

# NXT ENERGY SOLUTIONS INC.

Management's Discussion and Analysis

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The following management's discussion and analysis ("MD&A") was prepared by management based on information available as at August 3, 2018, has been approved by the Board of Directors, and should be reviewed in conjunction with the unaudited Consolidated Interim Financial Statements for the period ended June 30, 2018. This MD&A covers the unaudited three months ("Q2-18") and the six months year-to-date ended June 30, 2018 ("2018 YTD"), with comparative totals for the three-month ("Q2-17") and the six months year-to-date ended June 30, 2017 ("2017 YTD").

As used in this MD&A, the terms "we", "us", "our", "NXT" and the "Company" mean NXT Energy Solutions Inc.

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

NXT and Stress Field Detector ("SFD<sup>®</sup>") in Canada and the United States are the registered trademarks of NXT.

## **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", and relate primarily to:

- the anticipated use of proceeds from the Private Placement (as defined below);
- the timing and extent of potential future growth opportunities in new international markets, including new business ventures, and the satisfaction by third-parties of certain necessary conditions related thereto including obtaining financing and government and regulatory approvals;
- estimates related to our future financial position and liquidity;
- estimated minimum annual commitments for our leased premises and equipment;
- the extent to which the Company is entitled to receive tax credits under the SR&ED Program (as defined below), and the anticipated timing of receipt thereof; 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 source personnel and equipment in a timely manner and at an acceptable cost;
- our ability to obtain all permits and approvals required;
- general business, economic and market conditions (including global commodity prices);
- the ability to obtain insurance to mitigate the risk of default on client billings; and
- foreign currency exchange and interest rates.

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:

- our ability to generate sufficient ongoing cash flow from operations or to raise adequate capital to allow us to grow the business and continue operations;
- conducting operations in international markets;
- the emergence of alternative competitive technologies;
- protection of our intellectual property and rights to our SFD<sup>®</sup> technology;
- the loss of key personnel;
- our dependence on a limited number of clients;
- foreign currency and interest rate fluctuations may affect our financial position;
- changes in, or in the interpretation of, laws, regulations or policies; and
- volatility in oil and natural gas commodity prices may reduce demand for our services.

For more information relating to risks, see the section titled "Risk Factors" in NXT's current 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.

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

NXT's accompanying consolidated interim 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 meaning prescribed by US GAAP and may not be comparable to similar measures presented by other entities. Net working capital is the net result of the difference of current assets less current liabilities. Management of NXT uses this non-GAAP measure to improve its ability to assess liquidity at a point in time.

# **Description of the Business**

NXT utilizes its proprietary and patented SFD<sup>®</sup> survey method to provide airborne, gravity-based geophysical surveys to companies involved in oil and gas exploration and production globally.

The discussion in this MD&A focuses on the highlights of NXT's ongoing business development activities, and any significant changes arising prior to the filing of our MD&A for the three and six month periods ended June 30, 2018.

# **Financial and Operational Highlights**

Key financial and operational highlights for the second quarter of 2018 include:

- Completed a private placement financing on July 3, 2018 of \$9,484,810 through the issuance of an aggregate of 10,264,946 units at \$0.924 per unit, marginally less than the original target of \$10,076,416 and the issuance of 10,905,212 units that was announced in the first quarter (the "Private Placement").
  - Closed on an aggregate of \$4,200,000 during the second quarter over two separate closings on May 15 and June 15, 2018.

