



# **NXT ENERGY SOLUTIONS INC.**

**Management's Discussion and Analysis**

**For the three and nine months ended  
September 30, 2022**

## Management's Discussion and Analysis

This management's 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 November 9, 2022 and 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 condensed consolidated interim financial statements and related notes for the period ended September 30, 2022 (the "unaudited condensed consolidated interim financial statements"). This MD&A covers the unaudited three and nine month periods ended September 30, 2022, with comparative amounts for the unaudited three and nine month periods ended September 30, 2021.

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

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

### Advisories

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

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

- payment of the Consideration (as defined below), and the satisfaction of the conditions thereto (including with respect to cash balances, receipt of funds, and the execution and completion of contracts);
- the development, commercialization, and protection of the SFD® technology for geothermal resource exploration;
- the extent to which expanding the Company's scope of business to include exploring for both hydrocarbon and geothermal resources is anticipated to result in an expansion of its scope of revenue sources;
- the Company's pursuit of opportunities to secure new revenue contracts;
- estimates related to our future financial position and liquidity including certain contractual obligations; and
- general business strategies and objectives.

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

- our ability to develop and market our SFD® technology and services to current and new customers;
- our ability to source personnel and equipment in a timely manner and at an acceptable cost;

- our ability to obtain all permits and approvals required;
- our ability to obtain financing on acceptable terms;
- our ability to obtain insurance to mitigate the risk of default on client billings;
- foreign currency exchange and interest rates;
- general business, economic, and market conditions (including global commodity prices);
- the estimated costs of the Offering (defined below);
- the estimated amount of funds raised under the Offering; and
- the operating expenses of the Company following November 30, 2022.

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

- the ability of management to execute its business plan, including their ability to secure new revenue contracts;
- health, safety, and the environment (including risks related to the COVID-19 pandemic);
- our ability to develop and commercialize the geothermal technology;
- our ability to service existing debt;
- our ability to protect and maintain our intellectual property ("IP") and rights to our SFD® technology;
- our reliance on a limited number of key personnel;
- our reliance on a limited number of aircraft;
- our reliance on a limited number of clients;
- counterparty credit risk;
- foreign currency and interest rate fluctuations;
- the likelihood that the Company's ICFR (as defined below) will prevent or detect material misstatements in our unaudited condensed consolidated interim financial statements;
- changes in, or in the interpretation of, laws, regulations, or policies; and
- general business, economic, and market conditions (including global commodity prices).

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

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

## **Non-GAAP Measures**

NXT's accompanying unaudited condensed consolidated interim financial statements were prepared in accordance with accounting principles generally accepted in the United States of America ("US GAAP"). The Company has consistently used US GAAP for the eight most recently completed quarters. 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 being presented by other entities. Net working capital is the net result of the difference between current assets and current liabilities, and can be used by investors and management to assess liquidity at a particular point in time. See "*Liquidity and Capital Resources – Net Working Capital*" for further information.

## **Description of the Business**

NXT Energy Solutions Inc. is a Calgary-based technology company whose proprietary and patented Stress Field Detection ("SFD<sup>®</sup>") 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 hydrocarbon and geothermal exploration potential. The SFD<sup>®</sup> survey system enables NXT's clients to focus their exploration decisions concerning land commitments, data acquisition expenditures, and prospect prioritization on areas with the greatest potential. SFD<sup>®</sup> is environmentally friendly and unaffected by ground security issues or difficult terrain and is the registered trademark of NXT. NXT provides its clients with an effective and reliable method to reduce time, costs, and risks related to exploration.

## **Financial and Operational Highlights**

Key financial and operational highlights for Q3-22 are summarized below:

- cash at September 30, 2022 was \$0.57 million;
- net working capital was \$(1.06) million at September 30, 2022;
- the Company recorded SFD<sup>®</sup>-related revenues of \$nil and received US\$0.30 million (CDN\$0.39 million) of payments on outstanding accounts receivable in September 2022;
- a net loss of \$1.65 million was recorded for Q3-22, including stock-based compensation expense ("SBCE") and amortization expense of \$0.47 million;
- a net loss of \$5.26 million was recorded for YTD 2022, including SBCE and amortization expense of \$1.51 million;
- net loss per common share for Q3-22 was \$0.03 basic and \$0.03 diluted;
- net loss per common share for YTD 2022 was \$0.08 basic and \$0.08 diluted;
- cash flow used in operating activities was \$0.53 million during Q3-22 and \$2.23 million during YTD 2022;
- general and administrative ("G&A") expenses increased by \$0.20 million (26%) in Q3-22 as compared to Q3-21; and
- G&A expenses increased by \$0.57 million (24%) in YTD 2022 as compared to YTD 2021.

Key financial and operational highlights occurring subsequent to Q3-22 are summarized below:

- On October 31, 2022 the Company advised that will be offering rights (the "Offering") to holders of its common shares for gross proceeds of approximately \$4,000,000.

## Discussion of Operations

### ***Acquisition of the Geothermal Right***

The Company acquired the SFD<sup>®</sup> technology rights for geothermal resources ("Geothermal Right") from Mr. George Liszicasz, President and Chief Executive Officer of NXT ("CEO") on April 18, 2021. The consideration deliverable by the Company in connection with the acquisition of the Geothermal Right is set forth below (the "Consideration"):

1. US\$40,000 (CDN\$50,310) signature payment, which became due immediately and was paid on April 22, 2021;
2. CDN\$15,000 signature milestone payment paid in August 2021;
3. 300,000 common shares, which were issued in December 2021;
4. US\$200,000 milestone payment, which will become due in the event that the Company's cash balance exceeds CDN\$5,000,000 due to receipt of specifically defined funds from operations; and
5. US\$250,000 milestone payment, which will become due in the event that the Company executes and completes and receives full payment for a SFD<sup>®</sup> contract valued at US\$10,000,000 or greater, provided such contract is entered into and completed and payment of at least US\$5,000,000 is received by April 18, 2023.

As of September 30, 2022, the Company has recognized \$275,610 for the acquisition of the Geothermal Right, which is the combination of the US\$40,000 (CDN\$50,310) signature payment, the CDN\$15,000 signature milestone payment, the value of the 300,000 common shares of \$207,300 and other costs of \$3,000. The cost of the remaining two milestones will be recognized when it is deemed probable that these two milestones will be achieved by a special committee of the Board, comprised entirely of independent directors. The Board delegated authority to the special committee to determine when the milestones have been achieved.

### ***Geothermal Right Development Update***

Progress continues with respect to the development of the SFD-GT geothermal sensor family. The objective of this project was to test, identify, and analyze the desired elements of the SFD<sup>®</sup> geothermal sensor response over known geothermal areas with the ultimate goal of providing a green upstream geophysical service for advancing renewable power initiatives in Canada and abroad. The agreed project work was completed in November 2021 with total funding of \$50,000 from the National Research Council of Canada Industrial Research Assistance Program ("NRC IRAP"). The Company submitted a proposal to NRC IRAP for a funding and research plan for the next phase to support the research and development of the SFD<sup>®</sup> technology for geothermal applications.

