



# **NXT ENERGY SOLUTIONS INC.**

**Management's Discussion and Analysis**

**For the three and nine months ended  
September 30, 2021**

## Management's Discussion and Analysis

This discussion and analysis ("MD&A") was prepared by management of NXT Energy Solutions Inc. ("NXT", "we", "us", "our" or the "Company") based on information available as at November 15, 2021 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 three and nine month periods ended September 30, 2021 and the audited consolidated financial statements dated December 31, 2020. This MD&A covers the unaudited three and nine month periods ended September 30, 2021, with comparative amounts for the unaudited three and nine month periods ended September 30, 2020.

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" 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 Toronto Stock Exchange approval, cash balances, receipt of funds, and the execution and completion of contracts);
- the number of common shares in the capital of NXT ("Common Shares") owned by Mr. George Liszicasz, as well as the total number of Common Shares issued and outstanding, upon the issuance and receipt of the 300,000 Common Shares as part of the Consideration;
- 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;
- estimates related to our future financial position and liquidity including certain contractual obligations;
- the implementation of cost reduction measures; 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 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; 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;
- health, safety and the environment (including risks related to the COVID-19 pandemic);
- the emergence of alternative competitive technologies;
- our ability to develop 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;
- 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 – Risks and Uncertainties*" in this MD&A and the section titled "*Risk Factors*" in NXT's most recently filed Annual Information Form. Except as required by 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 ("GAAP" or "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<sup>®</sup>") survey system utilizes quantum-scale sensors to detect gravity field perturbations in an airborne survey method which can be used both onshore and offshore to remotely identify traps and reservoirs with exploration potential. The SFD<sup>®</sup> survey system enables NXT's clients to focus their exploration decisions concerning land commitments, data acquisition expenditures and prospect prioritization on areas with the greatest potential. SFD<sup>®</sup> is environmentally friendly and unaffected by ground security issues or difficult terrain and is the registered trademark of NXT. NXT provides its clients with an effective and reliable method to reduce time, costs and risks related to exploration.

## Financial and Operational Highlights

Key financial and operational highlights for Q3-21 are summarized below:

- On July 1, 2021 energy exploration veteran, Gerry Sheehan, joined the Board;
- The Company began receiving advisory services and funding of up to \$50,000 from the National Research Council of Canada Industrial Research Assistance Program ("NRC IRAP") to support the research and development of the SFD<sup>®</sup> technology for geothermal applications ("SFD-GT").
- Cash and short-term investments at September 30, 2021 were \$2.80 million;
- Working capital was \$4.03 million at September 30, 2021;
- The Company recorded no survey revenue in Q3-21 and \$3.14 million YTD 2021;
- A net loss of \$1.43 million was recorded for Q3-21, including stock based compensation and amortization expense of \$0.58 million;
- A net loss of \$1.55 million was recorded for YTD 2021, including stock based compensation and amortization expense of \$1.51 million;
- Net loss per common share for Q3-21 was \$0.02 basic and \$0.02 diluted;
- Net loss per common share for YTD 2021 was \$0.02 basic and \$0.02 diluted;
- Cash flow used by operating activities was \$1.07 million during Q3-21 and \$1.23 YTD 2021;
- General and administrative ("G&A") expenses increased by \$0.02 million (3%) as compared to Q3-20, due primarily to the receipt of a higher Canada Emergency Wage Subsidy ("CEWS"), the Canada Emergency Rent Subsidy ("CERS") an increase in salaries and stock based compensation costs; and
- G&A for YTD-2021 as compared to YTD-2020 decreased by \$0.20 million (8%), mostly due to receiving the CERS in 2021, decreased professional fees, and minimal business development travel due to the COVID-19 pandemic.

Key financial and operational highlights occurring subsequent to Q3-21 are summarized below:

- The Company received US\$0.75 million of payments on outstanding accounts receivable during October 2021;

- Progress continues with respect to the development of the SFD-GT geothermal sensor family for which NXT is receiving advisory services and funding from the NRC IRAP. NXT tested existing SFD® sensors under different operating parameters associated with subsurface conditions favourable for geothermal resources. The test results have demonstrated that the development of a dedicated SFD- GT sensor family can be accelerated;
- NXT is continuing development of the processing algorithms that will assist in the attribute mapping, interpretation and integration of SFD® data. A number of new approaches, algorithms, and models have been successfully trialed that provide a more definitive approach to corroborating SFD® results by direct spatial comparison with subsurface properties that are pertinent to both hydrocarbon and geothermal applications. Whilst these methods require final formalization and further field testing, NXT expects that the eventual implementation of these enhancements will help drive the integration of SFD® data and results into the overall upstream exploration cycle; and
- NXT also announces its patent application in India has now been officially granted by the Office of the Controller General of Patents, Designs and Trade Marks bringing the total number of countries in which NXT holds patents to 45.