- Subsequent to the quarter-end on July 3, 2018 we closed on a further amount of \$974,311.
- Entered into an Investor Rights Agreement with Alberta Green Ventures Limited Partnership (the "Subscriber" or "AGV") in conjunction with the completion of the Private Placement. The Subscriber now holds approximately 20.0% of the Company's 68,432,746 outstanding common shares (including common shares issuable through the exercise of its warrants).
- SHINE Quests FZC continued working towards securing government approvals for a larger scale infrastructure and resource development within the Mannar Basin of Sri Lanka which will include a commitment to use SFD<sup>®</sup>.
- Generation Resource Discoveries advanced discussions with various Indonesian authorities on securing financing and permits required for a geophysical survey over an area of up to 20,000 km<sup>2</sup> in the North Sumatra basin offshore Aceh, Indonesia, with discussions expected to conclude by August 2018. Upon successful conclusion, NXT will initiate SFD<sup>®</sup> survey contract discussions with Generation Resource Discoveries.
- Reinitiated discussions with the governments of Ghana and Nigeria regarding potential SFD<sup>®</sup> surveys for offshore exploration acreage.
- Engaged in discussions with private counterparties in Canada and the USA regarding the utilization of SFD<sup>®</sup> for the identification of new reservoir horizons with limited prior geophysical information in mature conventional and unconventional areas.
- Received notification of the granting of NXT's SFD<sup>®</sup> patent in China on April 13, 2018.
- No survey revenues were recorded for the first two quarters of 2018.
- A net loss of \$1.96 million was recorded for the three months ended June 30, 2018, including amortization expense of \$0.45 million and stock-based compensation expense of \$0.15 million.
- A net loss of \$3.92 million was recorded for the six months ended June 30, 2018, including amortization expense of \$0.89 million and stock-based compensation expense of \$0.45 million.
- Operating activities used \$1.94 million of cash during the second quarter, and net cash proceeds provided from financing activities was \$4.09 million.
- Operating activities used \$3.28 million of cash during the six months ended June 30, 2018, and net cash from financing activities provided was \$8.38 million.
- Losses per common share were \$0.03 for the second quarter and \$0.06 for the six months ended June 30, 2018 (basic and diluted).
- Continued progress in our corporate cost reduction program with a decrease in general and administrative costs of 17% compared to the same quarter last year and a reduction of 23% year to date.
- Cash and short-term investments at the end of the second quarter of 2018 were \$6.20 million.
- Subsequent to quarter-end on July 19, 2018, NXT received Notice of Allowance for a CIP (continuation-in-part) patent in the United States regarding a new sensor design we term the "Cascade" configuration. The patent will be granted and issued in the coming months.
  - The Cascade sensor is the result of NXT's continued research & development efforts and builds upon our existing US patent. The Company's Cascade sensors will provide enhanced ability for identifying trapped fluid bodies indicative of potential hydrocarbon accumulations along with improved reliability and flexibility during SFD<sup>®</sup> survey operations.

#### **Private Placement Closing**

On July 3, 2018, the Company closed the final portion of the Private Placement, issuing 1,054,449 units for gross proceeds of \$974,311. This brings the total amount raised in connection with the Private Placement to approximately \$9,484,810 through the issuance of an aggregate of 10,264,946 units to the Subscriber comprised of 10,264,946 common shares and 3,421,646 warrants. The Subscriber now holds approximately 20.0% of the Company's 68,432,746 outstanding common shares (including common shares issuable through the exercise of its warrants).

In conjunction with the closing of the final amount of the Private Placement, the Company and the Subscriber have entered into an Investor Rights Agreement pursuant to which: (a) the Subscriber has the right to nominate one director for election to the board of directors of the Company (subject to maintaining any equity ownership of at least 10% in the Company); (b) the Subscriber is entitled to participate in future equity or convertible security offerings of the Company in order to maintain its pro rata equity interest in the Company (subject to maintaining any equity ownership of at least 10% in the Company); (c) the Subscriber is entitled to a similar equity offering participation right in connection with certain new entities that may be created by the Company to expand the application of its proprietary technologies; and (d) the Subscriber has agreed to a 18 month standstill from the closing date of this final amount of the Private Placement and a 12 month restriction on dispositions of 75% of the securities acquired in the Private Placement.

## **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. The extent of the profit or loss each quarter is mainly due to SFD<sup>®</sup> surveys that have been completed or are underway, and variances in such non-cash items as stock-based compensation expense ("SBCE"), which can occasionally be a significant expense in any given quarter.

|                                   |    | Q2-18<br>Jun 30 | Q1-18<br>Mar 31 | -  | Q4-17<br>Dec 31 | -   | Q3-17<br>Sep 30   |
|-----------------------------------|----|-----------------|-----------------|----|-----------------|-----|-------------------|
| Survey revenue                    | \$ | -               | \$<br>-         | \$ | -               | \$  | -                 |
| Net income (loss)                 | (1 | 1,961,114)      | (1,954,650)     | (2 | ,096,360)       | (1, | 935 <i>,</i> 356) |
| Income (loss) per share - basic   | \$ | (0.03)          | \$<br>(0.03)    | \$ | (0.04)          | \$  | (0.04)            |
| Income (loss) per share - diluted | \$ | (0.03)          | \$<br>(0.03)    | \$ | (0.04)          | \$  | (0.04)            |

|                                   |    | Q2-17<br>Jun 30 | Q1-17<br>Mar 31 |     | Q4-16<br>Dec 31 |      | Q3-16<br>Sep 30 |
|-----------------------------------|----|-----------------|-----------------|-----|-----------------|------|-----------------|
| Survey revenue                    | \$ | -               | \$<br>-         | \$  | -               | \$   | -               |
| Net income (loss)                 | () | 2,723,956)      | (2,214,726)     | (2, | ,356,848)       | (2,2 | 142,834)        |
|                                   |    |                 |                 |     |                 |      |                 |
| Income (loss) per share - basic   | \$ | (0.05)          | \$<br>(0.04)    | \$  | (0.04)          | \$   | (0.04)          |
| Income (loss) per share - diluted | \$ | (0.05)          | \$<br>(0.04)    | \$  | (0.04)          | \$   | (0.04)          |

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<u>Q2-18 to Q1-18 comparison</u> – NXT had survey revenue of \$nil (\$nil in Q1-18), survey costs (related to aircraft lease and aircraft maintenance costs) of \$267,672 (\$249,762 in Q1-18), and SBCE of \$153,791 (\$295,284 in Q1-18).