## Patents

In Q1-22, NXT announced its patent application in Brazil has been allowed. As of the date of this MD&A, NXT has been granted SFD® patents in Brazil (February 2022), India (July 2021), Russia (January 2017), Japan (July 2017), Canada (August 2017), Mexico (September 2017), the United States (two patents were granted in November 2017 and September 2018, respectively), China (April 2018), and Europe (January 2020). In total, NXT has obtained SFD® patents or received patent allowances in 46 countries. These patents protect our proprietary SFD® technology and serve as independent third-party recognition of our technological invention in terms of practical applicability, conceptual novelty, and knowledge advancement.

## Summary of Operating Results

|                                     | Q3-22       | Q3-21       | YTD 2022    | YTD 2021     |
|-------------------------------------|-------------|-------------|-------------|--------------|
| SFD®-related revenue                | \$ -        | \$ -        | \$ -        | \$ 3,144,373 |
| Expenses:                           |             |             |             |              |
| SFD®-related costs, net             | 230,518     | 303,426     | 974,292     | 950,737      |
| General and administrative expenses | 963,433     | 765,120     | 2,922,660   | 2,348,280    |
| Amortization                        | 442,096     | 445,345     | 1,326,630   | 1,331,340    |
|                                     | 1,636,047   | 1,513,891   | 5,223,582   | 4,630,357    |
| Other Expenses (income):            |             |             |             |              |
| Interest expense, net               | 10,393      | 13,087      | 26,251      | 27,014       |
| Foreign exchange loss (gain)        | (3,085)     | (102,632)   | (14,175)    | 10,329       |
| Intellectual property and other     | 4,633       | 10,096      | 27,869      | 26,885       |
|                                     | 11,941      | (79,449)    | 39,945      | 64,228       |
| Loss before income taxes            | (1,647,988) | (1,434,442) | (5,263,527) | (1,550,212)  |
| Income tax expense                  | -           | -           | -           | -            |
| Net loss and comprehensive loss     | (1,647,988) | (1,434,442) | (5,263,527) | (1,550,212)  |
| Net loss per share – basic          | \$ (0.03)   | \$ (0.02)   | \$ (0.08)   | \$ (0.02)    |
| Net loss per share – diluted        | \$ (0.03)   | \$ (0.02)   | \$ (0.08)   | \$ (0.02)    |

**Quarterly operating results.** Net loss for Q3-22 compared to Q3-21 increased by \$213,546, or \$0.01 per share-basic. There were no SFD®-related revenues in either quarter. SFD®-related costs, net, were \$72,908 lower due to the timing of regular maintenance and lower lease costs. G&A expenses increased by \$198,313, compared to Q3-21, due primarily to the termination of the Canada Emergency Wage Subsidy ("CEWS") and the Canada Emergency Rent Subsidy ("CERS") in Q4-21. Interest expense, net decreased by \$2,694 in Q3-22 versus Q3-21 due to the cessation of the financial liability related to the aircraft lease in Q1-22.

With respect to foreign exchange, at September 30, 2021, the CDN\$ to US\$ exchange rate also weakened as compared to the CDN\$ to US\$ exchange rate at June 30, 2021, but the Company held a US\$ net asset, resulting in the corresponding foreign exchange gain for Q3-21. IP and other expenses decreased \$5,463 in Q3-22 related mostly to costs associated with finalizing certain SFD® patents during Q3-21.

At September 30, 2022, the Company held a small US\$ net liability balance, coupled with the CDN\$ to US\$ exchange rate being 6.1% lower as compared to the CDN\$ to US\$ exchange rate at June 30, 2022, resulting in the corresponding foreign exchange loss for Q3-22. At September 30, 2022, the CDN\$ to US\$ exchange rate was 6.8% lower as compared to the CDN\$ to US\$ exchange rate at December 31, 2021, resulting in the corresponding foreign exchange loss for YTD 2022. At September 30, 2021, the CDN\$ to US\$ exchange rate weakened as compared to the CDN\$ to US\$ exchange rate at June 30, 2021, resulting in the corresponding foreign exchange gain for Q3-21. The CDN\$ remained relatively constant with the US\$ at September 30, 2021 versus December 31, 2020 resulting in the \$10,329 exchange loss in YTD 2021.

*Year-to-date operating results.* Net loss for YTD 2022 compared to YTD 2021 increased by \$3,713,315, or \$0.06 per share-basic. SFD®-related costs, net, were \$23,555 higher due to the timing of routine maintenance costs and due to adding 300 available flight hours to the Company's aircraft, offset by survey interpretation costs to support the pre-existing SFD® data sale. G&A expenses increased by \$574,380 compared to YTD 2021, due primarily to the termination of the CEWS and the CERS in Q4-21. Interest expense, net, decreased by \$763 in YTD 2022 versus YTD 2021 due to the cessation of the financial liability related to the aircraft lease. With respect to foreign exchange, the CDN\$ weakened to the US\$ in YTD 2022 and strengthened YTD 2021 resulting in the related foreign exchange gain and loss. IP and other expenses increased \$984 in YTD 2022 mostly due to the disposal of leasehold improvement assets related to the Company surrendering 826 square feet of its office space, offset by lower IP costs related to increased patent maintenance and approval costs during YTD 2021.

#### **SFD®-Related Costs, Net**

| SFD®-Related Costs            | Q3-22     | Q3-21     | Net change  |
|-------------------------------|-----------|-----------|-------------|
| Aircraft lease costs          | \$ 86,385 | \$ 98,844 | \$ (12,459) |
| Aircraft operations           | 143,327   | 203,728   | (60,401)    |
| Survey projects               | 806       | 854       | (48)        |
| Total SFD®-related costs, net | 230,518   | 303,426   | (72,908)    |

| SFD®-Related Costs            | YTD 2022   | YTD 2021   | Net change |
|-------------------------------|------------|------------|------------|
| Aircraft lease costs          | \$ 314,979 | \$ 306,432 | \$ 8,547   |
| Aircraft operations           | 657,386    | 529,373    | 128,013    |
| Survey projects               | 1,927      | 114,932    | (113,005)  |
| Total SFD®-related costs, net | 974,292    | 950,737    | 23,555     |

SFD®-related costs include aircraft charter costs (net of charter hire reimbursements), lease expenses, and aircraft operation and maintenance costs. In Q3-22, SFD®-related costs were lower compared to Q3-21 by \$72,908 due to the timing of routine maintenance costs and lower monthly lease costs.

YTD 2022 Aircraft lease costs were higher due to a weaker CDN\$ to US\$ exchange rate. Aircraft operations were \$128,013 higher due to the timing of routine major preventive maintenance costs in Q1-22 and preparing the aircraft for up to 300 hours of flight hours to conduct SFD® surveys. Finally, survey project costs were \$113,005 lower due to the costs incurred for the pre-existing Data Sale in Q2-21.

