NXT ENERGY SOLUTIONS INC.

Management's Discussion and Analysis

For the year ended

December 31, 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 March 31, 2023 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 consolidated financial statements and related notes for the year ended December 31, 2022 (the "audited consolidated financial statements"). This MD&A covers the unaudited three and audited twelve month periods ended December 31, 2022, with comparative amounts for the unaudited three and twelve month periods ended December 31, 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," "would," "could," "should," "estimate," "expect," "intend," "may," "plan," "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);
- approval of phase 2 of the NRC IRAP project; and
- the use of funds raised under the Offering.

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 audited consolidated 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 audited consolidated 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®") 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 Q4-22 are summarized below:

- cash at December 31, 2022 was $0.26 million;
- net working capital was $(1.681) million at December 31, 2022;
- the Company recorded SFD®-related revenues of $nil;
- a net loss of $1.47 million was recorded for Q4-22, including stock-based compensation expense ("SBCE") and amortization expense of $0.47 million;
- a net loss of $6.73 million was recorded for YE-22, including SBCE and amortization expense of $1.98 million;
- net loss per common share for Q4-22 was $0.02 basic and $0.02 diluted;
- net loss per common share for YE-22 was $0.10 basic and $0.10 diluted;
- cash flow used in operating activities was $0.70 million during Q4-22 and $2.93 million during YE-22;
- general and administrative ("G&A") expenses decreased by $0.03 million (3%) in Q4-22 as compared to Q4-21;
- G&A expenses increased by $0.55 million (17%) in YE-22 as compared to YE-21; and
- the Rights Offering and Private Placement (together the "Offerings") contributed $0.43 million of cash.

Key financial and operational highlights occurring subsequent to Q4-22 are summarized below:

- On January 6, 2023 the Company announced the grant of 2,050,000 incentive stock options at a price of $0.216 to employees, officers and directors. These incentive stock options will vest upon receipt of cash for SFD® services performed: 1/3 upon collection of US$6.5 million, 1/3 upon the collection of the next US$7.0 million and the final 1/3 upon collection of an additional US$7.5 million; and
- January 25, 2023, the Company closed the Private Placement by issuing an additional 8,510,000 common shares, at $0.195 per common shares, for additional aggregate gross proceeds of approximately $1,659,450, less issuance costs of $1,170.

Selected Annual Information

($M except per share)	YE-22	YE-21	YE-20
Total assets	$15,575,295	$ 21,584,371	$ 23,484,748
Lease liabilities	1,246,723	1,902,604	2,089,838
Long-term debt	935,185	1,000,000	-
Revenue	-	3,134,250	136,566
Net earnings (loss)	(6,733,076)	(3,123,799)	(6,028,228)
Net earnings (loss) per share			
Basic	($0.10)	$(0.05)	$(0.09)
Diluted	($0.10)	$(0.05)	$(0.09)

Total assets decreased between YE-20 through YE-22 as cash and short-term investments were used for operating activities offset by revenue recognized from the Pre-existing SFD® Data Sale (defined below). The Company extended its aircraft lease during YE-21 for two years and one small equipment lease was entered into during YE-22. This was more than offset by accretion of the lease liabilities and the surrender of 7.3% of the Company's office space. During YE-21, the Company entered into the Business Development Bank of Canada's ("BDC") Highly Affected Sectors Credit Availability Program (the "HASCAP Loan") for $1,000,000 thereby increasing Long-term debt. There were no SFD® surveys in YE-20 and YE-22. For YE-21 revenue was due to the Pre-existing SFD® Data Sale. YE-20 revenue was the result of the forfeiture of a deposit from a customer.

Discussion of Operations

Management Committee

Given the recent passing of Mr. George Liszicasz, former Chairman, President and Chief Executive Officer ("CEO"), in Q1-23 the Board of Directors has formally empowered a committee of the Board to assume the CEO's duties. The Committee, which meets several times weekly with NXT management, consists of Lead Director Charles Selby and Directors Gerry Sheehan and Bruce G. Wilcox, who collectively possess senior operating and management experience in the Energy and Capital Markets Industries. The Committee will undertake its executive role, until further notice, in close cooperation with NXT's qualified management team that will continue to manufacture SFD® systems, perform SFD® surveys, and provide vital interpretation as contracts are finalized.

