

NXT ENERGY SOLUTIONS INC.

Management's Discussion and Analysis

For the three and six months ended June 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 August 11, 2022 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 June 30, 2022 (the "unaudited condensed consolidated interim financial statements"). This MD&A covers the unaudited three and six month periods ended June 30, 2022, with comparative amounts for the unaudited three and six month periods ended June 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 includes, but is 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;

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- our ability to obtain all permits and approvals required;
- our ability to obtain financing on acceptable terms;
- our ability to obtain insurance to mitigate the risk of default on client billings;
- foreign currency exchange and interest rates; and
- general business, economic, and market conditions (including global commodity prices).

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

- the ability of management to execute its business plan, 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"). 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[®]") 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[®] 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[®] 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 Q2-22 are summarized below:

- cash and short-term investments at June 30, 2022 were \$1.12 million;
- net working capital was \$0.05 million at June 30, 2022;
- the Company recorded SFD[®]-related revenues of \$nil and received US\$0.13 million (CDN\$0.16 million) of payments on outstanding accounts receivable in April 2022;
- a net loss of \$1.77 million was recorded for Q2-22, including stock-based compensation expense ("SBCE") and amortization expense of \$0.55 million;
- a net loss of \$3.62 million was recorded for YTD 2022, including SBCE and amortization expense of \$1.05 million;
- net loss per common share for Q2-22 was \$0.03 basic and \$0.03 diluted;
- net loss per common share for YTD 2022 was \$0.06 basic and \$0.06 diluted;
- cash flow used in operating activities was \$0.78 million during Q2-22 and \$1.70 during YTD 2022;
- general and administrative ("G&A") expenses increased by \$0.36 million (53%) as compared to Q2-21; and
- G&A expenses increased by \$0.38 million (24%) as compared to YTD 2021.

Discussion of Operations

COVID-19 Pandemic

As of the date of the unaudited condensed consolidated interim financial statements, the Covid-19 pandemic continues to be a risk to the operations of the Company. The Company has made provisions so employees can work safely in the office or if necessary from home, followed all Alberta Health Services and Health Canada recommendations, and implemented hygiene policies. Demand for our services and prospective revenues may become adversely impacted the longer the Covid-19 pandemic continues. The impact of the continuation of the Covid-19 pandemic may hamper our ability to deliver SFD[®]-related revenues in the following ways. If restrictions on international travel become tighter, our aircraft and personnel may not be able to perform project surveys. An outbreak of the virus among our staff or our customers' personnel could delay any survey in progress. Business development may be delayed when in-person meetings and technical presentations may be a superior delivery method to tele-conferences or online video conferencing.

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

Acquisition of the Geothermal Right

The Company acquired the SFD[®] 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. 300,000 common shares, which were issued in December 2021;
- 3. CDN\$15,000 signature milestone payment paid in August 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 an SFD[®] 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 June 30, 2022, the Company has recognized \$275,610 for the acquisition Geothermal Right, which is the combination of the US\$40,000 (CDN\$50,310) and CDN\$15,000 signature payments, 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[®] 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 is currently working with NRC IRAP to develop a funding and research plan for the next phase to support the research and development of the SFD[®] 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 (Q2-21 and YTD 2021 Adjusted) Please see the section "*Correction of Prior Period Error*".

	Q2-22	Q2	-21 YTD 2022	YTD 202	21
SFD [®] -related revenue	\$-	\$ 3,144,3	373 \$ -	\$ 3,144,37	73
Expenses:					
SFD [®] -related costs, net	306,492	381,0	596 743,774	647,31	11
General and administrative expenses	1,046,677	682,	351 1,959,227	1,583,16	50
Amortization	442,097	444,:	171 884,534	885,99	95
	1,795,266	1,508,	718 3,587,535	3,116,46	66
Other Expenses (income):					
Interest (income) expense, net	7,670	8,4	421 15,858	13,92	27
Foreign exchange loss (gain)	(31,355)	88,	533 (11,090)	112,96	51
Intellectual property and other	3,090	7,:	179 23,236	i 16,78	89
	(20,595)	104,:	133 28,004	143,67	77
Income (loss) before income taxes	(1,774,671)	1,531,	522 (3,615,539)	(115,77	0)
Income tax expense	-			-	-
Net income (loss) and comprehensive					
income (loss)	(1,774,671)	1,531,	522 (3,615,539)	(115,77	0)
Net income (loss) per share – basic	\$ (0.03)	\$ C	.02 \$ (0.06)	\$ (0.0	0)
Net income (loss) per share – diluted	\$ (0.03)	\$ C	.02 \$ (0.06)	\$ (0.0	0)
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NXT Energy Solutions Inc.