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

The Company extended the term of its aircraft leasing agreement effective in Q2-22 for a period of 24 months with payments of approximately US\$22,500 (CDN\$28,987) per month, or US\$270,000 (CDN\$347,849) per year.

Should NXT want to repurchase the aircraft at the end of the extended term, the purchase price will be US\$1.21 million.

### **General and Administrative Expenses**

| <b>G&amp;A Expenses</b>                           | <b>Q3-22</b>   | <b>Q3-21</b>   | <b>Net change</b> | <b>%</b>  |
|---|----------------|----------------|-------------------|-----------|
| Salaries, benefits and consulting charges         | \$ 414,934     | \$ 316,729     | \$ 98,205         | 31        |
| Board and professional fees, public company costs | 208,940        | 170,936        | 38,004            | 22        |
| Premises and administrative overhead              | 204,788        | 146,939        | 57,849            | 39        |
| Business development                              | 111,380        | 3,684          | 107,696           | >100      |
| Stock-based compensation                          | 23,391         | 126,832        | (103,441)         | (82)      |
| <b>Total G&amp;A Expenses</b>                     | <b>963,433</b> | <b>765,120</b> | <b>198,313</b>    | <b>26</b> |

| <b>G&amp;A Expenses</b>                           | <b>YTD 2022</b>  | <b>YTD 2021</b>  | <b>Net change</b> | <b>%</b>  |
|---|------------------|------------------|-------------------|-----------|
| Salaries, benefits and consulting charges         | \$ 1,307,645     | \$1,087,669      | \$ 219,976        | 20        |
| Board and professional fees, public company costs | 648,539          | 596,669          | 51,870            | 9         |
| Premises and administrative overhead              | 629,569          | 449,116          | 180,453           | 40        |
| Business development                              | 148,816          | 8,841            | 139,975           | >100      |
| Stock-based compensation                          | 188,092          | 205,985          | (17,893)          | (9)       |
| <b>Total G&amp;A Expenses</b>                     | <b>2,922,661</b> | <b>2,348,280</b> | <b>574,381</b>    | <b>24</b> |

G&A expenses increased \$198,313, or 26%, in Q3-22 compared to Q3-21 for the following reasons:

- salaries, benefits, and consulting charges increased \$98,205, or 31%, as Q3-21 costs were reduced by CEWS and partially offset by a lower vacation accrual in Q3-22 as employees took more vacations;
- board and professional fees and public company costs increased \$38,004, or 22%, due to increased professional and insurance fees;
- premises and administrative overhead costs increased \$57,849, or 39%, as Q3-21 costs were reduced by the CERS;

- business development costs for Q3-22 increased \$107,696 from Q3-21 due to meetings with potential customers in Q3-22. There was no business development travel in Q3-21 due to the pandemic travel restrictions; and
- SBCE's were lower in Q3-22 vs Q3-21 by \$103,441 or 82% due to a lower Restricted Share Unit Plan ("RSU Plan") expense as the actual share price settlement was lower than previously accrued and the share price was lower at September 30, 2022 versus June 30, 2022.

G&A expenses increased \$574,381 or 24%, in YTD 2022 compared to YTD 2021 for the following reasons:

- salaries, benefits, and consulting charges increased \$219,276 or 20%, as YTD 2021 costs were reduced by the CEWS;
- board and professional fees and public company costs increased \$51,870, or 9%, due to increased professional and insurance fees;
- premises and administrative overhead costs increased \$180,453, or 40%, as YTD 2021 costs were reduced by the CERS;
- business development costs for YTD 2022 increased \$139,975 from YTD 2021 due to meetings with potential customers during Q2-22 and Q3-22. There was no business development travel in YTD 2021 due to the pandemic travel restrictions; and
- SBCE's were lower in YTD 2022 vs YTD 2021 by \$17,893 or 9% due to a lower stock option expense as fewer director fees were settled by option grants and the Employee Share Purchase Plan (the "ESP Plan") expense is lower as there was no bonus accrual in YTD 2022. The RSU Plan expense was higher in YTD 2022 as there was a forfeiture in YTD 2021.–Please see the next section "Discussion of Operations – General and Administrative Expenses – Stock-based Compensation Expenses" for further information on the SBCE.

#### Stock-based Compensation Expenses

| Stock-based Compensation Expenses | Q3-22  | Q3-21    | Net change | % change |
|-----------------------------------|--------|----------|------------|----------|
| Stock Option Expense              | \$ -   | \$ 7,500 | \$ (7,500) | (100)    |
| Deferred Share Units              | -      | -        | -          | -        |
| Restricted Stock Units            | 14,410 | 82,965   | (68,555)   | (83)     |
| ESP Plan                          | 8,982  | 36,367   | (27,385)   | (75)     |
| Total SBCE                        | 23,392 | 126,832  | (103,440)  | (82)     |

| Stock-based Compensation Expenses | YTD 2022  | YTD 2021  | Net change | % change |
|-----------------------------------|-----------|-----------|------------|----------|
| Stock Option Expense              | \$ 15,052 | \$ 18,750 | \$ (3,698) | (20)     |
| Deferred Share Units              | -         | -         | -          | -        |
| Restricted Stock Units            | 141,063   | 102,511   | 38,552     | 38       |
| ESP Plan                          | 31,978    | 84,724    | (52,746)   | (62)     |
| Total SBCE                        | 188,093   | 205,985   | (17,892)   | (9)      |

SBCE varies in any given quarter or year as it is a function of several factors, including the number of units of each type of stock-based compensation plan issued in the period and the amortization term (based on the term of the contract and/or number of years for full vesting of the units, which is normally three years) of the resultant expense.

SBCE is also a function of periodic changes in the inputs used in the Black-Scholes option valuation model, such as volatility in NXT's trailing common share price. For cash-settled stock-based compensation awards variability will occur based on changes to observable prices.

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

The deferred share unit ("DSUs") plan (the "DSU Plan") is a long-term incentive plan that permits the grant of DSUs to qualified directors. DSUs granted under the DSU Plan are to be settled at the retirement, resignation, or death of the Board member holding the DSUs.

Restricted Share Units ("RSUs") entitle the holder to receive, at the option of the Company, either the underlying number of shares of the Company's common shares upon vesting of such RSUs or a cash payment equal to the value of the underlying shares. The RSUs vest at a rate of one-third at the end of each of the first three years following the date of grant. In Q3-22, the Company settled the Q3-22 RSU vesting with common shares and cash, and intends to continue to settle the RSUs in common shares and cash.

The ESP Plan allows employees and other individuals determined by the Board to be eligible to contribute a minimum of 1% and a maximum of 10% of their earnings to the plan for the purchase of common shares in the capital of the Company, of which the Company will make an equal contribution. Common shares contributed by the Company may be issued from treasury or acquired through the facilities of the Toronto Stock Exchange. During 2021 and 2022 the Company has elected to issue common shares from treasury.