Acquisition of the Geothermal Right

The Company acquired the SFD® technology rights for geothermal resources ("Geothermal Right") from Mr. George Liszicasz, the former President and CEO of NXT 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® 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 December 31, 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® 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"). During Q1-23, the Company submitted a proposal for up to approximately $200,000 to NRC IRAP for 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

	Q4-22	Q4-21	YE-22	YE-21
SFD®-related revenue	$ -	$ (10,123)	$ -	$ 3,134,250
Expenses:				
SFD®-related costs, net	203,891	273,431	1,178,183	1,224,168
General and administrative expenses	813,771	841,577	3,736,431	3,189,857
Amortization	442,097	445,144	1,768,727	1,776,484
	1,459,759	1,560,152	6,683,341	6,190,509
Other Expenses (income):				
Interest expense, net	9,969	10,941	36,220	37,955
Foreign exchange loss (gain)	(1,165)	(1,732)	(15,340)	8,597
Intellectual property and other	986	(5,897)	28,855	20,988
	9,790	3,312	49,735	67,540
Loss before income taxes	(1,469,549)	(1,573,587)	(6,733,076)	(3,123,799)
Income tax expense	-	-	-	-
Net loss and comprehensive loss	(1,469,549)	(1,573,587)	(6,733,076)	(3,123,799)
Net loss per share – basic	$ (0.02)	$ (0.02)	$ (0.10)	$ (0.05)
Net loss per share – diluted	$ (0.02)	$ (0.02)	$ (0.10)	$ (0.05)

<u>*Quarterly operating results*</u>. Net loss for Q4-22 compared to Q4-21 decreased by $104,038, or $0.00 per share-basic. There were no SFD®-related revenues in either quarter. SFD®-related costs, net, were $69,540 lower due to the timing of regular maintenance and lower lease costs. G&A expenses decreased by $27,806, compared to Q4-21, due primarily lower vacation expense, SBCE offset by higher professional fees. Interest expense, net, decreased by $972 in Q4-22 versus Q4-21 due to the cessation of the financial liability related to the aircraft lease in Q1-22. Foreign exchange gain was minimal as CDN$ to US$ exchange rate fluctuated less than 1% in each quarter. IP and other expenses related mostly to costs associated with finalizing certain SFD® patents.

<u>*Year-to-date operating results*</u>. In Q2-21, the Company completed the delivery of certain pre-existing Hydrocarbon Right SFD® data (the " Pre-existing SFD ® Data") to its customer (the "Pre-existing SFD® Data Sale"). The Company has been paid in full. Net loss for YE-22 compared to YE-21 increased by $3,609,277, or $0.05 per share-basic. SFD®-related costs, net, were $45,985 lower due to the timing of routine maintenance costs offset by survey interpretation costs to support the Pre-existing SFD® Data Sale in YE-21. G&A expenses increased by $546,574 compared to YE-21, 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 $1,735 in YE-22 versus YE-21 due to the cessation of the financial liability related to the aircraft lease. With respect to foreign exchange, at December 31, 2021, the CDN$ to US$ exchange rate was slightly lower as compared to the CDN$ to US$ exchange rate at December 31, 2020, resulting in the corresponding foreign exchange loss for YE-21. With respect to foreign exchange during 2022, the CDN$ weakened to the US$ at YE-22 resulting in the related foreign exchange gain. IP and other expenses increased $7,867 in YE-22 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 YE-21.

SFD®-Related Costs, Net

SFD®-Related Costs	Q4-22	Q4-21	Net change
Aircraft lease costs	$ 89,798	$ 106,310	$ (16,512)
Aircraft operations	119,162	166,754	(47,592)
Survey projects	(5,069)	367	(5,436)
Total SFD®-related costs, net	203,891	273,431	(69,540)

SFD®-Related Costs	YE-22	YE-21	Net change
Aircraft lease costs	$ 404,777	$ 412,742	$ (7,965)
Aircraft operations	776,548	696,127	80,421
Survey projects	(3,142)	115,299	(118,441)
Total SFD®-related costs, net	1,178,183	1,224,168	(45,985)

SFD®-related costs include aircraft charter costs (net of charter hire reimbursements), lease expenses, and aircraft operation and maintenance costs. In Q4-22, SFD®-related costs were lower compared to Q4-21 by $69,540 due to the timing of routine maintenance costs and lower monthly lease costs.