MD&A for the period ended June 30, 2022

<u>Quarterly operating results</u>. Net loss for Q2-22 compared to Q2-21 decreased by \$3,306,193, or \$0.05 per share-basic. SFD®-related revenues in Q2-21 were from the delivery of the pre-existing SFD® data sale in Q2-21. SFD®-related costs, net, were \$75,204 lower due as survey interpretation costs were incurred in Q2-21 to support the pre-existing SFD® data sale. G&A expenses increased by \$363,826, compared to Q2-21, due primarily to the termination of the Canada Emergency Wage Subsidy ("CEWS") and the Canada Emergency Rent Subsidy ("CERS") in Q4-21. Interest (income) expense, net changed by \$751 in Q2-22 versus Q2-21 due to interest expense for the Business Development Bank of Canada's ("BDC") Highly Affected Sectors Credit Availability Program (the "HASCAP Loan") in Q1-22, offset by the cessation of the financial liability related to the aircraft lease in Q1-22.

With respect to foreign exchange, the CDN\$ weakened (3.2%) to the US\$ in Q2-22 and strengthened (1.1%) in Q2-21 resulting in the related foreign exchange gain. IP and other expenses decreased \$4,089 in Q2-22 related mostly to costs associated with finalizing certain SFD[®] patents during Q2-21.

<u>Year-to-date operating results</u>. Net loss for YTD 2022 compared to YTD 2021 increased by \$3,499,769, or \$0.06 per share-basic. SFD[®]-related costs, net, were \$96,463 higher due to the timing of routine maintenance costs 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 \$376,067, or 24%, compared to YTD 2021, due primarily to the termination of the CEWS and the CERS in Q4-21. Interest (income) expense, net changed by \$1,931 in YTD 2022 versus YTD 2021 due to the HASCAP Loan, offset by 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. IP and other expenses increased \$6,447 in YTD 2022 mostly due to the disposal of leasehold improvement assets related to the Company surrendering 826 square feet of its office space.

SFD®-Related Costs, Net (Q2-21 and YTD 2021 Adjusted)

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

SFD [®] -Related Costs	Q2-22	Q2-21	Net change
Aircraft lease costs	\$ 107,123	\$ 101,999	\$ 5,124
Aircraft operations	198,848	185,195	13,653
Survey projects	521	94,370	(93,849)
Total SFD [®] -related costs, net	306,492	381,564	(75,072)
SFD [®] -Related Costs	YTD 2022	YTD 2021	Net change
Aircraft lease costs	\$ 228,594	\$ 207,588	\$ 21,006
Aircraft operations	514,059	325,645	188,414

SFD[®]-related costs include aircraft charter costs (net of charter hire reimbursements), lease expenses, and aircraft operation and maintenance costs. In Q2-22, SFD[®]-related costs were lower compared to Q2-21 by \$75,072 due to the costs incurred for the pre-existing data sale in Q2-21, offset by higher maintenance and pilot training costs in Q2-22.