SBCE in Q3-22 was lower compared to Q3-21 by \$103,440 or 82%. The main driver of the lower expense was the actual vesting price for the RSU was lower than the accrual price as the Company's share price decreased during Q3-22. In addition no options were issued for director fees in Q3-22. There was no ESP Plan bonus accrual in Q3-22, as all participants in the ESP Plan have been members of the plan for more than one year.

SBCE in YTD 2022 is lower compared to YTD 2021 by \$(17,892) or 9%. RSU costs in YTD 2022 are higher than YTD 2021 as the 2022 vesting price was higher than 2021 and in Q1-21 there was a forfeiture by one participant in the RSU plan. Option expense was lower as no options were issued for director fees in Q3-22. There was no ESP Plan bonus accrual YTD 2022, as all participants in the ESP Plan have been members of the plan for more than one year. No directors elected to participate in the DSU Plan in 2022 and 2021.

### ***Amortization***

| <b>Amortization</b>                | <b>Q3-22</b>   | <b>Q3-21</b>   | <b>Net change</b> | <b>%</b>   |
|------------------------------------|----------------|----------------|-------------------|------------|
| Property and equipment             | \$ 17,468      | \$ 20,641      | \$ (3,173)        | (15)       |
| Intellectual property              | 424,628        | 424,704        | (76)              | 0          |
| <b>Total Amortization Expenses</b> | <b>442,096</b> | <b>445,345</b> | <b>(3,249)</b>    | <b>(1)</b> |

| Amortization                | YTD 2022  | YTD 2021  | Net change | %    |
|-----------------------------|-----------|-----------|------------|------|
| Property and equipment      | \$ 52,745 | \$ 61,923 | \$ (9,178) | (15) |
| Intellectual property       | 1,273,885 | 1,269,417 | 4,468      | 0    |
| Total Amortization Expenses | 1,326,630 | 1,331,340 | (4,710)    | (0)  |

*Property and equipment and related amortization expense.* Property and equipment amortization was lower in Q3-22 compared to Q3-21, and YTD 2022 compared to YTD 2021, due to additional assets becoming fully amortized during the period and the Company not acquiring new assets in the periods. Amortization also decreases each year as the Company uses the declining balance method of depreciation, thereby having the effect of lowering amortization each year on existing assets.

*Intellectual property and related amortization expense.* NXT acquired specific rights to utilize the proprietary SFD® technology in global hydrocarbon exploration applications from the inventor of the SFD® technology, NXT's Chairman, President and CEO, 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 assessment of potential indicators of impairment of the recorded net book value. No impairments were recognized in YTD 2022 or YTD 2021.

As discussed in the section "*Discussion of Operations – Acquisition of the Geothermal Right*," the Company acquired the SFD® technology for the Geothermal Right from NXT's Chairman, President and CEO on April 18, 2021. The Geothermal Right is being amortized on a straight line basis over its estimated useful life of 20 years. The annual amortization expense expected to be recognized is approximately \$13,781 per year for a five-year aggregate total of \$68,902.

### **Other Expenses (Income)**

| Other Expenses                                   | Q3-22     | Q3-21     | Net change | %     |
|--|-----------|-----------|------------|-------|
| Interest expense, net                            | \$ 10,393 | \$ 13,087 | \$ (2,694) | (21)  |
| Foreign exchange loss (gain)                     | (3,085)   | (102,632) | (99,547)   | (97)  |
| Intellectual property and other                  | 4,633     | 10,096    | (5,463)    | (54)  |
| Loss on disposal of assets & lease modifications | -         | -         | -          | -     |
| Total Other Expenses, net                        | 11,941    | (79,449)  | (91,390)   | (115) |

| Other Expenses                                   | YTD 2022  | YTD 2021  | Net change | %     |
|--|-----------|-----------|------------|-------|
| Interest expense, net                            | \$ 26,251 | \$ 27,014 | \$ (763)   | (3)   |
| Foreign exchange loss (gain)                     | (14,175)  | 10,329    | (24,504)   | (237) |
| Intellectual property and other                  | 15,947    | 26,885    | (10,938)   | (41)  |
| Loss on disposal of assets & lease modifications | 11,922    | -         | 11,922     | 100   |
| Total Other Expenses, net                        | 39,945    | 64,228    | (24,283)   | (38)  |

Interest expense, net. This category of other expenses includes interest income earned on short-term investments netted, by interest expense from the financial liability related to the aircraft lease (up to February 2022) and long-term debt. Interest expense decreased in Q3-22 versus Q3-21 and YTD 2022 versus YTD 2021 due to the cessation of the financial liability in Q1-22.

Foreign exchange loss (gain). This category of other expenses includes losses and gains caused by changes in the relative currency exchange values of US\$ and CDN\$. The Company held net US\$ liability at September 30, 2022 and significant net assets in US\$ at September 30, 2022, which included accounts receivable, cash and cash equivalents, short-term investments, US\$ lease obligations, and the security deposit for the aircraft, all of which have an effect on the unrealized foreign exchange gain and loss. At September 30, 2022, the Company held a small US\$ net liability balance, coupled with the CDN\$ to US\$ exchange rate being 6.1% lower as compared to the CDN\$ to US\$ exchange rate at June 30, 2022, resulting in the corresponding foreign exchange loss for Q3-22 which was offset by receipt of US\$300,000 for outstanding accounts receivable. At September 30, 2022, the CDN\$ to US\$ exchange rate was 6.8% lower as compared to the CDN\$ to US\$ exchange rate at December 31, 2021, resulting in the corresponding foreign exchange gain for YTD 2022. At September 30, 2021, the CDN\$ to US\$ exchange rate weakened as compared to the CDN\$ to US\$ exchange rate at June 30, 2021, resulting in the corresponding foreign exchange gain for Q3-21. The CDN\$ remained relatively constant with the US\$ at September 30, 2021 versus December 31, 2020 resulting in the \$10,329 exchange loss in YTD 2021.

The Company does not currently enter into hedging contracts, but does however use alternative 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 and research & development activity related to the SFD® technology.

In Q3-22 and YTD 2022, the Company's IP and other expenses were associated with periodic patent maintenance and renewal fees required during these time periods.

Loss on disposal of assets & lease modifications. In Q1-22, the Company surrendered 826 square feet of office space. As a result of the space surrender, the Company recorded a loss on disposal of leasehold improvement assets and lease modifications.

### ***Income Tax Expense***

There was no income tax expense in YTD 2022 or YTD 2021.

### ***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 and geothermal exploration.

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

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

The energy 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 and geothermal exploration operations involve a number of risks and uncertainties that have affected our unaudited condensed consolidated interim financial statements and are reasonably likely to affect them in the future. These risks and uncertainties are discussed further below.