Aircraft operations were $80,421 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 $118,441 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$28,675) per month, or US$270,000 (CDN$344,099) 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	Q4-22	Q4-21	Net change	%
Salaries, benefits and consulting charges	$ 380,617	$ 398,283	$ (17,666)	(4)
Board and professional fees, public company costs	169,548	123,600	45,948	37
Premises and administrative overhead	189,419	198,827	(9,408)	(5)
Business development	46,995	38,952	8,043	21
Stock-based compensation	27,192	81,915	(54,723)	(67)
Total G&A Expenses	813,771	841,577	(27,806)	(3)

G&A Expenses	YE-22	YE-21	Net change	%
Salaries, benefits and consulting charges	$ 1,688,261	$1,485,952	$ 202,309	14
Board and professional fees, public company costs	818,087	720,269	97,818	14
Premises and administrative overhead	818,987	647,943	171,044	26
Business development	195,811	47,793	148,018	>100
Stock-based compensation	215,284	287,900	(72,616)	(25)
Total G&A Expenses	3,736,431	3,189,857	546,574	17

G&A expenses decreased $27,806, or 3%, in Q4-22 compared to Q4-21 for the following reasons:

- salaries, benefits, and consulting charges increased $17,666, or 4%, as Q4-21 costs were lower due to less vacation expense;
- board and professional fees and public company costs increased $45,948, or 37%, due to increased professional and insurance fees;
- premises and administrative overhead costs decreased $9,409, or 5%, by lower information technology costs;
- business development costs for Q4-22 increased $8,043 from Q4-21 due to additional meetings with potential customers in Q4-22; and
- SBCE's were lower in Q4-22 vs Q4-21 by $54,723 or 67% due to a lower Restricted Share Unit Plan ("RSU Plan") expense as the December 31, 2022 share price was lower than the December 31, 2021 share price. Please see the next section "*Discussion of Operations – General and Administrative Expenses – Stock-based Compensation Expenses*" for further information on the SBCE.

G&A expenses increased $546,574 or 17%, in YE-22 compared to YE-21 for the following reasons:

- salaries, benefits, and consulting charges increased $202,309 or 14%, as YE-21 costs were reduced by the CEWS. This was partially offset in YE-22 due to lower vacation expense;
- board and professional fees and public company costs increased $97,818, or 14%, due to increased professional and insurance fees;
- premises and administrative overhead costs increased $171,044 or 26%, as YE-21 costs were reduced by the CERS;

- business development costs for YE-22 increased $148,018 from YE-21 due to increased meetings with potential customers during YE-22; and
- SBCE's were lower in YE-22 vs YE-21 by $72,616 or 25% as the Employee Share Purchase Plan (the "ESP Plan") expense is lower as there was no bonus accrual during YE-22. 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	Q4-22	Q4-21	Net change	% change
Stock Option Expense	$ 7,500	$ 7,500	$ -	-
Deferred Share Units	-	-	-	-
Restricted Stock Units	12,280	52,204	(39,924)	(76)
ESP Plan	7,412	22,211	(14,799)	(67)
Total SBCE	27,192	81,915	(54,723)	(67)

Stock-based Compensation Expenses	YE-22	YE-21	Net change	% change
Stock Option Expense	$ 22,551	$ 26,250	$ (3,699)	(14)
Deferred Share Units	-	-	-	-
Restricted Stock Units	153,343	154,715	(1,372)	(1)
ESP Plan	39,390	106,935	(67,545)	(63)
Total SBCE	215,284	287,900	(72,616)	(25)

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 number of years for full vesting of the units.

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 as determined by the Board of Directors.

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 Q4-22 was lower compared to Q4-21 by $54,723 or 67%. The RSU expense was lower as the Company's share price was lower at December 31, 2022 versus December 31, 2021. In addition there was lower ESP plan participation and there was no ESP Plan bonus accrual in Q4-22, as all participants in the ESP Plan have been members of the plan for more than one year.