1,121

743,774

114,078

647,311

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Survey projects

Total SFD[®]-related costs, net

(112, 957)

96,463

YTD 2022 Aircraft lease costs were higher due to a weaker CDN\$ to US\$ exchange rate. Aircraft operations were \$188,414 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 \$112,957 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

G&A Expenses	Q2-22	Q2-21	Net change	%
Salaries, benefits and consulting charges	\$ 434,609	\$ 297,485	\$ 137,124	46
Board and professional fees, public company costs	257,645	232,729	24,916	11
Premises and administrative overhead	211,752	99,277	112,475	113
Business development	34,486	703	33,783	>100
Stock-based compensation	108,185	52,657	55,528	>100
Total G&A Expenses	1,046,677	682,851	363,826	53

G&A Expenses	YTD 2022	YTD 2021	Net change	%
Salaries, benefits and consulting charges	\$ 892,711	\$ 770,940	\$ 121,771	16
Board and professional fees, public company costs	439,599	425,733	13,866	3
Premises and administrative overhead	424,781	302,177	122,604	41
Business development	37,435	5,157	32,278	>100
Stock-based compensation	164,701	79,153	85,548	>100
Total G&A Expenses	1,959,227	1,583,160	376,067	24

G&A expenses increased \$363,826, or 53%, in Q2-22 compared to Q2-21 for the following reasons:

- salaries, benefits, and consulting charges increased \$137,124, or 46%, as Q2-21 costs were reduced by CEWS and partially offset by lower vacation expense in Q2-22;
- board and professional fees and public company costs increased \$24,916, or 11%, due to increased professional fees;
- premises and administrative overhead costs increased \$112,475, or 113%, as Q2-21 costs were reduced by the CERS;
- business development costs for Q2-22 increased \$33,783 from Q2-21 due to meetings with potential customers in Q2-22. There was no business development travel in Q2-21 due to the pandemic travel restrictions; and

• SBCE were higher in Q2-22 vs Q2-21 by \$55,528 due to a higher Restricted Share Unit Plan ("RSU Plan") expense as the estimated share price settlement was higher in Q2-22 versus Q2-21. This was offset by the Employee Share Purchase Plan ("ESP Plan") expenses decreasing.

G&A expenses increased \$376,067 or 24%, in YTD 2022 compared to YTD 2021 for the following reasons:

- salaries, benefits, and consulting charges increased \$121,771 or 16%, as YTD 2021 costs were reduced by the CEWS and partially offset by lower vacation expense in YTD 2022;
- board and professional fees and public company costs increased \$13,866, or 3%, due to increased professional fees;
- premises and administrative overhead costs increased \$122,604, or 41%, as YTD 2021 costs were reduced by the CERS;
- business development costs for YTD 2022 increased \$32,278 from YTD 2021 due to meetings with potential customers during Q2-22. There was no business development travel in YTD 2021 due to the pandemic travel restrictions; and
- SBCE were higher in YTD 2022 vs YTD 2021 by \$85,548 due to a higher RSU Plan expense as the estimated share price settlement was higher in YTD 2022 than YTD 2021. This was offset by the ESP Plan expenses decreasing. 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	Q2-22	Q2-21	Net change	% change
Stock Option Expense	\$ 7,552	\$ 7,500	\$52	1
Deferred Share Units	-	-	-	-
Restricted Stock Units	90,368	19,595	70,773	>100
ESP Plan	10,265	25,562	(15,297)	(60)
Total SBCE	108,185	52,657	55,528	105

Stock-based Compensation Expenses

Stock-based Compensation Expenses	YTD 2022	YTD 2021	Net change	% change
Stock Option Expense	\$ 15,052	\$ 11,250	\$ 3,802	34
Deferred Share Units	-	-	-	-
Restricted Stock Units	126,653	19,546	107,107	>100
ESP Plan	22,996	48,357	(25,361)	(52)
Total SBCE	164,701	79,153	85,548	108

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.

NXT Energy Solutions Inc. MD&A for the period ended June 30, 2022 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 Q3-21, the Company settled the Q3-21 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 Q2-22 was higher compared to Q2-21 by \$55,528 or 105%. The main driver of the higher expense is the estimated vesting price for the RSU was \$0.44 at Q2-21 versus \$0.68 at Q2-22. This increase was offset partially since there was no ESP Plan bonus accrual in Q2-22, as all participants in the ESP Plan have been members of the plan for more than one year.