<u>Q1-18 to Q4-17 comparison</u> – NXT had survey revenue of \$nil (\$nil in Q4-17), survey costs of \$249,762 (\$252,212 in Q4-17) related to aircraft lease and aircraft maintenance costs and SBCE of \$295,284 (\$84,351 in Q4-17).

<u>Q4-17 to Q3-17 comparison</u> – NXT had survey revenue of \$nil (\$nil in Q3-17), survey costs of \$252,212 (\$261,658 in Q3-17) related to aircraft lease and aircraft maintenance costs and SBCE of \$84,351 (\$162,724 in Q3-17).

<u>Q3-17 to Q2-17 comparison</u> - NXT had survey revenue of \$nil (\$nil in Q2-17), survey costs of \$261,658 (\$612,342 in Q2-17) related to aircraft lease and maintenance costs, and SBCE of \$162,724 (\$169,033 in Q2-17).

<u>Q2-17 to Q1-17 comparison</u> – NXT had survey revenue of \$nil (\$nil in Q1-17), survey costs (related to the Gulf of Mexico multi-client survey, and aircraft lease and maintenance costs) of \$612,342 (\$163,217 in Q1-17), and SBCE of \$169,033 (\$165,248 in Q1-17).

<u>Q1-17 to Q4-16 comparison</u> – NXT had survey revenue of \$nil (\$nil in Q4-16), survey costs (related to equipment test flights and aircraft maintenance costs) of \$163,217 (\$9,998 in Q4-16), and SBCE of \$165,248 (\$287,500 in Q4-16).

<u>Q4-16 to Q3-16 comparison</u> – NXT had survey revenue of \$nil (\$nil in Q3-16), survey costs (related to equipment test flights and aircraft maintenance costs) of \$9,998 (\$200,443 in Q3-16), and SBCE of \$287,500 (\$218,000 in Q3-16).

|                                      | Q2-18       | Q2-17       | 2018 YTD    | 2017 YTD    |
|--------------------------------------|-------------|-------------|-------------|-------------|
| Survey revenue                       | \$-         | \$-         | \$ -        | \$-         |
| Expenses:                            |             |             |             |             |
| Survey costs                         | 267,672     | 612,342     | 517,434     | 775,559     |
| General and administrative           | 1,110,634   | 1,337,051   | 2,092,038   | 2,699,632   |
| Stock-based compensation             | 153,791     | 169,033     | 449,075     | 334,281     |
| Amortization of property & equipment | 447,192     | 474,558     | 894,383     | 989,250     |
|                                      | 1,979,289   | 2,592,984   | 3,952,930   | 4,798,722   |
|                                      |             |             |             |             |
| Other Expenses (income):             |             |             |             |             |
| Interest Expense (income), net       | (14,276)    | (389)       | (14,207)    | 4,726       |
| Foreign exchange (gain) loss         | (3,264)     | 11,306      | (10,136)    | 17,281      |
| Other expense (recovery)             | (635)       | 38,785      | (12,823)    | 45,366      |
|                                      | (18,175)    | 49,702      | (37,166)    | 67,373      |
| Income (loss) before income taxes    | (1,961,114) | (2,642,686) | (3,915,764) | (4,866,095) |
|                                      |             |             |             |             |

## Summary of Operating Results

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| Income tax expense (recovery):        |       | -         |       | 81,270     |      | -        |    | 72,587     |
|---------------------------------------|-------|-----------|-------|------------|------|----------|----|------------|
|                                       |       |           |       |            |      |          |    |            |
| Net Income (loss) for the period      | \$ (1 | ,961,114) | \$ (2 | 2,723,956) | (3,9 | 915,764) | (4 | 1,938,682) |
|                                       |       |           |       |            |      |          |    |            |
| Net Income (loss) per share - basic   | \$    | (0.03)    | \$    | (0.05)     | \$   | (0.06)   | \$ | (0.09)     |
| Net Income (loss) per share - diluted | \$    | (0.03)    | \$    | (0.05)     | \$   | (0.06)   | \$ | (0.09)     |

Net loss for Q2-18 versus Q2-17 decreased \$762,842 (28%) or \$0.02 per share. This was mostly driven by cost reduction efforts in general and administrative ("G&A") expense as described below and the Gulf of Mexico survey flown in Q2-17 in which all costs were expensed. Net loss for 2018 YTD versus 2017 YTD decreased \$1,022,918 (21%) or \$0.03 per share. Again this was driven by cost reduction efforts in G&A expense and the Q2-17 Gulf of Mexico survey. There were no revenues in any of the periods.