## Discussion of Operations

### ***COVID-19 Pandemic***

As of the date of the condensed consolidated interim financial statements the COVID-19 pandemic continues to be a risk on the operations of the Company. The Company has made provisions so employees can work safely in the office or from home, followed all Alberta Health Services and Health Canada recommendations, and implemented hygiene and physical distancing policies. Demand for our services, as well as our ability to provide services and to generate revenues may become adversely impacted the longer the COVID-19 pandemic continues. For example, if restrictions on international travel continue and/or an outbreak of the virus among our or our customers' personnel occurred, it may result in NXT being unable to perform surveys. Further, business development may be impacted, as tele-conferences or on-line video conferencing may be an inferior method of business development than in-person meetings and technical presentations.

The Company's approach to managing the impacts of the Covid-19 pandemic is dynamic and the ultimate duration and magnitude of the impact on the economy and the financial effect to the Company is not known at this time. Estimates and judgments made by management in the preparation of these consolidated financial statements are subject to a higher degree of measurement uncertainty during this volatile period.

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

#### Description of the "Acquisition"

The Company acquired the rights to the geothermal applications of the SFD® technology (the "Geothermal Right") from Mr. George Liszicasz, Chairman, President and Chief Executive Officer of NXT on April 18, 2021 (the "Acquisition"). The agreement providing for the Acquisition was negotiated between Mr.

Liszicasz and a special committee of the Board comprised entirely of independent directors (the "Committee"). The initially negotiated consideration payable by the Company in connection with the Acquisition included the following:

1. US\$40,000 (CAD\$50,310) signature payment, which became due immediately and was paid on April 22, 2021;
2. 300,000 Common Shares, which became due on April 18, 2021 and will be issued upon receipt of all necessary approvals including the approval of the Toronto Stock Exchange (the "TSX") which is expected in Q4-21;
3. CAD\$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 CAD\$5,000,000 due to receipt of 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<sup>®</sup> contract valued at US\$10,000,000 or greater, provided such contract is entered into and completed, and payment of at least US\$5,000,000 is received, by April 18, 2023.

Collectively and as amended, the "Consideration".

Geothermal applications of the SFD<sup>®</sup> technology include naturally occurring sub-surface fluid reservoirs or rock conditions from which heat can be extracted and utilized for generating electric power, or for direct utilization in industrial, agricultural or domestic applications. The main subsurface properties such as porosity, permeability and impermeable cap rock that are vital in the search for oil and gas resources and are equally critical for locating the most prospective geothermal resources. For these reasons, the SFD<sup>®</sup> technology has a natural extension to geothermal applications.

Since first commercialized in 2007 for hydrocarbon use, NXT's non-intrusive SFD<sup>®</sup> airborne technology enables its customers to significantly improve drill success rates while reducing the overall negative environmental impact of traditional large-scale ground surveys by minimalizing disruptions to community life and surface use. NXT anticipates applying for patent protection for the geothermal applications of SFD<sup>®</sup> once development of the SFD<sup>®</sup> sensors reach appropriate milestones.

As industries worldwide transition toward a low-carbon economy, geothermal energy has gained greater prominence for its environmental benefits as a non-intermittent renewable energy source. NXT will begin to utilize the research and marketing skillsets acquired in hydrocarbon resources to develop and commercialize the application of the SFD<sup>®</sup> technology for geothermal resource exploration. By expanding the Company's scope of business to include exploring for both hydrocarbon and geothermal resources, the Company anticipates that its scope of revenue sources will expand as well.

#### Description of Review and Approval Process

The Acquisition constituted a "related party transaction" for the purposes of Multilateral Instrument 61-101 *Protection of Minority Security Holders in Special Transactions* ("MI 61-101") on the basis that Mr. Liszicasz is a director, officer and control person of the Company.

The Acquisition was reviewed and unanimously approved by the Committee which took into consideration the fair market value of the Geothermal Right as determined by them acting in good faith. Due to the fair market value not being readily determinable, the Committee considered the potential value to be realized by the Company in exercising the Geothermal Right, the value of the Consideration being offered to Mr. Liszicasz, and the effect on the Company's share ownership before and after the completion of the Acquisition.

The Acquisition was exempt from the formal valuation and disinterested shareholder approval requirements typically applicable to related party transactions under MI 61-101 on the basis that, at the time the Acquisition was agreed to, neither the fair market value of the Geothermal Right (as determined by the Committee acting in good faith, due to the fair market value not being readily determinable), nor the fair market value of the Consideration to be received by Mr. Liszicasz for the Geothermal Right, exceeded 25% of the Company's market capitalization, calculated as follows:

- fair market value of the Geothermal Right and fair market value of the Consideration, approximately \$837,947 if all of the milestones are met;
- market capitalization of the Company, approximately \$44,579,810; and
- fair market value as a % of market capitalization, 1.88%.