SBCE in YE-22 is lower compared to YE-21 by $72,616 or 25%. RSU costs in YE-22 are higher than YE-21 as the 2022 vesting price was higher than in 2021 and in Q1-21 there was a forfeiture by one participant in the RSU plan. This was offset by the Company's share price being lower at December 31, 2022 versus December 31, 2021. Option expense was lower as no options were issued for director fees in Q3-22. There was no ESP Plan bonus accrual YE-22, 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.

On January 6, 2023 the Company announced the grant of 2,050,000 incentive stock options at a price of $0.216 to employees, officers and directors. These incentive stock options will vest upon receipt of cash for SFD® services performed: 1/3 upon collection of US$6.5 million, 1/3 upon the collection of the next US$7.0 million and the final 1/3 upon collection of an additional US$7.5 million.

Amortization

Amortization	Q4-22	Q4-21	Net change	%
Property and equipment	$ 17,468	$ 20,641	$ (3,173)	(15)
Intellectual property	424,629	424,503	126	0
Total Amortization Expenses	442,097	445,144	(3,047)	(1)

Amortization	YE-22	YE-21	Net change	%
Property and equipment	$ 70,213	$ 82,564	$ (12,351)	(15)
Intellectual property	1,698,514	1,693,920	4,594	0
Total Amortization Expenses	1,768,727	1,776,484	(7,757)	(0)

Property and equipment and related amortization expense.–Property and equipment amortization was lower in Q4-22 compared to Q4-21, and YE-22 compared to YE-21, 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 former 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 YE-22 or YE-21.

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	Q4-22	Q4-21	Net change	%
Interest expense, net	$ 9,969	$ 10,941	$ (972)	(9)
Foreign exchange loss (gain)	(1,165)	(1,732)	567	(33)
Intellectual property and other	986	(5,897)	6,883	>(100)
Loss on disposal of assets & lease modifications	-	-	-	-
Total Other Expenses, net	9,790	3,312	6,478	>100

Other Expenses	YE-22	YE-21	Net change	%
Interest expense, net	$ 36,220	$ 37,955	$ (1,735)	(5)
Foreign exchange loss (gain)	(15,340)	8,597	(23,937)	>(100)
Intellectual property and other	16,933	20,988	(4,055)	(19)
Loss on disposal of assets & lease modifications	11,922	-	11,922	100
Total Other Expenses, net	49,735	67,540	(17,805)	(26)

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 Q4-22 versus Q4-21 and YE-22 versus YE-21 due to the cessation of the financial liability in Q1-22, amortization of the HASCAP Loan principle and no short-term investments during Q4-22.

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 December 31, 2022 and significant net assets in US$ at December 31, 2021, 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. For Q4-22 and Q4-21 the exchange gains were minimal as the CDN$ to US$ exchange rates changed less than 1% from the previous quarter. At December 31, 2022, the CDN$ to US$ exchange rate was 6.3% lower as compared to the CDN$ to US$ exchange rate at December 31, 2021, resulting in the corresponding foreign exchange gain for YE-22. At December 31, 2021, the CDN$ to US$ exchange rate was slightly lower as compared to the CDN$ to US$ exchange rate at December 31, 2020, resulting in the corresponding foreign exchange loss for YE-21.

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 Q4-22 and YE-22, 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 YE-22 or YE-21.

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

The 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 audited consolidated 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, 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 December 31, 2022, cash and cash equivalents included balances in bank accounts 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 December 31, 2022, the Company held net U.S. dollar liabilities totaling US$231,161. Accordingly, a hypothetical 10% change in the value of one United States dollar expressed in Canadian dollars as at December 31, 2022 would have had an approximately $31,327 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 and on SEDAR at www.sedar.com.