#### **Summary of Survey Expenses**

|                               | Q2-18      | Q2-17      | 2018 YTD   | 2017 YTD   |
|-------------------------------|------------|------------|------------|------------|
| Aircraft lease costs          | \$ 112,267 | \$ 107,052 | \$ 223,411 | \$ 107,052 |
| Amortization of deferred gain | (38,825)   | (25,883)   | (77,650)   | (25,883)   |
| Aircraft operations           | 194,173    | 161,645    | 371,559    | 324,219    |
| Survey projects               | 57         | 369,528    | 114        | 370,171    |
| Total Survey Expenses, net    | 267,672    | 612,342    | 517,434    | 775,559    |

During Q2-17, the Company entered into a sale and leaseback transaction of its aircraft (the "Leaseback Transaction"). Accordingly, subsequent to entering into the Leaseback Transaction in April 2017, survey expenses include the net costs related to this operating lease. The monthly lease payments are net of the amortized deferred gain on sale that was realized upon completion of the Leaseback Transaction.

During Q2-18, survey expenses related entirely to the aircraft lease and maintenance costs, net of charter hire revenue. A significant scheduled major maintenance was performed in Q2-18 with resulted in higher operating costs versus Q2-17. In addition, Q2-17 survey project costs were direct costs related to the Gulf of Mexico survey. Aircraft lease costs in Q2-18 are slightly higher than Q2-17 as the lease payments started in May 2017, which resulted in one less month of lease costs.

In comparing 2018 YTD with 2017 YTD, costs for aircraft operations were higher because of the scheduled major maintenance performed in Q2-18. Also charter hours were lower in Q1-18 which reduced the offset against operating costs. Aircraft lease costs in 2018 YTD are \$116,359 higher than 2017 YTD as the lease payments started in May 2017, which resulted in 4 less month of lease costs in during 2017. This is offset by lower amortization costs in 2018 YTD.

The aircraft is available for charter to third parties through our aircraft manager when it is not being used by NXT. All associated revenues, net of commissions, and costs of charter activity are retained by NXT.

<u>General and administrative expense</u> – all salaries and overhead costs related to SFD<sup>®</sup> data interpretation staff are included in G&A, and not included with direct survey expenses. The categories of costs included in G&A are as follows:

| G&A Expenses                                     | Q2-18      | Q2-17      | net change   | %      |
|--|------------|------------|--------------|--------|
| Salaries, benefits and consulting charges        | \$ 473,095 | \$ 699,449 | \$ (226,354) | (32%)  |
| Board, professional fees, & public company costs | 295,772    | 219,532    | 76,240       | 35%    |
| Premises and administrative overhead             | 199,113    | 199,363    | (250)        | (0%)   |
| Business development                             | 142,654    | 64,201     | 78,453       | 122%   |
| Bolivian overhead                                | -          | 154,506    | (154,506)    | (100%) |
| Total G&A Expenses                               | 1,110,634  | 1,337,051  | (226,417)    | (17%)  |

| G&A Expenses                                     | 2018 YTD     | 2017 YTD    | net change   | %     |
|--|--------------|-------------|--------------|-------|
| Salaries, benefits and consulting charges        | \$ 1,023,175 | \$1,484,096 | \$ (460,921) | (31%) |
| Board, professional fees, & public company costs | 483,592      | 437,102     | 46,490       | 11%   |
| Premises and administrative overhead             | 369,461      | 457,990     | (88,529)     | (19%) |
| Business development                             | 209,354      | 132,082     | 77,272       | 59%   |
| Bolivian overhead                                | 6,456        | 188,362     | (181,906)    | (97%) |
| Total G&A Expenses                               | 2,092,038    | 2,699,632   | (607,594)    | (23%) |

G&A decreased 17% or \$226,417 in Q2-18 compared to Q2-17 as the result of successful cost reduction efforts. The Company did increase spending in business development as it continues to focus in this area.

- The main reason for salaries, benefits and consulting charges being lower than Q2-17 is due to a reduction in corporate headcount and recognition of a refundable credit from the Scientific Research and Experimental Development Tax Incentive Program (the "SR&ED Program").
- Board, professional fees & public company costs, were 35% higher in Q2-18 compared to Q2-17 as the Company incurred costs indirectly related to the Private Placement and termination costs for contracts as part of cost reduction efforts.
- Premises and administrative overhead were flat in Q2-18 compared to the same period the prior year.
- Business development costs increased \$78,453 as the Company increased marketing efforts for the SFD<sup>®</sup> technology.
- The Bolivian office is shut-down. Therefore there was no spending in Q2-18.

G&A decreased 23% or \$607,594 in 2018 YTD compared to 2017 YTD.