SBCE in YTD 2022 is higher compared to YTD 2021 by \$85,548 or 108%. The main driver of the higher expense was a forfeiture in the RSU Plan in Q1-21 which reduced the RSU expenses. The estimated vesting price for RSUs was \$0.44 at Q2-21 versus \$0.68 at Q2-22 with one director electing to take all of their 2022 director fees in options versus only one half of the director fees in Q1-21. This increase was offset partially since there was no ESP Plan bonus accrual in YTD 2022, as all participants in the ESP Plan have been members of the ESP Plan for more than one year. No directors elected to participate in the DSU Plan in 2022 and 2021.

Amortization

Amortization	Q2-22	Q2-21	Net change	%
Property and equipment	\$ 17,468	\$ 20,641	\$ (3,173)	(15)
Intellectual property	424,629	423,530	1,099	0
Total Amortization Expenses	442,097	444,171	(2,074)	(0)

Amortization	YTD 2022	YTD 2021	Net change	%
Property and equipment	\$ 35,277	\$ 41,282	\$ (6,005)	(15)
Intellectual property	849,257	844,713	4,544	1
Total Amortization Expenses	884,534	885,995	(1,461)	(0)

NXT Energy Solutions Inc. MD&A for the period ended June 30, 2022 <u>Property and equipment and related amortization expense</u>. Property and equipment amortization was lower in Q2-22 compared to Q2-21, 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.

<u>Intellectual property and related amortization expense</u>. NXT acquired specific rights to utilize the proprietary SFD[®] technology in global hydrocarbon exploration applications from the inventor of the SFD[®] technology, NXT's Chairman, President and 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) (Q2-21 and YTD 2021 Adjusted) Please see the section "Correction of Prior Period Error".

Other Expenses	Q2-22	Q2-21	Net change	%
Interest (income) expense, net	\$ 7,670	\$ 8,421	\$ (751)	(9)
Foreign exchange loss (gain)	(54,546)	88,533	(143,079)	(162)
Intellectual property and other	3,090	7,179	(4,089)	(57)
Loss on disposal of assets & lease modifications	-	-	-	-
Total Other Expenses, net	(43,786)	104,133	(147,919)	(142)
Other Expenses	YTD 2022	YTD 2021	Net change	%
Interest (income) expense, net	\$ 15,858	\$ 13,927	\$ 1,931	14
Foreign exchange loss (gain)	(34,281)	112,961	(147,242)	(130)
Intellectual property and other	11,314	16,789	(5,475)	(33)
Loss on disposal of assets & lease modifications	11,922	-	11,922	100

<u>Interest (income) expense, net</u>. This category of other expenses includes interest income earned on shortterm investments netted, by interest expense from the financial liability related to the aircraft lease (up to February 2022) and long-term debt. Interest expense increased YTD 2022 due to the HASCAP loan, but was offset by the cessation of the financial liability in Q1-22.

4,813

143,677

(138, 864)

Foreign exchange loss (gain). This category of other expenses includes losses and gains caused by changes in the relative currency exchange values of US\$ and CDN\$. The Company held significant net assets in US\$ at June 30, 2022 and 2021, including accounts receivable, cash and cash equivalents, short-term

Total Other Expenses, net

(97)

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 June 30, 2022, the CDN\$ to US\$ exchange rate was 3.2% lower as compared to the CDN\$ to US\$ exchange rate at March 31, 2022, resulting in the corresponding foreign exchange gain for Q2-22. At June 30, 2022, the CDN\$ to US\$ exchange rate was 1.1% 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 Q2-21, the CDN\$ strengthened as compared to the US\$ at December 31, 2020, resulting in the corresponding foreign exchange loss for Q2-21. Also, the CDN\$ strengthened versus the US dollar in YTD 2021 resulting in the foreign 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.

<u>IP and other</u>. This category of other expenses primarily includes costs related to IP filings and research & development activity related to the SFD[®] technology.