Summary of Quarterly Results

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

	Q4-22	Q3-22	Q2-22	Q1-22
SFD®-related revenue	$ -	$ -	$ -	$ -
Net loss	(1,469,549)	(1,647,988)	(1,774,671)	(1,840,868)
Loss per share – basic	$ (0.02)	$ (0.03)	$ (0.03)	$ (0.03)
Loss per share – diluted	$ (0.02)	$ (0.03)	$ (0.03)	$ (0.03)

	Q4-21	Q3-21	Q2-21	Q1-21
SFD®-related revenue	$ (10,123)	$ -	$ 3,144,373	$ -
Net income (loss)	(1,573,587)	(1,434,442)	1,531,522	(1,647,292)
Income (loss) per share – basic	$ (0.02)	$ (0.02)	$ 0.02	$ (0.03)
Income (loss) per share – diluted	$ (0.02)	$ (0.02)	$ 0.02	$ (0.03)

During Q4-22 costs were reduced primarily due to lower vacation and SBCE. In Q3-22 the Company incurred lower SFD®-related costs as the aircraft had early completed its required maintenance. 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. 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 Q4-22, costs were reduced primarily due to lower vacation and SBCE;
- in Q3-22, costs were reduced primarily due to lower SFD®-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$;
- in Q1-22, the Company incurred maintenance fees on the leased aircraft to have it available for up to 300 flight hours;
- in Q4-21, the Company received grants from the CEWS and CERS for only one month due to the termination of these programs;
- in Q3-21, the US$ strengthened vs the CDN$, which resulted in a $102,632 exchange gain;
- in Q2-21, revenue was earned for the Pre-existing SFD® Data Sale 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; and
- in Q1-21, costs were lower due to lower aircraft costs, a reduction in RSU accruals, and less fluctuation of exchange rates.

Liquidity and Capital Resources

Going Concern

The audited consolidated financial statements for YE-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 consolidated 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 consolidated financial statements have been issued.

The Company continues to defer payment of operating costs, including payroll and other general and administrative costs. Subsequent to December 31, 2022, the Company completed a private placement which resulted in raising an additional net proceeds of $1,658,280. 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 audited consolidated 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 audited consolidated 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 December 31, 2022 totaled $0.263 million. Net working capital totaled $(1.691) 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 (Non-GAAP Measure)

Net Working Capital	December 31, 2022	December 31, 2021	Net Change	%
Current assets (current liabilities)				
Cash, cash equivalents and short-term investments	$ 263,437	$ 2,807,855	$(2,544,418)	(91)
Accounts receivable	57,065	841,567	(784,502)	(93)
Prepaid expenses and deposits	36,157	265,436	(229,279)	(86)
Accounts payable and accrued liabilities	(1,276,236)	(500,625)	(775,611)	(155)
Current portion of long-term debt	(111,111)	(64,815)	(46,296)	(71)
Current portion of lease obligation	(650,315)	(532,936)	(117,379)	(22)
Total Net Working Capital	(1,681,003)	2,816,482	(4,497,485)	(160)

NXT had net working capital of $(1,681,003) as at December 31, 2022.

Net working capital at December 31, 2022 compared to December 31, 2021 decreased by $4,497,485, or 160%, 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	December 31, 2022	December 31, 2021	Net Change	%
Trade accounts payable	$ (270,956)	$ (122,935)	$(148,021)	(120)
Deferred advisor board payable	(25,410)	(23,896)	(1,514)	(6)
Accrued liabilities	(357,457)	(171,714)	(185,743)	(108)
Accrued directors fees payable	(162,500)	-	(162,500)	(100)
Salaries payable	(363,594)	-	(363,594)	(100)
Vacation pay accrued	(62,413)	(102,536)	40,123	39
RSU and ESP Plan liability	(33,906)	(79,544)	45,638	57
Total accounts payable	(1,276,236)	(500,625)	(775,611)	(155)

Accounts payable increased by $775,611 or 155%, as at December 31, 2022 compared to December 31, 2021 for the following reasons:

- trade accounts payable increased by $148,021, or 120%, due to timing of payables at the stated dates and deferring of payments;
- accrued liabilities increased by $185,743, or 108%, due to timing of annual professional fees and deferring payments;
- accrued directors fees payable increased by $162,500, or 100%, as payment of directors' fees were deferred;
- salaries payable increased by $363,594, or 100%, as the Company has implemented a salary deferral program;
- vacation pay accrued decreased by $40,123, or 39%, due to improved management of vacations; and
- RSU Plan and ESP Plan liabilities decreased by $45,638 or 57% due to the lower NXT share price at December 31, 2022 versus December 31, 2021.