- The main reason for salaries, benefits and consulting charges being lower than 2017 YTD is due to a reduction in corporate headcount. In addition focus was put on reducing vacation liabilities. This was offset partially by engaging two agents in South America to leverage the Company's experience and success in the region.
- Board, professional fees & public company costs, were 11% higher in 2018 YTD compared to 2017 YTD as the Company incurred costs indirectly related to the Private Placement and termination costs for contracts as part of cost reduction efforts. These increases were partially offset as a result of the Company having one less director during these comparative periods.
- Premises and administrative overhead were 19% lower in 2018 YTD compared to the prior year, mostly due to lower rental common area costs as actual property taxes and significantly lower

maintenance costs due to lower than expected property taxes. In addition there were no temporary staff in 2018 YTD and the overall reduced headcount reduced overhead spending in several areas like supplies.

- Business development costs increased \$77,272 as the Company increased marketing efforts for the SFD<sup>®</sup> technology during Q2-18.
- 2018 YTD Bolivian overhead costs of \$6,456 are related to closing of the branch. At the beginning of 2017, Bolivian overhead costs were presented as G&A to reflect the fact the office has been maintained to facilitate periodic operating activities in Bolivia that were anticipated from time to time.

<u>Stock-based compensation</u> – this expense varies in any given quarter or year, as it is a function of several factors, such as 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 Q2-18 was lower compared to Q2-17 by \$15,242. The expense was lower as headcount reductions caused the forfeiture of options during late 2017.

SBCE in 2018 YTD was higher compared to 2017 YTD by \$114,794. The expense was higher because of the vesting of 333,333 options granted in February 2018. No options were granted in 2017.

<u>Interest income (expense), net</u> – includes interest income earned on short-term investments netted by interest expense from capital lease obligations. Net interest income for Q2-18 was \$14,276 as compared to net interest income of \$389 for Q2-17. For 2018 YTD net interest income was \$14,207 and for 2017 YTD net interest expense was \$4,726. Proceeds from the Private Placement were placed in short-term investments as soon as they were received and therefore interest income increased versus the prior periods. Short-term investments were minimal in Q2-17 and 2017 YTD.

Loss (gain) on foreign exchange – this total is caused by changes in the relative exchange values of the US\$ and CDN\$. For example, when the CDN\$ trades higher relative to the US\$, cash held in US\$ and monetary assets denominated in US\$ will decline in value. This decline will be reflected as a foreign exchange loss in the period. NXT normally holds its cash and short-term investments in CDN\$ to reduce the effect of market volatility. The security deposit for the aircraft is held in US\$, which has a significant effect on the unrealized foreign exchange gain and loss.

The value of net US\$ monetary assets can vary widely each period, based on such factors as the extent of US\$ revenue contracts in process, and the level of US\$ cash and short-term investments on hand.

The valuation is also affected by the relative strength of the US\$ at each period end, resulting in both realized and unrealized net exchange movements on the net holdings of US\$ cash and other working capital items. The foreign exchange gain for the quarter was primarily caused by the translation of assets and liabilities in the Canadian Company which were held in US\$.

<u>Intellectual property and other expenses</u> – this category includes primarily costs related to intellectual property ("IP") filings and research and development ("R&D") activity related to the SFD<sup>®</sup> technology, and costs for certain non-recurring, "project" activities.

| Other Expenses                | Q2-18    | Q2-17    | 2018 YTD   | 2017 YTD  |
|-------------------------------|----------|----------|------------|-----------|
| Intellectual property and R&D | \$ 2,106 | \$30,594 | \$(10,964) | \$ 41,027 |
| Other, net                    | (2,741)  | 8,191    | (1,859)    | 4,339     |
| Total Other Expenses, net     | (635)    | 38,785   | (12,823)   | 45,366    |

For 2018 YTD, the Company's other expenses were negative as it incurred less R&D costs from a provider of services than originally estimated. For 2017 YTD, other expenses consisted primarily of costs incurred to secure a patent for SFD<sup>®</sup> in the United States and to continue to develop SFD<sup>®</sup> technology.

<u>Intellectual property and related amortization expense</u> – NXT finalized its acquisition of specific rights to utilize the proprietary SFD<sup>®</sup> technology from its inventor, NXT's President & CEO, on August 31, 2015. As a result of this acquisition, NXT obtained the exclusive rights to utilize the SFD<sup>®</sup> intellectual property in global hydrocarbon exploration applications.

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 will also be subject to ongoing tests of potential impairment of the recorded net book value. No impairments were recognized during the three and six months ended June 30, 2018 and 2017.