#### Development, Commercialization, and Protection of the Geothermal Right

With the acquisition of the Geothermal Right, the Company will continue to refine and develop the SFD<sup>®</sup> survey system to commercialize the Geothermal Right. This development requires substantial time and resources, and continued government assistance is not guaranteed. Furthermore, even if resources are available, there can be no assurance that the Company will be commercially or technically successful in enhancing the technology. If we are unable to develop and commercialize the geothermal applications of SFD<sup>®</sup> technologies, or adapt to evolving industry standards and demands, these could have a material adverse effect on our business, financial condition, and results of operations.

#### Debt Service

NXT may finance a significant portion of its operations through debt. Amounts paid in respect of interest and principal on debt incurred by NXT may impair NXT's ability to satisfy its other obligations. Variations in interest rates and scheduled principal repayments could result in significant changes in the amount required to be applied to debt service before payment by NXT of its debt obligations. Lenders may be provided with security over substantially all of the assets of NXT. If NXT becomes unable to pay its debt service charges or otherwise commits an event of default such as bankruptcy, a lender may be able to foreclose on or sell the assets of NXT.

#### Credit Risk

Credit risk arises from the potential that the Company may incur a loss if a counterparty to a financial instrument fails to meet its obligation in accordance with agreed terms. The Company's financial instruments that are exposed to concentrations of credit risk consist primarily of cash and cash equivalents, and accounts receivable. The carrying value of cash and cash equivalents, short-term investments, and accounts receivable reflect management's assessment of credit risk.

At September 30, 2022, cash and cash equivalents included balances in bank accounts, term deposits, and guaranteed investment certificates, placed with financial institutions with investment grade credit ratings. The Company manages accounts receivable credit risk by requiring advance payments before entering into certain contract milestones and when possible, accounts receivable insurance.

#### Foreign Exchange Risk

The Company is exposed to foreign exchange risk in relation to its holding of significant US\$ balances in cash and cash equivalents, accounts receivable, deposits, accounts payables, accrued liabilities and lease obligations, and entering into United States dollar revenue contracts. The Company does not currently enter into hedging contracts, but to mitigate exposure to fluctuations in foreign exchange, the Company uses strategies to reduce the volatility of United States dollar assets including converting excess United States dollars to Canadian dollars. As at September 30, 2022, the Company held net U.S. dollar liabilities totaling US\$24,665. Accordingly, a hypothetical 10% change in the value of one United States dollar expressed in Canadian dollars as at September 30, 2022 would have had an approximately \$3,373 effect on the unrealized foreign exchange gain or loss for the period.

#### Interest Rates

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

#### Tax Rates

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

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

## Summary of Quarterly Results

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

|                                   | Q3-22       | Q2-22       | Q1-22       | Q4-21       |
|-----------------------------------|-------------|-------------|-------------|-------------|
| Survey revenue                    | \$ -        | \$ -        | \$ -        | \$ (10,123) |
| Net income (loss)                 | (1,647,988) | (1,774,671) | (1,840,868) | (1,573,587) |
| Income (loss) per share – basic   | \$ (0.03)   | \$ (0.03)   | \$ (0.03)   | \$ (0.02)   |
| Income (loss) per share – diluted | \$ (0.03)   | \$ (0.03)   | \$ (0.03)   | \$ (0.02)   |

|                                   | Q3-21       | Q2-21        | Q1-21       | Q4-20       |
|-----------------------------------|-------------|--------------|-------------|-------------|
| Survey revenue                    | \$ -        | \$ 3,144,373 | \$ -        | \$ -        |
| Net income (loss)                 | (1,434,442) | 1,531,522    | (1,647,292) | (1,653,447) |
| Income (loss) per share – basic   | \$ (0.02)   | \$ 0.02      | \$ (0.03)   | \$ (0.03)   |
| Income (loss) per share – diluted | \$ (0.02)   | \$ 0.02      | \$ (0.03)   | \$ (0.03)   |

In Q3-22 the Company no longer participated in the CEWS and the CERS which increased G&A costs. This was offset by lower SFD<sup>®</sup> related costs due to maintenance timing and lower lease costs. In Q2-22 the Company recorded unrealized foreign exchange gains as the CDN\$ weakened versus the US\$. In Q1-22, the Company incurred maintenance fees on its aircraft to have it available for up to 300 flight hours. In Q4-21, the CEWS and the CERS programs were ended therefore increasing G&A costs. In Q3-21, the Company recorded favourable exchange gains due to the strengthening of the US\$. In Q2-21, revenue was recognized for a pre-existing SFD<sup>®</sup> data sale. In Q1-21, costs were lower due to lower aircraft costs, a reduction in RSU accruals, and less fluctuation of exchange rates. In Q4-20, the Company received the CEWS and the CERS, which reduced costs. Excluding Q2-21, the Company incurred net losses primarily due to incurred SFD<sup>®</sup>-related costs related to aircraft lease and aircraft maintenance costs, G&A expenses, and non-cash items like SBCE, which can be a significant expense in any given quarter. More specific details are provided below:

- in Q3-22, costs were reduced primarily due to lower SFD<sup>®</sup> related costs offset partially by higher business development costs;
- in Q2-22, the Company recorded unrealized foreign exchange gains as the CDN\$ weakened versus the US\$;
- in Q1-22, the Company incurred maintenance fees on its aircraft to have it available for up to 300 flight hours;
- in Q4-21, the Company only received grants from the CEWS and CERS for one month due to the termination of these programs;
- in Q3-21, the US\$ strengthened vs the CDN\$, which resulted in a \$102,632 exchange gain;
- in Q2-21, revenue was earned for a pre-existing SFD<sup>®</sup> sale of data and costs were lower due to receipt of the CEWS and the CERS. Additionally there was no business development travel due to restrictions from the COVID-19 pandemic;

- in Q1-21, costs were lower due to lower aircraft costs, a reduction in RSU accruals, and less fluctuation of exchange rates; and
- in Q4-20, costs were reduced primarily due to recognizing \$123,105 benefits under the CEWS and the CERS, and due to reduced travel.

## Liquidity and Capital Resources

### **Going Concern**

The unaudited condensed consolidated interim financial statements for Q3-22 have been prepared on a going concern basis. The going concern basis of presentation assumes that NXT will continue in operation for the foreseeable future and will be able to realize its assets and discharge its liabilities and commitments in the normal course of business.

The events described in the following paragraphs highlight that there is substantial doubt about NXT's ability to continue as a going concern within one year after the date that these condensed consolidated interim financial statements have been issued. The Company's current cash position is not expected to be sufficient to meet the Company's obligations and planned operations for a year beyond the date that these condensed consolidated interim financial statements have been issued.

The Company has deferred payment of operating costs, including payroll and other general and administrative costs, and is evaluating alternatives to reduce other costs. Subsequent to September 30, 2022, the Company offered rights to holders of its common shares. (Please refer to the section *Liquidity and Capital Resources - Rights Offering*.) Further financing options that may or may not be available to the Company include issuance of new equity, debentures or bank credit facilities. The need for any of these options will be dependent on the timing of securing new SFD<sup>®</sup> related revenues and obtaining financing on terms that are acceptable to both the Company and the financier.

