2,249, or 9%, due to exchange rate fluctuations as the payable amount is in US\$ for advisor fees;
- accrued liabilities decreased by \$10,604, or 8%, due to timing of invoice receipts; and
- Vacation pay accrued decreased by \$94,072, or 88%, as employees' vacation payables were paid.

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)	Q1-20	Q1-19
Operating activities	\$(634,660)	\$(881,482)
Financing activities	(11,158)	(10,377)
Investing activities	29,424	1,200,000
Effect of exchange rate changes on cash	157,656	3,503
Net source (use) of cash	(458,738)	311,644
Cash and cash equivalents, start of period	2,858,245	339,532
Cash and cash equivalents, end of period	2,399,507	651,176
Cash and cash equivalents	2,399,507	651,176
Short-term investments	3,843,212	2,700,000
Total Cash and Short-Term Investments	6,242,719	3,351,176

Operating Activities	Q1-20	Q1-19
Net income (loss) for the period	\$(1,332,301)	\$(1,763,320)
Total non-cash expense items & Translation of U.S. dollar cash	50,020	407,766
	(1,282,281)	(1,355,554)
Change in non-cash working capital balances	647,621	474,072
Total Cash from (used in) Operating Activities	(634,660)	(881,482)

Operating cash flow increased by \$312,361 in Q1-20 as compared to Q1-19 because of a payment received from the Nigerian SFD[®] Survey in Q1-20, which was partially offset by receipt of the SFD[®] mobilization fee in Q1-19.

Financing Activities	Q1-20	Q1-19
Repayment of capital lease obligation	(11,158)	(10,377)
Total Cash from (used in) Financing Activities	(11,158)	(10,377)

Financing payments in both Q1-20 and Q1-19 were for payments on the finance lease for office equipment. These payments will end in Q3-20 when the Company terminates the lease with a final payment of approximately \$20,000.

Investing Activities	Q1-20	Q1-19
Decrease (increase) in short-term investments	29,424	1,200,000
Total Cash from (used in) Investing Activities	29,424	1,200,000

Short-term investments in Q1-20 and Q1-19 decreased as the Company used investments in Guaranteed Investment Certificates to fund operations.

Contractual Commitments

The estimated minimum annual contractual commitments are as follows, as at March 31, 2020:

For the period ended December 31	Office Premises
April to December 2020	\$ 166,587
2021	222,501
2022	222,501
2023	222,501
2024	222,501
	1,056,591
2025	166,876
	1,223,467

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 Loan Arrangement), 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:

	Q1-20	Q1-19
Legal Fees	\$67,513	\$39,989

Accounts payable and accrued liabilities includes a total of \$84,694 (\$146,197 as at December 31, 2019) payable to Norton Rose Fulbright Canada LLP.

Critical Accounting Estimates

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

Changes in Accounting Policies

Measurement of credit losses on financial instruments

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

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 March 31, 2020 and December 31, 2019, the Company held no derivate financial instruments.

For more information relating to risks, see the section titled "*Liquidity and Capital Resources – Net Working Capital*".

Outstanding Share Capital

	May 14, 2020	March 31, 2020	December 31, 2019
Common Shares	64,406,891	64,406,891	64,406,891
Stock options	882,600	882,600	1,169,500
Deferred Share Units	16,573	16,573	-
Total Share Capital and Dilutive Securities	65,306,064	65,306,064	65,576,391

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

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

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

The Responsible Officers concluded that, as at March 31, 2020, are not effective and as a result its DCPs are not sufficiently effective. NXT reached this conclusion based upon its assessment that there is a more than remote likelihood that its ICFR will not prevent or detect material misstatements if they should exist

in the Company's consolidated financial statements. The Responsible Officers continue to take certain actions to remediate these material weaknesses including: (i) the implementation of controls with regards to the review procedures surrounding its disclosure; and (ii) engagement of third-party specialists. In addition, the Chief Financial Officer engages subject matter consultants as the need arises.

It should be noted that a control system, including the Company's DCPs and ICFR 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.