In Q2-22 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. Please refer to the section "Contract Obligations" for a discussion on the office lease surrender. 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[®] survey system is highly complementary to seismic analysis. Our system may reduce the need for seismic in wide-area reconnaissance but will not replace the role of seismic in verifying structure, closure, and selecting drilling locations. The seismic industry is very competitive with many international and regional service providers.

The SFD[®] system can be used as a focusing tool for seismic. With an SFD[®] survey, a large tract (i.e. over 5,000 square kilometers) of land can be evaluated quickly to identify locations with indications of reservoir potential. Seismic surveys, although effective in identifying these locations, are much more expensive, require significantly more time, and impose a much greater negative impact on local communities and the environment. An SFD[®] survey deployed first can provide necessary information to target a seismic

program over a limited area of locations selected by SFD[®]. This approach can result in a more effective seismic program and reduce the overall cost, time, community resistance, and environmental impact required to locate and qualify a prospect.

The 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[®] 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[®] 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, short-term investments, 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 June 30, 2022, cash and cash equivalents and short-term investments included balances in bank accounts, term deposits, and guaranteed investment certificates, placed with financial institutions with investment grade credit ratings. The majority of the Company's accounts receivable relate to sales to one customer in the African region and is exposed to foreign country credit risks. The Company manages this

credit risk by requiring advance payments before entering into certain contract milestones and when possible, accounts receivable insurance.

Foreign Exchange Risk

The Company is exposed to foreign exchange risk in relation to its holding of significant US\$ balances in cash and cash equivalents, 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 June 30, 2022, the Company held net U.S. dollar assets totaling US\$273,150. Accordingly, a hypothetical 10% change in the value of one United States dollar expressed in Canadian dollars as at June 30, 2022 would have had an approximately \$35,191 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 <u>www.nxtenergy.com</u> and on SEDAR at <u>www.sedar.com</u>.

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:

		Q2-22		Q1-22		Q4-21		Q3-21
Survey revenue	\$	-	\$	-	\$	(10,123)	\$	-
Net income (loss)	(1,	774,671)	(1,8	840,868)	(1,	573,587)	(1,4	434,442)
Income (loss) per share – basic	\$	(0.03)	\$	(0.03)	\$	(0.02)	\$	(0.02)
Income (loss) per share – diluted	\$	(0.03)	\$	(0.03)	\$	(0.02)	\$	(0.02)
		Q2-21		Q1-21		Q4-20		Q3-20
Survey revenue	\$3	,144,373	\$	-	\$	-	\$	-
Net income (loss)	1	,531,522	(1,6	647,292)	(1,	653,447)	(1,4	487,821)
Income (loss) per share – basic	\$	0.02	\$	(0.03)	\$	(0.03)	\$	(0.02)
Income (loss) per share – diluted	\$	0.02	\$	(0.03)	\$	(0.03)	\$	(0.02)

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[®] 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. In Q3-20, the Company received the CEWS and the Scientific Research and Experimental Development Credit ("SR&ED"), which also reduced costs. Excluding Q2-21, the Company incurred net losses primarily due to incurred SFD[®]-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 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[®] 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;
- in Q4-20, costs were reduced primarily due to recognizing \$123,105 benefits under the CEWS and the CERS, and due to reduced travel; and

• in Q3-20, costs were reduced primarily due to recognizing \$189,135 benefits under the CEWS and the SR&ED, and reduced travel.

Liquidity and Capital Resources

Going Concern

The unaudited condensed consolidated interim financial statements for Q2-22 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 unaudited 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 the unaudited condensed consolidated financial interim statements have been issued.