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

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

NXT's cash and cash equivalents at September 30, 2022 totaled \$0.574 million. Net working capital totaled \$(1.06) million. See the information in the section "*Liquidity and Capital Resources – Net Working Capital*" for further information.

Risks related to having sufficient ongoing net working capital to execute survey project contracts are mitigated through our normal practice of obtaining advance payments and progress payments from customers throughout the course of the projects, which often span three to four months. In addition, where possible, risk of default on client billings has been mitigated through the use of export insurance programs offered by Export Development Canada.

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

### **Net Working Capital**

| <b>Net Working Capital</b>                        | <b>September 30,<br/>2022</b> | <b>December 31,<br/>2021</b> | <b>Net<br/>Change</b> | <b>%</b>     |
|---|-------------------------------|------------------------------|-----------------------|--------------|
| Current assets (current liabilities)              |                               |                              |                       |              |
| Cash, cash equivalents and short-term investments | \$ 573,842                    | \$ 2,807,855                 | \$(2,234,013)         | (80)         |
| Accounts receivable                               | 25,996                        | 841,567                      | (815,571)             | (97)         |
| Prepaid expenses and deposits                     | 44,456                        | 265,436                      | (220,980)             | (83)         |
| Accounts payable and accrued liabilities          | (987,246)                     | (500,625)                    | (486,621)             | (97)         |
| Current portion of long-term debt                 | (111,111)                     | (64,815)                     | (46,296)              | (71)         |
| Current portion of lease obligation               | (606,795)                     | (532,936)                    | (73,859)              | (14)         |
| <b>Total Net Working Capital</b>                  | <b>(1,060,858)</b>            | <b>2,816,482</b>             | <b>(3,877,340)</b>    | <b>(138)</b> |

NXT had net working capital of \$(1,060,858) as at September 30, 2022.

Net working capital at September 30, 2022 compared to December 31, 2021 decreased by \$3,877,340, or 138%, due to cash used in operating activities, offset by cash received from payments on accounts receivable. Accounts payable increased due to annual timing of professional fees, payroll accruals, and the deferral of payments of various G&A costs.

### **Accounts Payable**

| <b>Accounts Payable</b>        | <b>September 30,<br/>2022</b> | <b>Dec. 31, 2021</b> | <b>Net Change</b> | <b>%</b>    |
|--------------------------------|-------------------------------|----------------------|-------------------|-------------|
| Trade accounts payable         | \$ (87,560)                   | \$ (122,935)         | \$ 35,375         | 29          |
| Deferred advisor board payable | (25,640)                      | (23,896)             | (1,744)           | (7)         |
| Accrued liabilities            | (322,665)                     | (171,714)            | (150,951)         | (88)        |
| Accrued directors fees payable | (123,750)                     | -                    | (123,750)         | (100)       |
| Salaries payable               | (227,432)                     | -                    | (227,432)         | (100)       |
| Vacation pay accrued           | (104,087)                     | (102,536)            | (1,551)           | (2)         |
| RSU and ESP Plan liability     | (96,112)                      | (79,544)             | (16,568)          | (21)        |
| <b>Total accounts payable</b>  | <b>(987,246)</b>              | <b>(500,625)</b>     | <b>(486,621)</b>  | <b>(97)</b> |

Accounts payable increased by \$486,621 or 97%, as at September 30, 2022 compared to December 31, 2021 for the following reasons:

- trade accounts payable decreased by \$35,375, or 29%, due to timing of payables at the stated dates;
- accrued liabilities increased by \$150,951, or 88%, due to timing of annual professional fees and deferring payments;
- accrued directors fees payable increased by \$123,750, or 100%, as payment of directors' fees were deferred;
- salaries payable increased by \$227,432, or 100%, as the Company has implemented a salary deferral program;
- vacation pay accrued increased by \$1,551, or 2%, due to timing of vacations; and
- RSU Plan and ESP Plan liabilities increased by \$16,568 or 21% due to the RSU Plan share issuance and related payroll withholdings only being settled once per year.

**Cash Flow** (Q3-21 and YTD 2021 Adjusted)

Please see the section "Correction of Prior Period Error".

| Cash Flow - from / (used in)                         | Q3-22       | Q3-21         | YTD 2022      | YTD 2021      |
|--|-------------|---------------|---------------|---------------|
| Operating activities                                 | \$(533,787) | \$(1,027,858) | \$(2,229,816) | \$(1,108,785) |
| Financing activities                                 | (25,694)    | (21,679)      | (24,573)      | 941,717       |
| Investing activities                                 | 500,000     | (102,448)     | 550,000       | (87,804)      |
| Effect of foreign exchange changes on cash           | 16,481      | 79,946        | 20,376        | 1,678         |
| Net use of cash                                      | (43,000)    | (1,072,039)   | (1,684,013)   | (253,194)     |
| Cash and cash equivalents, start of period           | 616,842     | 3,508,991     | 2,257,855     | 2,690,146     |
| Cash and cash equivalents, end of period             | 573,842     | 2,436,952     | 573,842       | 2,436,952     |
|  |             |               |               |               |
| Cash and cash equivalents, end of period             | 573,842     | 2,436,952     | 573,842       | 2,436,952     |
| Short-term investments, end of period                | -           | 363,769       | -             | 363,769       |
| Total cash and short-term investments, end of period | 573,842     | 2,800,721     | 573,842       | 2,800,721     |

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:

| Operating Activities  | Q3-22         | Q3-21         | YTD 2022      | YTD 2021      |
|---|---------------|---------------|---------------|---------------|
| Net loss for the period   | \$(1,647,988) | \$(1,434,442) | \$(5,263,527) | \$(1,550,212) |
| Total non-cash expense and lease items                                  | 470,038       | 446,041       | 1,533,800     | 1,514,341     |
| Operating activities before change in non-cash working capital balances | (1,177,950)   | (988,401)     | (3,729,727)   | (35,871)      |
| Change in non-cash working capital balances                             | 644,163       | (39,457)      | 1,499,911     | (1,072,914)   |
| Total cash used in operating activities                                 | (533,787)     | (1,027,858)   | (2,229,816)   | (1,108,785)   |

Operating cash flow increased by \$494,071 in Q3-22 as compared to Q3-21 due to the receipt of payments for outstanding accounts receivable in Q3-22.