Following the issuance of the 300,000 Common Shares (to be issued as part of the Consideration, subject to receipt of all necessary approvals including approval by the TSX), Mr. Liszicasz's ownership is expected to increase from 15,077,784 Common Shares (representing approximately 23.22% of the 64,933,648 Common Shares issued and outstanding as at the date of this MD&A) to 15,377,784 Common Shares (representing approximately 23.57% of the Company's then 65,233,648 Common Shares expected to be issued and outstanding, assuming no other changes in the number of issued and outstanding Common Shares occurs prior to the issuance of the 300,000 Common Shares to Mr. Liszicasz).

Mr. Liszicasz retains all rights, title and interest in and to the SFD® technologies for all other commercial applications, except for respect to hydrocarbons and geothermal resources.

As of September 30, 2021, the Company has recognized \$281,610 for the acquisition Geothermal Right, which is the combination of the US\$40,000 and CAD\$15,000 signature payments, the estimated value of the 300,000 common shares and the estimated legal costs to acquire the Geothermal Right. The cost of the remaining two milestones will be recognized when it is deemed probable that these two milestones will be achieved.

#### ***Pre-existing SFD® Data Sale***

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 received payments of US\$1,100,000 in respect of the Pre-existing SFD® Data. US\$750,000 of the outstanding receivable was received in October 2021, with the remaining US\$650,000 expected to be received later in Q4-21.

## **Government Grants**

### National Research Council of Canada Industrial Research Assistance Program

In July 2021, the Company began receiving advisory services and funding of up to \$50,000 from the NRC IRAP to support the research and development of the SFD® technology for geothermal applications. The objective of this project will be 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 NRC IRAP assistance is being recognized as a reduction to G&A expenses beginning in Q3-21.

### Canada Emergency Wage Subsidy and Canada Emergency Rent Subsidy

During the three and nine month periods ended September 30, 2021 and 2020, the Company received government grants through the CEWS and CERS. The CEWS and CERS were recognized as a reduction to G&A expenses. The Company participated in the CEWS and CERS in both of these programs until October 25, 2021, at which time the Government of Canada ended both of the programs.

	Q3-21	Q3-20	YTD 2021	YTD 2020
CEWS	\$ 39,741	\$ 121,706	\$ 188,769	\$ 227,581
CERS	62,880	-	181,681	-
NRC IRAP	27,943	-	27,943	-
Government grants recognized	130,564	121,706	398,393	227,581

## **Patents**

In Q3-21 NXT announced its patent application in India was officially granted by the Office of the Controller General of Patents, Designs and Trade Marks, bringing the total number of countries in which NXT holds patents to 45. As of the date of this MD&A, NXT has been granted SFD® patents in 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 45 countries. In addition, one SFD® patent application in Brazil is pending. These patents protect our proprietary SFD® technology and serve as independent third-party recognition of our technological invention in terms of practical applicability, conceptual novelty, and knowledge advancement.



## Summary of Operating Results

	Q3-21		Q3-20		YTD 2021		YTD 2020	
Survey revenue	\$	-	\$	-	\$	3,144,373	\$	136,566
Expenses:								
Survey costs, net		303,426		257,269		950,737		804,384
General and administrative expenses		765,120		743,024		2,348,280		2,549,195
Amortization		445,345		445,123		1,331,340		1,335,684
		1,513,891		1,445,416		4,630,357		4,689,263
Other Expenses (income):								
Interest (income) expense, net		13,087		(547)		27,014		(19,051)
Foreign exchange loss (gain)		(102,632)		42,212		10,329		(168,138)
Intellectual property and other		10,096		740		26,885		9,274
		(79,449)		42,405		64,228		(177,915)
Loss before income taxes		(1,434,442)		(1,487,821)		(1,550,212)		(4,374,782)
Income tax expense		-		-		-		-
Net loss and comprehensive loss		(1,434,442)		(1,487,821)		(1,550,212)		(4,374,782)
Net loss per share – basic	\$	(0.02)	\$	(0.02)	\$	(0.02)	\$	(0.07)
Net loss per share – diluted	\$	(0.02)	\$	(0.02)	\$	(0.02)	\$	(0.07)

**Quarterly operating results.** Net loss for Q3-21 compared to Q3-20 decreased by \$53,379, or \$0.00 per share-basic. Survey costs, net, were \$46,157 higher due to the timing of routine maintenance costs. G&A expenses increased by \$22,096, or 3%, compared to Q3-20, due primarily to a lower CEWS rate and higher stock-based compensation expenses ("SBCE"), offset by the CERS received in Q3-21, and lower professional fees. Interest (income) expense, net changed by \$13,634 in Q3-21 versus Q3-20 due to interest expense for the Business Development Bank of Canada's ("BDC") Highly Affected Sectors Credit Availability Program (the "HASCAP Loan"). With respect to foreign exchange, the Company held significant net assets in US\$ as at September 30, 2021 and 2020. In Q3-21 and Q3-20, the CDN\$ weakened as compared to the US\$ at June 30, 2021 and in Q3-20 the CDN\$ strengthened versus the US\$ at June 30, 2020, resulting in the corresponding foreign exchange loss and gain in each respective quarter. IP and other expenses in Q3-21 related mostly to costs associated with maintaining certain SFD® patents.