The Company has deferred payment of operating costs, including payroll and other G&A costs, and is evaluating alternatives to reduce other costs. If required, further financing options that may or may not be available to the Company include issuance of new equity, debentures, or bank credit facilities. The need for any of these options will be dependent on the timing of securing new SFD[®]-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 plus short-term investments at June 30, 2022 totaled \$1.12 million. Net working capital totaled \$0.05 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

	June 30,	December 31,	Net	
Net Working Capital	2022	2021	Change	%
Current assets (current liabilities)				
Cash, cash equivalents and short-term				
investments	\$1,116,842	\$2,807,855	\$(1,691,013)	(60)
Accounts receivable	432,295	841,567	(409,272)	(49)
Prepaid expenses and deposits	53,285	265,436	(212,151)	(80)
Accounts payable and accrued liabilities	(858,764)	(500,625)	(358,139)	(72)
Current portion of long-term debt	(120,370)	(64,815)	(55 <i>,</i> 555)	(86)
Current portion of lease obligation	(574 <i>,</i> 058)	(532,936)	(41,122)	(8)
Total Net Working Capital	49,230	2,816,482	(2,767,252)	(98)

NXT had net working capital of \$49,173 as at June 30, 2022.

Net working capital at June 30, 2022 compared to December 31, 2021 decreased by \$2,767,252, or 98%, 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

Accounts Payable	June 30, 2022	Dec. 31, 2021	Net Change	%
Trade accounts payable	\$ (63,016)	\$ (122,935)	\$ 59,919	(49)
Deferred advisor board payable	(24,156)	(23,896)	(260)	1
Accrued liabilities	(267,669)	(171,714)	(95,955)	(56)
Accrued directors fees payable	(77,500)	-	(77,500)	(100)
Salaries payable	(113,716)	-	(113,716)	(100)
Vacation pay accrued	(108,081)	(102,536)	(5,545)	(5)
RSU and ESP Plan liability	(204,626)	(79,544)	(125,082)	(157)
Total accounts payable	(858,764)	(500,625)	(358,139)	(72)

Accounts payable increased by \$358,139 or 72%, as at June 30, 2022 compared to December 31, 2021 for the following reasons:

- trade accounts payable decreased by \$59,919, or 49%, due to timing of payables at the stated dates;
- accrued liabilities increased by \$95,955, or 56%, due to timing of annual professional fees and deferring payments;

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- accrued directors fees payable increased by \$77,500, or 100%, as payment of directors' fees were deferred;
- salaries payable increased by \$113,716, or 100%, as the Company has implemented a salary deferral program;
- vacation pay accrued increased by \$5,545, or 5%, due to timing of vacations; and
- RSU Plan and ESP Plan liabilities increased by \$125,082 due to the RSU Plan share issuance only being settled once per year (August).

Cash Flow (Q2-21 and YTD 2021 Adjusted)

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

Cash Flow - from / (used in)	Q2-22	Q2-21	YTD 2022	YTD 2021
Operating activities	\$ (782,888)	\$ 766,202	\$(1,696,029)	\$ (80,927)
Financing activities	12,965	979,952	1,121	963,396
Investing activities	200,272	(176,617)	50,000	14,644
Effect of foreign exchange changes on cash	17,772	(63,769)	3,895	(78,268)
Net source (use) of cash	(551,879)	1,505,768	(1,641,013)	818,845
Cash and cash equivalents, start of period	1,168,721	2,003,223	2,257,855	2,690,146
Cash and cash equivalents, end of period	616,842	3,508,991	616,842	3,508,991
Cash and cash equivalents, end of period	616,842	3,508,991	616,842	3,508,991
Short-term investments, end of period	500,000	269,623	500,000	269,623
Total cash and short-term investments, end of period	1,116,842	3,778,614	1,116,842	3,778,614

The overall net changes in cash balances in each of the quarters 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	Q2-22	Q2-21	YTD 2022	YTD 2021
Net income (loss) for the period	\$(1,774,671)	\$1,531,522	\$(3,615,539)	\$(115,770)
Total non-cash expense and lease items	549,302	583,311	1,063,762	1,068,300
Operating activities before change in non- cash working capital balances	(1,225,369)	2,114,833	(2,551,777)	952,530
Change in non-cash working capital balances	442,481	(1,348,631)	855,748	(1,033,457)
Total cash from (used in) operating activities	(782,888)	766,202	(1,696,029)	(80,927)

Operating cash flow decreased by \$1,549,090 in Q2-22 as compared to Q2-21 due to the receipt of payments for outstanding accounts receivable in Q2-21 and increased G&A costs in Q2-22.