Operating cash flow decreased by \$1,121,031 in YTD 2022 as compared to YTD 2021 due larger payments for outstanding accounts receivable in YTD 2021 and increased G&A costs and aircraft maintenance costs during YTD 2022.

| Financing Activities                           | Q3-22       | Q3-21    | YTD 2022    | YTD 2021    |
|--|-------------|----------|-------------|-------------|
| Proceeds from (repayment of) long-term debt    | \$ (37,037) | \$ -     | \$ (37,037) | \$1,000,000 |
| Proceeds from the employee share purchase plan | 11,343      | 16,529   | 40,414      | 52,754      |
| Repayment of finance liability                 | -           | (38,208) | (27,950)    | (111,037)   |
| Total cash from (used in) financing activities | (25,694)    | (21,679) | (24,573)    | 941,717     |

The Company began to repay its HASCAP Loan (as defined below) at the beginning of Q3-22. Proceeds were received from employee contributions under the ESP Plan. The repayment of finance liability was for the financing liability for the sales and leaseback agreement on NXT's aircraft and ended in Q1-22.

| Investing Activities                           | Q3-22   | Q3-21       | YTD 2022 | YTD 2021    |
|--|---------|-------------|----------|-------------|
| Acquisition of intellectual property           | \$ -    | \$ (15,000) | \$ -     | \$ (65,310) |
| Proceeds from (used in) short-term investments | 500,000 | (87,448)    | 550,000  | (22,494)    |
| Total Cash from (used in) Investing Activities | 500,000 | (102,448)   | 550,000  | (87,804)    |

Changes in short-term investments were for investments in guaranteed investment certificates to fund operations and investing of excess short-term cash. Please see the section "Acquisition of the Geothermal Right" for a discussion on the Acquisition of intellectual property.

## Contractual Obligations

### Leases

The estimated minimum annual commitments for the Company's lease components as at September 30, 2022 are listed in the following table:

| Lease payment obligations:  | Total            | 2022           | 2023           | 2024           | 2025           |
|-----------------------------|------------------|----------------|----------------|----------------|----------------|
| Office                      | \$ 1,024,416     | \$ 85,368      | \$ 341,472     | \$ 341,472     | \$ 256,104     |
| Office operating costs      | 667,488          | 55,624         | 222,496        | 222,496        | 166,872        |
| Aircraft lease <sup>1</sup> | 499,804          | 92,303         | 369,212        | 38,289         | -              |
| Office equipment            | 900              | 900            | -              | -              | -              |
| <b>Total</b>                | <b>2,192,608</b> | <b>234,195</b> | <b>933,180</b> | <b>602,257</b> | <b>422,976</b> |

1. US\$ payments have been converted to CDN\$ at a rate of 1.36745.

### Long-term Debt (HASCAP Loan)

On May 26, 2021, the Company received \$1,000,000 from the BDC's HASCAP Loan. The HASCAP Loan is a \$1,000,000 non-revolving ten-year term credit facility with an interest rate of 4%. Repayment terms were interest only until May 26, 2022, and monthly principal plus interest payments for the remaining nine years. The HASCAP Loan is secured by a general security agreement and is guaranteed by BDC.

| Repayment of long-term debt:                 |                  |
|--|------------------|
| 2022   | \$ 37,315        |
| 2023   | 146,481          |
| 2024   | 142,037          |
| 2025   | 137,593          |
| 2026   | 133,148          |
| 2027 to 2031                                 | 534,908          |
| <b>Total principal and interest payments</b> | <b>1,131,482</b> |
| Less interest                                | (168,519)        |
| <b>Total principal remaining</b>             | <b>962,963</b>   |
| Current portion of long-term debt            | 111,111          |
| Non-current portion of long-term debt        | 851,852          |

### Rights Offering

On October 31, 2022 the Company advised that the "Offering was made to holders of its common shares of record at the close of business on November 7, 2022. The Offering will expire on November 30, 2022. A fully subscribed Offering will raise gross proceeds of approximately \$4.0 million. There is no minimum commitment required and no standby purchase agreement. Certain executive officers and directors of NXT intend to participate in the Offering.

Shareholders of record on November 7, 2022 received one right (a "Right") for each common share held. 2.95 Rights entitles the holder to purchase one common share of the Company at a price of \$0.18 per Common Share. Exercise of the Rights and purchase of the common shares must be completed by November 30, 2022. Up to 22,238,553 additional common shares would be issued if 100% of the Offering is subscribed.

The proceeds from the Offering will be used to commence SFD® surveys and for general and administrative costs.

The Company currently has sufficient working capital to last less than two months. 100% of the Offering is required to meet the anticipated obligations for the next 9 months for commencing SFD® surveys and for G&A assuming no other sources of cash inflow during this period.

### 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 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 in the section "*Liquidity and Capital Resources – Contractual Obligations.*" 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 consistent with discussions with the Landlord.

### Transactions with Related Parties

Related party fees incurred were as follows:

|                              | Q3-22     | Q3-21     | YTD 2022  | YTD 2021  |
|------------------------------|-----------|-----------|-----------|-----------|
| Legal fees                   | \$ 15,344 | \$ 15,087 | \$ 45,800 | \$ 65,698 |
| Design services <sup>1</sup> | -         | -         | -         | \$4,013   |

1. US\$3,000.

One of the members of NXT's Board is a partner in a law firm which provides legal advice to NXT. Accounts payable and accrued liabilities includes a total of \$21,070 (\$16,000 as at December 31, 2021) payable to this law firm.

Accounts payable and accrued liabilities includes \$5,574 (\$11,467 as at December 31, 2021) related to reimbursement of expenses owing to an executive officer and \$123,750 (\$nil as at December 31, 2021) for the Board's fees.

A company owned by a family member of an executive officer was contracted to provide presentation design services to the Company during 2021.

The Geothermal Right was acquired from the Company's CEO on April 18, 2021.

### Critical Accounting Estimates

In preparing the unaudited condensed consolidated interim financial statements, NXT is required to make estimates and assumptions that affect both the amount and timing of recording assets, liabilities, revenues, and expenses since the determination of these items may be dependent on future events. The Company uses the most current information available and exercises careful judgment in making these estimates and assumptions. In the opinion of management, the unaudited condensed consolidated interim financial statements have been properly prepared within reasonable limits of materiality and within the framework of the Company's significant accounting policies. The estimates and assumptions used are based upon management's best estimate as at the date of the unaudited condensed consolidated interim financial statements. Estimates and assumptions are reviewed periodically and the effects of revisions are reflected in the period when determined. Actual results may differ from those estimates.

Critical accounting estimates relate primarily to the use of the going concern assumption, estimated useful lives and the valuation of intellectual property and property and equipment, and the measurement of SBCE.

### Changes in Accounting Policies

The unaudited condensed consolidated interim financial statements of NXT for Q3-22 have been prepared by management in accordance with US GAAP. The Company has consistently used US GAAP for the eight most recently completed quarters. The accounting policies applied are consistent with those outlined in NXT's annual audited consolidated financial statements for the year ended December 31, 2021, available on NXT's website at [www.nxtenergy.com](http://www.nxtenergy.com) and on SEDAR at [www.sedar.com](http://www.sedar.com).

### Correction of Prior Period Error

In the preparation of the annual financial statements as at and for the year ended December 31, 2021, the Company determined that certain amounts previously recorded in the 2021 consolidated statements of cash flows were not correctly calculated to properly reflect payments on the financial liability, lease obligation payments and accretion, and application of exchange rates to calculate unrealized foreign exchange (gain) loss, including the effect of foreign exchange on changes on cash and cash equivalents.