**Year-to-date operating results.** Net loss for YTD 2021 compared to YTD 2020 decreased by \$2,824,570, or \$0.05 per share-basic. YTD 2021 revenue resulted from the Pre-existing SFD® Data Sale. In YTD 2020, revenue was earned on the recognition of the forfeited deposit from the Co-operation Agreement with Alberta Green Ventures Limited Partnership ("AGV"). Survey costs were higher in YTD 2021 versus YTD 2020 as YTD 2021 costs were due to delivery costs in connection with the Pre-existing SFD® Data Sale and lower charter hire reimbursements due to the COVID-19 pandemic. G&A expenses decreased by \$200,915, or 8%, primarily due to receiving the CERS in YTD 2021, decreased professional fees and no business development travel during YTD 2021 due to the COVID-19 pandemic offset by a lower CEWS rate and higher SBCE due to the Restricted Share Unit Plan ("RSU Plan"). Interest (income) expense net

changed \$46,065 versus YTD 2020 due to interest expense from the HASCAP Loan and the Company having larger cash and short-term investments in YTD 2020. For foreign exchange, the CDN\$ remained relatively constant with the US\$ at September 30, 2021 versus December 31, 2020 resulting in the \$10,329 exchange loss in YTD 2021. The CDN\$ weakened versus the US dollar in YTD 2020, resulting in the foreign exchange gain during YTD 2020. IP and other expenses in YTD 2021 related mostly to costs associated with maintaining certain SFD® patents as their renewal periods came up during YTD 2021.

### **Survey Costs, net**

<b>Survey Costs</b>	<b>Q3-21</b>	<b>Q3-20</b>	<b>Net change</b>
Aircraft lease costs	\$ 98,844	\$ 115,915	\$ (17,071)
Aircraft operations	203,728	141,354	62,374
Survey projects	854	-	854
Total survey costs, net	303,426	257,269	46,157

<b>Survey Costs</b>	<b>YTD 2021</b>	<b>YTD 2020</b>	<b>Net change</b>
Aircraft lease costs	\$ 306,432	\$ 343,038	\$ (36,606)
Aircraft operations	529,373	461,346	68,027
Survey projects	114,932	-	114,932
Total survey costs, net	950,737	804,384	146,353

Survey costs include aircraft charter costs (net of charter hire reimbursements), lease expenses and aircraft operation and maintenance costs. In Q3-21, survey costs were higher compared to Q3-20 due to the timing of routine maintenance costs. This was offset by lower aircraft lease costs due to the favourable CDN\$ to US\$ exchange rate.

In YTD 2021, survey costs were also higher compared to YTD 2020 due to costs to deliver the Pre-existing SFD® Data, routine maintenance costs and lower charter hire reimbursements due to the COVID-19 pandemic. This was offset by lower aircraft lease costs, due to the favourable CDN\$ to US\$ exchange rate during Q3-21.

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.

In April 2017, NXT completed a sale and leaseback agreement of its aircraft with a Calgary-based international aircraft services organization (the "Lessor"). NXT has leased the aircraft over an initial term of 60 months and retains all existing operating rights and obligations. NXT is required to make monthly payments to the Lessor of approximately US\$39,500. NXT has the option to extend the term of the lease by an additional two years for payments of approximately US\$22,500 per month. Should NXT want to repurchase the aircraft at the end of the initial lease term, the purchase price will be US\$1.45 million.

## General and Administrative Expenses

G&A Expenses	Q3-21	Q3-20	Net change	%
Salaries, benefits and consulting charges	\$ 316,729	\$ 241,566	\$ 75,163	31
Board and professional fees, public company costs	170,936	261,915	(90,979)	(35)
Premises and administrative overhead	146,939	199,312	(52,373)	(26)
Business development	3,684	4,847	(1,163)	(24)
Stock-based compensation	126,832	35,384	91,448	258
Total G&A Expenses	765,120	743,024	22,096	3

G&A Expenses	YTD 2021	YTD 2020	Net change	%
Salaries, benefits and consulting charges	\$ 1,087,669	\$ 1,014,304	\$ 73,365	7
Board and professional fees, public company costs	596,669	752,479	(155,810)	(21)
Premises and administrative overhead	449,116	581,604	(132,488)	(23)
Business development	8,841	136,234	(127,393)	(94)
Stock-based compensation	205,985	64,574	141,411	219
Total G&A Expenses	2,348,280	2,549,195	(200,915)	(8)

G&A expenses increased \$22,096, or 3%, in Q3-21 compared to Q3-20 for the following reasons:

- salaries, benefits and consulting charges increased \$75,163, or 31%, due to the decreased CEWS rate offset by lower vacation expense in Q3-21;
- board and professional fees and public company costs decreased \$90,979, or 35%, due primarily to decreased professional fees and the 2021 annual general meeting being held one quarter earlier during 2021;
- premises and administrative overhead costs decreased \$52,373, or 26%, due to receipt of the CERS in Q3-21;
- business development costs were minimal in both periods as travel restrictions continued due to the COVID-19 pandemic; and
- SBCE were higher in Q3-21 vs Q3-20 by \$91,448, or 258% due to recognizing the restricted share unit ("RSUs") RSU Plan expense and the employee share purchase plan (the "ESP Plan"). The ESP Plan was commenced in Q4-20 and has approximately 75% employee participation. See the section "*Discussion of Operations - General and Administrative Expenses - Stock-based Compensation Expenses*" for further information on the SBCE.