Operating cash flow decreased by \$1,615,102 in YTD 2022 as compared to YTD 2021 due to the receipt of payments for outstanding accounts receivable in YTD 2021 and increased G&A costs and aircraft maintenance costs during YTD 2022.

Financing Activities	Q2-22	Q2-21	YTD 2022	YTD 2021
Proceeds from long-term debt	\$-	\$ 1,000,000	\$-	\$ 1,000,000
Proceeds from the employee share purchase plan	12,965	16,590	29,071	36,225
Repayment of finance liability	-	(36,638)	(27,950)	(72,829)
Total cash from financing activities	12,965	979,952	1,121	963,396

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	Q2-22	Q2-21	YTD 2022	YTD 2021
Acquisition of intellectual property	\$-	\$ (50,310)	\$-	\$ (50,310)
Proceeds from (used in) short-term investments	200,272	(126,307)	50,000	64,954
Total Cash from Investing Activities	200,272	(176,617)	50,000	14,644

Changes in short-term investments were for investments in guaranteed investment certificates to fund operations and investing of excess short-term cash.

Contractual Obligations

<u>Leases</u>

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

Lease payment obligations:	Total	2022	2023	2024	2025
Office	\$ 1,109,784	\$ 170,736	\$ 341,472	\$ 341,472	\$ 256,104
Office operating costs	723,112	111,248	222,496	222,496	166,872
Aircraft lease ¹	557,847	173,925	347,849	36,073	-
Office equipment	2,250	2,250	-	-	-
Total	2,392,993	458,159	911,817	600,041	422,976

1. US\$ payments have been converted to CDN\$ at a rate of 1.28833.

On March 15, 2022, the Company surrendered 826 square feet of its office building lease to Interloq Capital Corp. (the "Landlord"). As a result, its non-lease operating cost commitments for the building lease will be reduced by approximately \$13,881 for 2022, \$17,537 for 2023 and 2024, and \$13,150 for 2025. The Company incurred a surrender fee of \$14,000. The Company derecognized the following amounts on its balance sheet in the quarter and recorded a gain on the remeasurement of the lease of \$3,062:

Right of Use Assets	\$ 80,033
Lease obligations	83,095

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	\$ 87,500
2023	146,481
2024	142,037
2025	137,593
2026	133,148
2027 to 2031	534,908
Total principal and interest payments	1,181,667
Less interest	(181,667)
Total principal remaining	1,000,000
Current portion of long-term debt	120,370
Non-current portion of long-term debt	879,630

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:

	Q2-22	Q2-21	YTD 2022	YTD 2021
Legal fees	\$ 19,491	\$ 33,231	\$ 30,456	\$ 50,611
Design services ¹	-	-		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 \$28,162 (\$16,000 as at December 31, 2021) payable to this law firm.

Accounts payable and accrued liabilities includes \$2,545 (\$11,467 as at December 31, 2021) related to reimbursement of expenses owing to an executive officer and \$77,500 (\$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 Q2-22 have been prepared by management in accordance with US GAAP. 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 <u>www.nxtenergy.com</u> and on SEDAR at <u>www.sedar.com</u>.

Correction of Prior Period Error

During Q3-21, the Company determined that the amounts previously recorded for the aircraft lease were calculated incorrectly and the United States dollar denominated lease liability had not been re-measured to Canadian dollars each reporting period as required. The result of these corrections are to reduce the value of both the Right of use assets and Lease obligations, with changes to related income statement. The Company has determined that the effect of these adjustments are not material.

The Company has recorded the adjustments in the related accounts in the comparative periods in this MD&A. On the balance sheet and income statement, the specific accounts affected are Deposits, Right of use assets, Current portion of lease obligations, Long-term lease obligations, Deficit, SFD[®]-related costs, Interest income (expense), and Foreign exchange loss (gain). The loss per share in each of the comparative periods did not change as a result of these immaterial corrections. The tables below highlight the changes to each account in each of the comparative period presented in this MD&A.