Cash Flow

Cash Flow - from / (used in)	Q4-22	Q4-21	YE-22	YE-21
Operating activities	$(704,187)	$75,612	$(2,934,003)	$(1,033,173)
Financing activities	413,790	(66,289)	389,217	875,428
Investing activities	-	(186,245)	550,000	(274,049)
Effect of foreign exchange changes on cash	(20,008)	(2,175)	368	(497)
Net use of cash	(310,405)	(179,097)	(1,994,418)	(432,291)
Cash and cash equivalents, start of period	573,842	2,436,952	2,257,855	2,690,146
Cash and cash equivalents, end of period	263,437	2,257,855	263,437	2,257,855
Cash and cash equivalents, end of period	263,437	2,257,855	263,437	2,257,855
Short-term investments, end of period	-	550,000	-	550,000
Total cash and short-term investments, end of period	263,437	2,807,855	263,437	2,807,855

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	Q4-22	Q4-21	YE-22	YE-21
Net loss for the period	$(1,469,549)	$(1,573,587)	$(6,733,076)	$(3,123,799)
Total non-cash expense and lease items	510,165	562,568	2,043,966	2,076,909
Operating activities before change in non-cash working capital balances	(959,384)	(1,011,019)	(4,689,110)	(1,046,890)
Change in non-cash working capital balances	255,196	1,086,631	1,755,107	13,717
Total cash from (used) in operating activities	(704,188)	75,612	(2,934,003)	(1,033,173)

Operating cash flow decreased by $779,799 in Q4-22 as compared to Q4-21 due to the receipt of payments for outstanding accounts receivable in Q4-21 of US$750,000 (CDN$950,168). There were no receipts in Q4-22.

Operating cash flow decreased by $1,900,830 in YE-22 as compared to YE-21 due larger payments for outstanding accounts receivable in YE-21 for the Pre-existing SFD® Data Sale versus YE-22 and increased G&A costs during YE-22.

Financing Activities	Q4-22	Q4-21	YE-22	YE-21
Proceeds from (repayment of) long-term debt	$ (27,778)	$ -	$ (64,815)	$1,000,000
Proceeds from the employee share purchase plan	9,324	16,505	49,738	69,259
Net proceeds from Rights Offering	216,062	-	216,062	-
Net proceeds from Private Placement	216,182	-	216,182	-
Repayment of financial liability	-	(40,097)	(27,950)	(151,134)
Share issuance costs for Geothermal Right	-	(42,697)	-	(42,697)
Total cash from (used in) financing activities	413,790	(66,289)	389,217	875,428

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, but at a lower rate due to the salary deferral. The repayment of financial liability was for the sales and leaseback agreement on NXT's aircraft which ended in Q1-22.

In Q4-22 net proceeds from the Offerings were $432,244. Please see the sections *"Rights Offering" and "Private Placement"* for a discussion on the Offering.

Investing Activities	Q4-22	Q4-21	YE-22	YE-21
Acquisition of intellectual property	$ -	$ -	$ -	$ (65,310)
Proceeds from (used in) short-term investments	-	(186,245)	550,000	(208,739)
Total Cash from (used in) Investing Activities	-	(186,245)	550,000	(274,049)

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 December 31, 2022 are listed in the following table:

Lease payment obligations:	Total	2023	2024	2025	2026
Office	$ 969,048	$ 371,472	$ 341,472	$ 256,104	$ -
Office operating costs	619,451	225,255	225,255	168,941	-
Aircraft lease[1]	403,850	365,904	37,946	-	-
Office equipment	13,412	3,424	3,424	3,424	3,140
Total	2,005,761	966,055	608,097	428,469	3,140

1. US$ payments have been converted to CDN$ at a rate of 1.3552.

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 principal and interest:	
2023	146,481
2024	142,037
2025	137,593
2026	133,148
2027	128,704
2028 to 2031	406,204
Total principal and interest payments	**1,094,167**
Less interest	(158,982)
Total principal remaining	**935,185**
Current portion of long-term debt	111,111
Non-current portion of long-term debt	824,074

Rights Offering

On December 2, 2022, NXT closed the Rights Offering that had been announced on October 31, 2022. The Company issued 2,149,180 common shares a price of $0.18 per common share, for aggregate gross proceeds of $386,852. Share issue costs of $170,790 were recorded as a reduction to share capital.