G&A expenses decreased by \$200,915, or 8%, in YTD 2021 compared to YTD 2020 for the following reasons:

- salaries, benefits and consulting charges increased \$73,365, or 7%, due to the decrease CEWS rate offset by lower vacation expense;
- board and professional fees and public company costs decreased \$155,810, or 21%, due to lower legal fees;
- premises and administrative overhead decreased \$132,488, or 23%, due to receipt of the CERS in YTD 2021;

- business development costs decreased \$127,393, or 94%, as travel restrictions continued due to the COVID-19 pandemic; and
- SBCE were higher in YTD 2021 vs YTD 2020 by \$141,411, or 219% due to recognizing the RSU Plan expense and the ESP Plan. See the section "*Discussion of Operations - General and Administrative Expenses - Stock-based Compensation Expenses*" for further information on the SBCE.

#### Stock-based Compensation Expenses

Stock-based Compensation Expenses	Q3-21	Q3-20	Net change	% change
Stock Option Expense	\$ 7,500	\$ 11,274	\$ (3,774)	(33)
Deferred Share Units	-	3,750	(3,750)	(100)
Restricted Stock Units	82,965	20,360	62,605	307
ESP Plan	36,367	-	36,367	100
Total SBCE	126,832	35,384	91,448	258

Stock-based Compensation Expenses	YTD 2021	YTD 2020	Net change	% change
Stock Option Expense	\$ 18,750	\$ 32,964	\$ (14,214)	(43)
Deferred Share Units	-	11,250	(11,250)	(100)
Restricted Stock Units	102,511	20,360	82,151	403
ESP Plan	84,724	-	84,724	100
Total SBCE	205,985	64,574	141,411	219

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. Also, SBCE is a function of periodic changes in the inputs used in the Black-Scholes option valuation model, such as volatility in NXT's trailing share price and for cash-settled stock-based compensation awards variability will occur based on changes to observable prices. Stock options granted generally expire, if unexercised, five years from the date granted and entitlement to exercise them generally vests at a rate of one-third at the end of each of the first three years following the date of grant. The deferred share unit ("DSUs") plan (the "DSU Plan") is a long-term incentive plan that permits the grant of DSUs to qualified directors. DSUs granted under the DSU Plan are to be settled at the retirement, resignation or death of the Board member holding the DSUs. RSUs entitle the holder to receive, at the option of the Company, either the underlying number of shares of the Company's common stock upon vesting of such units 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 shares and cash, and intends to continue to settle the RSUs in shares and cash. In the year ended December 31, 2020, the Company granted 1,200,000 RSUs to employees and officers. 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 TSX. During 2020 and 2021 the Company has elected to issue Common Shares from treasury.

SBCE in Q3-21 was higher compared to Q3-20 by \$91,448 or 258%. The main driver was the RSU Plan vesting event in Q3-21 was recognized at a share price of \$0.55 versus the June 30, 2021 share price of \$0.44. Also 3 months of RSU expense were recognized in Q3-21 versus 36 days in Q3-20. Option expense in Q3-21 was due to an option grant to a director who elected to take options, instead of cash payments for all of their fees. No directors elected to participate in the DSU Plan in 2021, thereby partially offsetting the SBCE. The ESP Plan expense was not incurred in Q3-20 as the ESP Plan commenced in Q4-20.

SBCE in YTD 2021 was higher compared to YTD 2020 by \$141,411 or 219%. Option expense in YTD 2021 was an option grant to a director who elected to take options, instead of cash payments for part of his fees. Option expense in YTD 2020 was a grant of an award of 30,000 fully vested stock options. The ESP Plan expenses was not incurred in Q3-20 as the ESP Plan commenced in Q4-20. The main driver was the RSU Plan recognized nine months of RSU expense in YTD 2021 versus 36 days in YTD 2020. In addition, the RSU plan was expensed at the lower price of \$0.50 at September 30, 2020 versus \$0.55 for the RSU Plan vesting date on August 25, 2021 and \$0.64 at September 30, 2021 for the unvested RSUs.