Property and equipment amortization is lower for both the three and six month periods ending June 30, 2018 versus the same periods in the prior year due to the Leaseback Transaction.

| Amortization Expenses       | Q2-18     | Q2-17     | 2018 YTD  | 2017 YTD   |
|-----------------------------|-----------|-----------|-----------|------------|
| Property and equipment      | \$ 26,008 | \$ 53,374 | \$ 52,016 | \$ 146,883 |
| Intellectual property       | 421,184   | 421,184   | 842,367   | 842,367    |
| Total Amortization Expenses | 447,192   | 474,558   | 894,383   | 989,250    |

<u>Income tax expense</u> – NXT periodically earns revenues while operating outside of Canada as a non-resident within certain foreign jurisdictions, and services rendered to clients in such countries may be subject to foreign withholding taxes, which are only recoverable in certain limited circumstances. Income tax expense for 2017 is withholding taxes that were incurred on charges related to the Bolivia survey project. There was no income tax expense in Canada or Bolivia during 2018.

# Liquidity and Capital Resources

NXT's cash and cash equivalents plus short-term investments at June 30, 2018 was \$6,202,682.

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, and the proceeds from the Private Placement are expected to be, used to provide NXT with funds to pursue, close and implement commercial transactions currently in negotiation, develop additional revenue streams including multiclient data sales and strategic partnerships, and for general corporate and working capital purposes.

Risks related to having sufficient ongoing working capital to execute survey project contracts are mitigated through our normal practice of obtaining progress payments from prospective clients 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.

During Q2-18, NXT continued to make progress in strengthening its liquidity and working capital position through a series of corporate actions described below.

**Reduction in corporate costs:** Following the completion of the Leaseback Transaction, NXT took further steps to reduce corporate costs. The most significant of these steps included the deferral of a portion of the employees' cash compensation and a reduction in non-essential staff. Please see the discussion under "Summary of Operating Results – General and administrative expense" for the results of these reductions.

**Private Placement:** As discussed in the section Private Placement Closing the Company closed the final portion of the Private Placement on July 3, 2018.

With the completion of the Private Placement, NXT estimates it will have sufficient funds to meet its ongoing obligations for a period of approximately 16 months. The lower closing amount of the Private Placement has reduced this period by approximately 3 months.

| Net Working Capital Summary                 | Jun 30,<br>2018 | Dec 31,<br>2017 | net change as<br>at Q2-18 |
|---|-----------------|-----------------|---------------------------|
| Current assets (current liabilities)        |                 |                 |                           |
| Cash, cash equivalents and Short Term       |                 |                 |                           |
| Investments                                 | \$ 6,202,681    | \$ 1,116,618    | \$ 5,086,063              |
| Accounts receivable                         | 139,207         | 60,027          | 79,180                    |
| Prepaid expenses and deposits               | 142,237         | 107,363         | 34,874                    |
| Accounts payable and accrued liabilities    | (1,324,084)     | (1,562,394)     | 238,310                   |
| Income taxes payable                        | -               | (201)           | 201                       |
| Current portion of capital lease obligation | (41,051)        | (39,579)        | (1,472)                   |
| Net Working Capital                         | 5,118,990       | (318,166)       | 5,437,156                 |

NXT has no secured debt, and had net working capital of \$5,118,990 as at June 30, 2018, as follows:

The increase in working capital was due to the cash provided by the Private Placement net of cash operating costs during the quarter, lower accounts payable and accrued liabilities and a receivable for tax credits the Company is entitled to under the SR&ED Program which it expects to receive in the third quarter of 2018.

The net decrease in accounts payable and accrued liabilities is comprised of the following movements:

| Accounts Payable Summary                  | Jun 30,<br>2018 | Dec 31,<br>2017 | net change as<br>at Q2-18 |
|---|-----------------|-----------------|---------------------------|
| Trade accounts payable                    | \$<br>(282,604) | \$ (430,100)    | \$ 147,496                |
| Deferred gain on sale of aircraft         | (155,301)       | (155,301)       | -                         |
| Deferred employee salaries                | (157,419)       | (380,548)       | 223,129                   |
| Deferred director /Advisory Board payable | (150,420)       | (213,181)       | 62,761                    |
| Accrued liabilities                       | (537,927)       | (212,701)       | (325,226)                 |
| Vacation pay accrued                      | (40,413)        | (170,563)       | 130,150                   |
| Total Accounts Payable                    | (1,324,084)     | (1,562,394)     | 238,310                   |

Trade payables as at June 30, 2018 decreased \$147,496 compared to those outstanding as at December 31, 2017 as several deferred payables were settled in the period.

Deferred employee salaries decreased by \$223,129 as employees were paid their deferred salaries up until March 31, 2018.

Deferred director and Advisory Board fees decreased \$62,761 as several of these outstanding liabilities were paid or settled upon termination of contracts during Q2-18.

Accrued liabilities as at June 30, 2018 increased compared to those accrued as at December 31, 2017 as an accrual was made for the finder's fee payable in connection with the Private Placement.

Vacation Pay Accrued decreased \$130,150 as employees took significant vacation time and any remaining outstanding balances from prior years were settled.