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.

Private Placement

On December 22 the Company announced a multi-tranche private placement (the “Private Placement”) at $0.195 per share. At December 22, 2022 the Company issued 1,148,282 common shares for gross proceeds of $223,915 in the first tranche, less issuance costs of $7,732.

January 25, 2023, the Company closed the Private Placement by issuing an additional 8,510,000 common shares, at $0.195 per common shares, for additional aggregate gross proceeds of approximately $1,659,450, less issuance costs of $1,170.

The proceeds from both Offerings are being used to commence SFD® surveys, and for general and administrative costs.

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:

	Q4-22	Q4-21	YE-22	YE-21
Legal fees	$ 46,508	$ 20,117	$ 92,308	$ 85,815
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 $76,843 ($16,000 as at December 31, 2021) payable to this law firm.

Accounts payable and accrued liabilities includes $nil ($11,467 as at December 31, 2021) related to reimbursement of expenses owing to an executive officer and $162,500 ($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 former CEO on April 18, 2021.

Critical Accounting Estimates

In preparing the audited consolidated 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 audited consolidated 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 audited consolidated 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.

Certain estimates and judgments have a material impact where the assumptions underlying these accounting estimates relate to matters that are highly uncertain at the time the estimate or judgment is made or are subjective. In 2022 and 2021, the estimates and judgments included the assessment of impairment indicators of intellectual property.

The Company reviews intellectual property for impairment whenever events or changes in circumstances indicate the carrying value may not be recoverable. The Company considers both internal and external factors when assessing for potential indicators of impairment of its intellectual property, including the consideration of historical and forecasted SFD related revenues, market capitalization, control premiums, and the SFD related revenue multiples compared to industry peers. When indicators of impairment exist, the Company first compares the total of the estimated undiscounted future cash flows or the estimated sale price to the carrying value of an asset. If the carrying value exceeds these amounts, an impairment loss is recognized for the excess of the carrying value over the estimated fair value of the intellectual property.

Changes in Accounting Policies

The audited consolidated financial statements of NXT for YE-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, 2022, available on NXT's website at www.nxtenergy.com and on SEDAR at www.sedar.com.

New Standard Effective During YE-22

Disclosures by Business Entities about Government Assistance: In June 2021 the Financial Accounting Standards Board issued new guidance that increases the transparency of government assistance including the disclosure of the types of assistance, and entity's accounting for the assistance, and the effect of the assistance on an entity's financial statements. The new guidance is effective for annual periods beginning after December 15, 2021. The Company adopted ASU 2021-10 on January 1, 2022. Adoption of ASU 2021-10 did not have a material impact on the Company's financial statements.

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 December 31, 2022 and December 31, 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

	March 31, 2023	December 31, 2022	December 31, 2021
Common Shares	77,599,131	68,949,109	65,250,710
Options	2,696,370	461,320	358,660
Deferred Share Units	37,354	37,354	37,354
Restricted Share Units	296,668	348,334	696,666
Total share capital and dilutive securities	80,629,523	69,796,117	66,343,390

Current Director & Officer Share Capital

	March 31, 2023	December 31, 2022	December 31, 2021
Charles Selby [1]	408,161	408,161	408,161
Gerry Sheehan [1]	77,000	77,000	-
John Tilson [1]	6,887,490	6,887,490	5,916,208
Bruce G. Wilcox [1]	500,005	500,005	410,000
Eugene Woychyshyn [2]	553,723	514,937	185,445
Total Director and Officer Share Capital	8,426,379	8,387,593	6,919,814

[1] Director of NXT

[2] Officer of NXT

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

NXT's members of the Management Committee of the Board of Directors 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 December 31, 2022, its ICFR is not effective and as a result, its DCPs are not 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 Q4-22.

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 and on SEDAR at www.sedar.com.