### **Amortization**

Amortization	Q3-21	Q3-20	Net change	%
Property and equipment	\$ 20,641	\$ 23,939	\$ (3,298)	(14)
Intellectual property	424,704	421,184	3,520	1
Total Amortization Expenses	445,345	445,123	222	-

Amortization	YTD 2021	YTD 2020	Net change	%
Property and equipment	\$ 61,923	\$ 72,134	\$ (10,211)	(14)
Intellectual property	1,269,417	1,263,550	5,867	-
Total Amortization Expenses	1,331,340	1,335,684	(4,344)	-

Property and equipment and related amortization expense. Property and equipment amortization was lower in Q3-21 and YTD 2021 compared to Q3-20 and YTD 2020 due to additional assets becoming fully amortized during the period and the Company not acquiring new assets in the periods. Amortization also decreases each year as the Company uses the declining balance method of depreciation, thereby having the effect of lowering amortization each year on existing assets.

Intellectual property and related amortization expense. NXT acquired specific rights to utilize the proprietary SFD® technology in global hydrocarbon exploration applications from the inventor of the SFD® technology, NXT's Chairman, President and Chief Executive Officer, on August 31, 2015. The value attributed to the acquired IP assets was \$25.3 million. The IP assets are being amortized on a straight-line basis over a 15-year period (future amortization expense of \$1,685,000 per year) and are also being subject to ongoing assessment of potential indicators of impairment of the recorded net book value. No impairments were recognized in Q3-21 or Q3-20.

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 Chief Executive Officer 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 \$14,081 per year for a 5 year aggregate total of \$70,402.

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

<b>Other Expenses</b>	<b>Q3-21</b>	<b>Q3-20</b>	<b>Net change</b>	<b>%</b>
Interest (income) expense, net	\$ 13,087	\$ (547)	\$ 13,634	>100
Foreign exchange loss (gain)	(102,632)	42,212	(144,844)	(343)
Intellectual property and other	10,096	740	9,356	1,264
Total Other Expenses, net	(79,449)	42,405	(121,854)	(287)

<b>Other Expenses</b>	<b>YTD 2021</b>	<b>YTD 2020</b>	<b>Net change</b>	<b>%</b>
Interest (income) expense, net	\$ 27,014	\$ (19,051)	\$ 46,065	(242)
Foreign exchange loss (gain)	10,329	(168,138)	178,467	(106)
Intellectual property and other	26,885	9,274	17,611	190
Total Other Expenses, net	64,228	(177,915)	242,143	(136)

***Interest (income) expense, net.*** This category of other expenses includes interest income earned on short-term investments netted, by interest expense from lease obligations and long-term debt. Q3-21 interest decreased \$13,634 compared to Q3-20 and YTD 2021 (income) expense compared to YTD 2020 decreased \$46,065 as interest rates have decreased, as less cash was held in short-term investments and interest expense was incurred for the HASCAP Loan.

***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 September 30, 2021 and September 30, 2020, including accounts receivable, cash and cash equivalents, short-term investments US\$ lease obligations and the security deposit for the aircraft, all of which have an effect on the unrealized foreign exchange gain and loss. At September 30, 2021, the CDN\$ to US\$ exchange rate weakened as compared to the CDN\$ to US\$ exchange rate at June 30, 2021, resulting in the corresponding foreign exchange gain for Q3-21. The opposite happened in Q3-20 resulting in the foreign exchange loss in Q3-2020. The CDN\$ remained relatively constant with the US\$ at September 30, 2021 versus December 31, 2020 resulting in the \$10,329 exchange loss in YTD 2021. The CDN\$ weakened versus the US dollar in YTD 2020, resulting in the foreign exchange gain of \$168,138 in YTD 2020.

The Company does not currently enter into hedging contracts, but does however use alternative strategies to reduce the volatility of US dollar assets including converting excess US dollars to CDN dollars.

***IP and other.*** This category of other expenses primarily includes costs related to IP filings and research & development activity related to the SFD® technology.

In Q3-21 and YTD 2021, the Company's IP and other expenses were associated with periodic patent maintenance and renewal fees required during these time periods.

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

There was no income tax expense in Q3-21 or Q3-20.

## ***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 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 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 reflects management's assessment of credit risk. At September 30, 2021, 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, short-term investments, accounts receivable, deposits, accounts payables, accrued liabilities, and lease obligations, and entering into United States dollar revenue contracts. The Company does not currently enter into hedging contracts, but to mitigate exposure to fluctuations in foreign exchange the Company uses strategies to reduce the volatility of United States Dollar assets including converting excess United States dollars to Canadian dollars. As at September 30, 2021, the Company held net U.S dollar assets totaling US\$2,544,676. Accordingly, a hypothetical 10% change in the value of one United States dollar expressed in Canadian dollars as at September 30, 2021 would have had an approximately \$324,543 effect on the unrealized foreign exchange gain or loss for the period.

### Interest Rates

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

### Tax Rates

Changes in tax rates in the jurisdictions that we operate in would impact the amount of current taxes that we pay. In addition, changes to substantively enacted tax rates would impact the carrying balance of



deferred tax assets and liabilities, potentially resulting in a deferred tax recovery or incremental deferred tax expense.