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 Summary - from / (used in)       | Q2-18         | Q2-17         | 2018 YTD       | 2017 YTD      |
|--|---------------|---------------|----------------|---------------|
| Operating activities                       | \$(1,942,964) | \$(1,878,718) | \$ (3,281,872) | \$(3,301,404) |
| Financing activities                       | 4,093,205     | (8,976)       | 8,377,941      | 12,330        |
| Investing activities                       | (4,960,007)   | 1,940,996     | (4,310,006)    | 3,086,624     |
| Net source (use) of cash                   | (2,809,766)   | 53,302        | 786,063        | (202,450)     |
| Cash and cash equivalents, start of period | 3,762,447     | 234,744       | 166,618        | 490,496       |
| Cash and cash equivalents, end of period   | 952,681       | 288,046       | 952,681        | 288,046       |
|  |               |               |                |               |
| Cash and cash equivalents                  | 952,681       | 288,046       | 952,681        | 288,046       |
| Short-term investments                     | 5,250,000     | 1,500,000     | 5,250,000      | 1,500,000     |
| Total Cash and Short-Term Investments      | 6,202,681     | 1,788,046     | 6,202,681      | 1,788,046     |

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| Operating Activities                | Q2-18         | Q2-17         | 2018 YTD      | 2017 YTD      |
|-------------------------------------|---------------|---------------|---------------|---------------|
| Net income (loss) for the period    | \$(1,961,114) | \$(2,723,956) | \$(3,915,764) | \$(4,938,682) |
| Total non-cash expense items        | 544,625       | 826,159       | 1,241,772     | 1,506,869     |
|                                     | (1,416,489)   | (1,897,797)   | (2,673,992)   | (3,431,813)   |
| Change in non-cash working          |               |               |               |               |
| capital balances                    | (526,475)     | 19,079        | (607,880)     | 130,409       |
| Total Cash from (used in) Operating |               |               |               |               |
| Activities                          | (1,942,964)   | (1,878,718)   | (3,281,872)   | (3,301,404)   |

For all periods, changes in operating cash flow was driven by the lack of revenue and incurred operating costs for the period. Operating cash outflow increased \$64,246 when comparing Q2-18 versus Q2-17 as previously deferred liabilities were settled. Cost savings increased operating cash flow by \$481,308, but payments of deferred liabilities decreased non-cash working capital by \$545,554. When comparing 2018 YTD to 2017 YTD operating activity outflow improved slightly by \$19,532. Again cost reduction and cash deferral efforts reduced the operating cash by \$757,821, but payments of deferred liabilities decreased non-cash working capital by \$738,289 for a net improvement of \$19,532.

| Financing Activities                           | Q2-18            | Q2-17   | 2018 YTD  | 2017 YTD  |
|--|------------------|---------|-----------|-----------|
| Proceeds from exercise of stock options        | -                | \$ 136  | \$        | \$ 30,420 |
| Net proceeds from Private Placement            | 4,103,011        | -       | 8,392,332 | -         |
| Repayment of capital lease obligation          | (9 <i>,</i> 806) | (9,112) | (19,458)  | (18,090)  |
| Total Cash from (used in) Financing Activities | 4,093,205        | (8,976) | 8,377,941 | 12,330    |

NXT recorded a net cash inflow of \$4,103,011 in Q2-18 and \$8,392,332 in 2018 YTD as a result of proceeds received from the closing of tranches in the Private Placement.

| Investing Activities                           | Q2-18       | Q2-17       | 2018 YTD    | 2017 YTD    |
|--|-------------|-------------|-------------|-------------|
| Sale/(purchase) of property and equipment      | \$(10,006)  | \$3,137,905 | \$ (10,006) | \$3,133,533 |
| Decrease (increase) in short-term investments  | (4,950,001) | (1,196,909) | (4,300,000) | (46,909)    |
| Total Cash from (used in) Investing Activities | (4,960,007) | 1,940,996   | (4,310,006) | 3,086,624   |

Short-term investments in Q2-18 increased \$4,950,001 with cash received from the Private Placement. In Q2-17, short-term investments increased from cash received from the Leaseback Transaction.

#### **Contractual Commitments**

#### Aircraft and office premises lease

NXT has an operating lease commitment on its Calgary office space for a 10-year term at an initial estimated minimum monthly lease payment of \$44,624 (including operating costs).

The leaseback of NXT's aircraft is an operating lease with a minimum term of 60 months and monthly lease payments of approximately US\$39,500.