The adjustments to correct the respective financial statement line items were not material and did not change the Cash, SFD<sup>®</sup>-related revenues, or Net loss accounts, or basic and diluted loss per share. The Company has recorded the adjustments in the related line items in each of the comparative periods. Line items affected on the Consolidated Statement of Cash Flows by the adjustment are: Non-cash lease costs, Change in the carrying amount of right of use assets and lease liabilities, Unrealized foreign exchange (gain) loss, Repayment of financial liability and finance lease obligations, Proceeds from (used in) short-term investments, and Effect of foreign exchange rate changes on cash and cash equivalents. The table below highlights the changes to each line item in the comparative period in this MD&A.

| Consolidated Statements of cash flows  | For the three months ended September 30, 2021 |                 |                    |
|--|---|-----------------|--------------------|
|  | As previously reported                        | Adjustments     | Adjusted           |
| Net loss   | \$ (1,434,442)                                | \$ -            | \$ (1,434,442)     |
| Non-cash lease costs   | (1,627)                                       | (4,242)         | (5,869)            |
| Change in carrying amount of right of use assets & lease liabilities         | -   | 8,819           | 8,819              |
| Unrealized foreign exchange (gain) loss                                      | (177,850)                                     | 39,845          | (138,005)          |
| <b>Operating activities</b>  | <b>(1,072,280)</b>                            | <b>44,422</b>   | <b>(1,027,858)</b> |
| Repayment of financial liability and lease obligations                       | -   | (38,208)        | (38,208)           |
| <b>Financing activities</b>  | <b>16,529</b>                                 | <b>(38,208)</b> | <b>(21,679)</b>    |
| <b>Effect of foreign exchange rate changes on cash and cash equivalents.</b> | <b>86,160</b>                                 | <b>(6,214)</b>  | <b>79,946</b>      |
| <b>Net increase (decrease) in cash and cash equivalents</b>                  | <b>(1,072,039)</b>                            | <b>-</b>        | <b>(1,072,039)</b> |

| Consolidated Statements of cash flows  | For the nine months ended September 30, 2021 |                  |                    |
|--|--|------------------|--------------------|
|  | As previously reported                       | Adjustments      | Adjusted           |
| Net loss   | \$ (1,550,212)                               | \$ -             | \$ (1,550,212)     |
| Non-cash lease costs   | (74,409)                                     | 65,606           | (8,803)            |
| Change in carrying amount of right of use assets & lease liabilities         | -  | 17,736           | 17,736             |
| Unrealized foreign exchange (gain) loss                                      | (37,350)                                     | 33,909           | (3,441)            |
| <b>Operating activities</b>  | <b>(1,226,036)</b>                           | <b>117,251</b>   | <b>(1,108,785)</b> |
| Repayment of financial liability and lease obligations                       | -  | (111,037)        | (111,037)          |
| <b>Financing activities</b>  | <b>1,052,754</b>                             | <b>(111,037)</b> | <b>941,717</b>     |
| <b>Effect of foreign exchange rate changes on cash and cash equivalents.</b> | <b>7,892</b>                                 | <b>(6,214)</b>   | <b>1,678</b>       |
| <b>Net increase (decrease) in cash and cash equivalents</b>                  | <b>(253,194)</b>                             | <b>-</b>         | <b>(253,194)</b>   |

### Financial Instruments and Other Instruments

The Company's non-derivative financial instruments consist of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities, long-term debt and lease obligations. The carrying value of these financial instruments approximates their fair values due to their short terms to maturity. NXT is not exposed to significant interest arising from these financial instruments, but is exposed to significant credit risk with accounts receivable. For accounts receivable, where possible, NXT requests

advance payments and utilizes risk mitigation products offered by entities such as Export Development Canada including, for example, insurance coverage of contract accounts receivable, guarantee support for contract performance bonds, and wrongful call insurance for such bonds.

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

As at September 30, 2022 and September 30, 2021, the Company held no derivative financial instruments. For more information relating to risks, see the section titled "*Liquidity and Capital Resources – Net Working Capital*".

### Outstanding Share Capital

|   | November 9,<br>2022 | September 30,<br>2022 | December 31,<br>2021 |
|---|---------------------|-----------------------|----------------------|
| Common Shares                               | 65,627,113          | 65,585,902            | 65,250,710           |
| Options                                     | 392,120             | 392,120               | 358,660              |
| Deferred Share Units                        | 37,354              | 37,354                | 37,354               |
| Restricted Share Units                      | 348,334             | 348,334               | 696,666              |
| Right Shares                                | 22,238,553          | -                     | -                    |
| Total share capital and dilutive securities | 86,643,474          | 66,363,710            | 66,343,390           |

|  | Director & Officer Share Capital at |                       |                      |
|--|-------------------------------------|-----------------------|----------------------|
|  | November 9,<br>2022                 | September 30,<br>2022 | December 31,<br>2021 |
| Frank Ingriselli <sup>1</sup>            | 50,000                              | 50,000                | 50,000               |
| George Liszicasz <sup>1 &amp; 2</sup>    | 15,414,283                          | 15,412,120            | 15,378,679           |
| Charles Selby <sup>1</sup>               | 408,161                             | 408,161               | 408,161              |
| John Tilson <sup>1</sup>                 | 6,536,208                           | 6,536,208             | 5,916,208            |
| Bruce G. Wilcox <sup>1</sup>             | 410,000                             | 410,000               | 410,000              |
| Eugene Woychyshyn <sup>2</sup>           | 272,679                             | 256,968               | 185,445              |
| Total Director and Officer Share Capital | 23,091,331                          | 23,073,457            | 22,348,493           |

<sup>1</sup> Director of NXT

<sup>2</sup> Officer of NXT

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

NXT's CEO and Chief Financial Officer ("CFO") (together the "Responsible Officers") are responsible for establishing and maintaining DCPs, or causing them to be designed under their supervision, for NXT to provide reasonable assurance that material information relating to the Company is made known to the

Responsible Officers by others within the organization, particularly during the period in which the Company's year-end consolidated financial statements and MD&A are being prepared.

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

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

In evaluating the effectiveness of the Company's DCPs, as defined under the rules adopted by the Canadian securities regulatory authorities and by the United States Securities and Exchange Commission, the Company's Responsible Officers concluded that there are material weaknesses in the Company's ICFR that have a direct impact on the Company's DCPs:

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

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 the engagement of external consultants and legal counsel as well.

The Responsible Officers concluded that, as at September 30, 2022, its ICFR is not effective and as a result, its DCPs are not sufficiently effective. NXT reached this conclusion based upon its assessment that there is a more than remote likelihood that its ICFR will not prevent or detect material misstatements if they should exist in the Company's consolidated financial statements. The Responsible Officers continue to take certain actions to mitigate these material weaknesses including:

- the implementation of controls with regards to the review procedures surrounding its disclosure; and

- engagement of third party specialists. In addition, the CFO engages subject matter consultants as the need arises.

There were no changes to the Company's ICFR in Q3-22.

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

### **Additional Information**

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