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

### Summary of Quarterly Results

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

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

	Q3-20	Q2-20	Q1-20	Q4-19
Survey revenue	\$ -	\$ 136,566	\$ -	\$ -
Net income (loss)	(1,487,821)	(1,439,363)	(1,447,598)	(1,762,427)
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)

In Q3-21 the Company recorded favourable exchange gains due to the strengthening of the US\$. In Q2-21 revenue was recognized for the 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. During Q2-20, revenue was earned on the recognition of the forfeited deposit from AGV, payable pursuant to the existing co-operation agreement between NXT and AGV (the "Co-operation Agreement"). Excluding Q2-21, the Company incurred net losses primarily due to incurred survey costs related to aircraft lease and aircraft maintenance costs, G&A expenses and non-cash items like SBCE, which can be a significant expense in any given quarter. More specific details are provided below:

- 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;
- 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;

- in Q3-20, costs were reduced primarily due to recognizing \$189,135 benefits under the CEWS and the SR&ED, and reduced travel;
- in Q2-20, \$136,566 revenue was earned on the recognition of the forfeited deposit from AGV, payable pursuant to the Co-operation Agreement, and the Company incurred a \$135,991 foreign exchange loss partially offsetting the Q1-20 foreign exchange gain described below;
- in Q1-20, the Company incurred a foreign exchange gain as it held significant monetary assets in US\$ at March 31, 2020, including accounts receivable, cash and cash equivalents, short-term investments and the security deposit for the aircraft, and the CDN\$ devalued by approximately 9%; and
- in Q4-19, survey costs were higher as final integration costs from the 2019 SFD<sup>®</sup> survey in Africa were incurred.

## Liquidity and Capital Resources

### ***Going Concern***

The Q3-21 condensed consolidated interim financial statements have been prepared on a going concern basis. The going concern basis of presentation assumes that NXT will continue in operation for the foreseeable future and will be able to realize its assets and discharge its liabilities and commitments in the normal course of business.

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

The Company has plans in place to reduce 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<sup>®</sup> survey contracts 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, ultimately to expand the 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 Q3-21 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 these 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 September 30, 2021 totaled \$2.80 million. Net working capital totaled \$4.03 million. See the information in the section "*Liquidity and Capital Resources – Net Working Capital*" for further information.

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

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

### ***Net Working Capital***

<b>Net Working Capital</b>	<b>September 30, 2021</b>	<b>December 31, 2020</b>	<b>Net Change</b>	<b>%</b>
<b>Current assets (current liabilities)</b>				
Cash, cash equivalents and short-term investments	\$2,800,721	\$ 3,031,407	\$(230,686)	(8)
Accounts receivable	1,887,334	965,548	921,786	95
Prepaid expenses	303,986	77,532	226,454	292
Accounts payable and accrued liabilities	(459,354)	(440,537)	(18,817)	4
Contract obligations	-	(127,507)	127,507	100
Current portion of long-term debt	(37,037)	-	(37,037)	(100)
Current portion of lease obligation	(469,821)	(687,991)	218,170	(32)
<b>Total Net Working Capital</b>	<b>4,025,829</b>	<b>2,818,452</b>	<b>1,207,377</b>	<b>43</b>

NXT had net working capital of \$4,025,829 as at September 30, 2021.

The increase in net working capital at September 30, 2021 compared to December 31, 2020 was due to cash from receipt of the HASCAP Loan and accounts receivable from the Pre-existing SFD® Data Sale.

## Accounts Payable

Accounts Payable	Sept 30, 2021	Dec 31, 2020	Net Change	%
Trade accounts payable	\$ (74,364)	\$ (62,872)	\$ (11,492)	(18)
Deferred advisor board payable	(23,910)	(23,908)	(2)	0
Accrued liabilities	(184,781)	(161,742)	(23,039)	(14)
Board of Director fees	(7,500)	-	(7,500)	(100)
Vacation pay accrued	(97,514)	(71,698)	(25,816)	(36)
RSU and ESP Plan Liability	(71,285)	(120,317)	49,032	41
Total Accounts Payable	(459,354)	(440,537)	(18,817)	(4)

Accounts payable increased by \$18,817 or 4%, as at September 30, 2021 compared to December 31, 2020 for the following reasons:

- trade accounts payable increased by \$11,492, or 17%, due to timing of payables at the stated dates;
- accrued liabilities increased by \$23,039, or 14%, due to annual professional fee accruals;
- the board of director fees for one director were not paid until Q4-21;
- vacation pay accrued increased by \$25,816, or 36%, due to timing of vacations; and
- RSU Plan and ESP Plan liabilities decreased by \$49,032 as one third of the RSU Plan vested in Q3-21 offset partially by ESP Plan bonus accrual.