Income Statement	For the three months ended June 30, 2021				
	As previously reported	Adjustments	Adjusted		
SFD [®] -related costs	\$ 383,211	\$ (1,515)	\$ 381,696		
Interest (income) expense	9,036	(615)	8,421		
Foreign exchange loss (gain)	84,719	3,814	88,533		
Net income (loss)	1,533,206	(1,684)	1,531,522		
Deficit	(84,044,575)	50,090	(83,994,485)		

Income Statement	For the six months	For the six months ended June 30, 2021				
	As previously reported	Adjustments	Adjusted			
SFD [®] -related costs	\$ 648,694	\$ (1,383)	\$ 647,311			
Interest (income) expense	15,151	(1,224)	13,927			
Foreign exchange loss (gain)	104,929	8,032	112,961			
Net income (loss)	(110,345)	(5,425)	(115,770)			
Deficit	(84,044,575)	50,090	(83,994,485)			

Consolidated Statement of Cash Flows

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 are not material and did not change the Cash, SFD[®]-related revenues, or Net income (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 June 30, 2021 As previously				
	reported	Adjustments	Adjusted		
Net loss	\$ 1,533,206	\$ (1,684)	\$ 1,531,522		
Non-cash lease costs	(42,825)	39,891	(2,934)		
Change in carrying amount of right of use assets					
& lease liabilities	-	5,550	5,550		
Unrealized foreign exchange (gain) loss	122,413	(7,118)	115,295		
Operating activities	729,564	36,638	766,202		
Repayment of financial liability and lease					
obligations	-	(36,638)	(36,638)		

NXT Energy Solutions Inc.

MD&A for the period ended June 30, 2022

Financing activities	1,016,590	(36,638)	979,952
Net increase (decrease) in cash and cash			
equivalents	1,505,768	-	1,505,768

Consolidated Statements of cash flows	For the six months As previously reported	ended June 30, 202 Adjustments	21 Adjusted
Net loss	\$ (110,345)	\$ (5,425)	\$ (115,770)
Non-cash lease costs	(85,649)	79,781	(5,868)
Change in carrying amount of right of use assets & lease liabilities Unrealized foreign exchange (gain) loss	- 147,942	11,851 (13,378)	11,851 134,564
Operating activities	(153,756)	72,829	(80,927)
Repayment of financial liability and lease obligations	-	(72,819)	(72,829)
Financing activities	1,036,225	(72,829)	963,396
Net increase (decrease) in cash and cash equivalents	818,845	-	818,845

Financial Instruments and Other Instruments

The Company's non-derivative financial instruments consist of cash and cash equivalents, short-term investments, accounts receivable, accounts payable, and accrued liabilities. 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 June 30, 2022 and June 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

	August 11, 2022	June 30, 2022	December 31, 2021
Common Shares	65,362,115	65,341,775	65,250,710
Options	392,120	392,120	358,660
Deferred Share Units	37,354	37,354	37,354
Restricted Share Units	696,666	696,666	696,666
Total share capital and dilutive securities	66,488,255	66,467,915	66,343,390

		Director & Officer Share Capital at		
	August 11,	June 30,	December 31,	
	2022	2022	2021	
Frank Ingriselli ¹	50,000	50,000	50,000	
George Liszicasz 1 & 2	15,384,640	15,383,555	15,378,679	
Charles Selby ¹	408,161	408,161	408,161	
John Tilson ¹	6,536,208	6,536,208	5,916,208	
Bruce G. Wilcox ¹	410,000	410,000	410,000	
Eugene Woychyshyn ²	228,742	220,861	185,445	
Total Director and Officer Share Capital	23,017,751	23,008,785	22,348,493	

¹ Director of NXT

 $^{\rm 2}\,$ 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 June 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 Q2-22.

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 <u>www.nxtenergy.com</u> and on SEDAR at <u>www.sedar.com</u>.