The estimated minimum annual commitments for these leases are as follows, as at June 30, 2018:

| For the period ended December 31 | Office Premises |           | Aircraft |           |
|----------------------------------|-----------------|-----------|----------|-----------|
| 2018                             | \$              | 275,776   | \$       | 312,082   |
| 2019                             |                 | 551,553   |          | 624,163   |
| 2020                             |                 | 554,526   |          | 624,163   |
| 2021                             |                 | 563,450   |          | 624,163   |
| 2022                             |                 | 563,450   |          | 156,041   |
|                                  |                 | 2,508,755 |          | 2,340,612 |
| Thereafter, 2023 through 2025    |                 | 1,549,487 |          | -         |
|                                  |                 | 4,058,242 |          | 2,340,612 |

#### Additional Disclosures – Outstanding Share Capital and Dilutive Securities

|   |                   |                  | As at                |
|---|-------------------|------------------|----------------------|
|   | August 3,<br>2018 | June 30,<br>2018 | December<br>31, 2017 |
| Common shares issued and outstanding:       |                   |                  |                      |
| Common shares                               | 68,432,746        | 67,378,297       | 58,161,133           |
| Common shares issuable upon exercise:       |                   |                  |                      |
| Warrants                                    | 3,421,646         | 3,070,164        | 0                    |
| Stock options                               | 2,269,500         | 2,292,000        | 1,648,667            |
| Total Share Capital and Dilutive Securities | 74,123,892        | 72,740,461       | 59,809,800           |

During the month of July 2018, a total of 22,500 stock options expired without being exercised.

#### **Other Transactions with Related Parties**

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:

|            | For the thre | For the three-month period<br>ended June 30 |            | For the six-month period<br>ended June 30 |  |
|------------|--------------|---|------------|---|--|
|            | 2018         | 2017  | 2018       | 2017                                      |  |
| Legal Fees | \$ 188,263   | \$ 8,884                                    | \$ 209,156 | \$ 22,478                                 |  |

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Accounts payable and accrued liabilities includes a total of \$121,403 (\$120,479 as at December 31, 2017) payable to this law firm.

In addition, accounts payable and accrued liabilities includes \$24,184 (\$14,210 as at December 31, 2017) related to re-imbursement of expenses owing to an officer of NXT.

#### **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, 2017. The following is also important to note:

#### Revenue recognition

Revenue earned on SFD<sup>®</sup> survey contracts (net of any related foreign sales taxes) is recognized on a completed contract basis. This method of revenue recognition is currently deemed appropriate given the complex nature of the end product that is delivered to the client. While the quantity of data acquisition can be measured based on actual line kilometers flown, the acquired SFD<sup>®</sup> data does not realize its full value until it is processed, interpreted in detail, and a recommendations report is generated and reviewed with the client's geological and geophysical staff.

All funds received or invoiced in advance of completion of the contract are reflected as unearned revenue and classified as a current liability on our balance sheet. All survey expenditures and obligations related to uncompleted SFD<sup>®</sup> survey contracts (including directly-related sales commissions) are reflected as work-in-progress and classified as a current asset on our balance sheet. Upon completion of the related contract, unearned revenue and the work-in-progress is moved as appropriate to the statement of earnings (loss) as either revenue or survey cost. Survey costs do not include any salaries and overhead related to SFD<sup>®</sup> data interpretation staff (which is included in G&A expense) or amortization of property and equipment expense.

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

#### Issued but not yet adopted: Leases

In February 2016, the Financial Accounting Standards Board issued new guidance on leases. The new guidance requires lessees to recognize most leases, including operating leases, on the balance sheet as lease assets and lease liabilities. In addition, lessees may be required to reassess assumptions associated with existing leases as well as to provide expanded qualitative and quantitative disclosures. The new guidance is effective January 1, 2019. NXT is evaluating the impact of the adoption of this new guidance and has not yet determined the effect on its consolidated financial statements.

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

NXT's Chief Executive Officer (the "CEO") and Chief Financial Officer (the "CFO"), together the "Responsible Officers") are responsible for establishing and maintaining DCP, 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.

DCP 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. DCP 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 CEO and CFO 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 DCP 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 DCP:

- 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. These complex areas have historically included accounting for income taxes and equity related transactions. 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 can result in control deficiencies in maintaining DCP and ICFR that in turn have led to a recurrence of previously identified deficient disclosure and the requirement for refiling of certain disclosure documents. To address this issue and 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.

Notwithstanding NXT's efforts to mitigate the risks associated with the above-mentioned deficiencies, the CEO and CFO concluded that, as at June 30, 2018, the Company's ICFR are not effective and as a result its DCP are not effective. NXT reached this conclusion based upon its assessment that there is more than a remote likelihood that its ICFR will not prevent or detect material misstatements if they should exist in the Company's consolidated financial statements. NXT has therefore further taken on a process of

continuous improvement in financial reporting and disclosure policies and responsibilities from which the Company expects to see benefits over the course of 2018.

It should be noted that a control system, including the Company's DCP 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 DCP and ICFR will prevent all errors or fraud.

#### **Additional Information**

Additional information is available on NXT's website at www.nxtenergy.com and on SEDAR at www.sedar.com.