## 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 are 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.

Maturity of long-term debt:	
2021	\$ 10,000
2022	104,167
2023	146,481
2024	142,037
2025	137,593
2026 to 2031	668,055
Total principal and interest payments	1,208,333
Less interest	(208,333)
Total principal remaining	1,000,000
Current portion of long-term debt	37,037
Non-current portion of long-term debt	962,963

## Cash Flow

Cash Flow - from / (used in)	Q3-21	Q3-20	YTD 2021	YTD 2020
Operating activities	\$(1,072,280)	\$(829,149)	\$(1,226,036)	\$(2,525,930)
Financing activities	16,529	-	1,052,754	(42,515)
Investing activities	(102,448)	1,523,724	(87,804)	2,387,450
Effect of foreign exchange changes on cash	86,160	7,438	7,892	(29,875)
Net source (use) of cash	(1,072,039)	702,013	(253,194)	(210,870)
Cash and cash equivalents, start of period	3,508,991	1,945,362	2,690,146	2,858,245
Cash and cash equivalents, end of period	2,436,952	2,647,375	2,436,952	2,647,375
Cash and cash equivalents, end of period	2,436,952	2,647,375	2,436,952	2,647,375
Short-term investments, end of period	363,769	1,408,509	363,769	1,408,509
Total Cash and Short-Term Investments, end of period	2,800,721	4,055,884	2,800,721	4,055,884

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	Q3-21	Q3-20	YTD 2021	YTD 2020
Net income (loss) for the period	\$(1,434,442)	\$(1,487,821)	\$(1,550,212)	\$(4,374,782)
Total non-cash expense items & ARO liabilities settled	401,619	473,554	1,397,090	1,312,982
	(1,032,823)	(1,014,267)	(153,122)	(3,061,800)
Change in non-cash working capital balances	(39,457)	185,118	(1,072,914)	535,870
Total Cash from (used in) Operating Activities	(1,072,280)	(829,149)	(1,226,036)	(2,525,930)

Operating cash flow decreased by \$243,131 in Q3-21 as compared to Q3-20 due to the timing of payments accounts payable and accrued liabilities which were higher in Q3-21 vs Q3-20.

Operating cash flow increased by \$1,299,894 in YTD 2021 as compared to YTD 2020 due to the payment of the Pre-existing SFD® Data Sale accounts receivable offset by timing of accounts payable and accrued liabilities.

Financing Activities	Q3-21	Q3-20	YTD 2021	YTD 2020
Proceeds from long-term debt	\$ -	\$ -	\$ 1,000,000	\$ -
Proceeds from the employee share purchase plan	16,529	-	52,754	-
Repayment of capital lease obligation	-	-	-	(42,515)
Total Cash from (used in) Financing Activities	16,529	-	1,052,754	(42,515)

In YTD 2021, proceeds of \$1,000,000 were received from the HASCAP Loan. Additionally, proceeds were received from employee contributions under the ESP Plan which began in Q4-20. The financing payments in YTD 2020 were for payments on the finance lease for office equipment which was terminated in Q2-20.

Investing Activities	Q3-21	Q3-20	YTD 2021	YTD 2020
Acquisition of intellectual property	\$ (15,000)	\$ -	\$ (65,310)	\$ -
Proceeds from (used in) short-term investments	(87,448)	1,523,724	(22,494)	2,387,450
Total Cash from Investing Activities	(102,448)	1,523,724	(87,804)	2,387,450

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

### **Contractual Obligations**

The estimated minimum annual commitments for the Company's lease components as at September 30, 2021. US\$ payments have been converted to CDN\$ at a rate of 1.27538:

Lease payment obligations:	Total	2021	2022	2023	2024	2025
Office	\$ 1,468,740	\$ 91,796	\$ 367,185	\$ 367,185	\$ 367,185	\$ 275,389
Office operating costs	912,365	57,023	228,091	228,091	228,091	171,069
Aircraft lease	251,888	151,133	100,755	-	-	-
Office equipment	6,300	1,350	4,950	-	-	-
Total	2,639,293	301,302	700,981	595,276	595,276	446,458

NXT has the option to extend the term of the aircraft lease by an additional two years for payments of approximately US\$22,500 per month. Should NXT want to repurchase the aircraft at the end of the initial lease term, the purchase price will be US\$1.45 million.

### **Long-term Debt (HASCAP Loan)**

Please refer to the section "*Liquidity and Capital Resources*" for a discussion on the contractual obligations for the HASCAP Loan.

## Off-balance Sheet Arrangements

The Company has no off-balance sheet arrangements as of the date of this MD&A other than office premise non-lease operating costs with Interloq Capital (the "Landlord"). If the Company were to default on its office lease the current month rent including operation costs plus the next three months become immediately due. Operating cost amounts are disclosed in the section "*Liquidity and Capital Resources – Contractual Commitments*". NXT pays an estimated operating cost during the current year, but has the obligation to pay the actual operating costs incurred as defined in the office lease with the Landlord early in the first quarter of the preceding year if the estimate was low, or will receive a refund if the estimate was too high. Currently, the Company believes that the current operating cost estimate is reasonable and is constant with discussions with the Landlord.

## Transactions with Related Parties

One of the members of NXT's Board, Thomas Valentine, is a partner in the law firm Norton Rose Fulbright Canada LLP which provides legal advice to NXT. A company owned by a family member of an executive officer was contracted to provide presentation design services to the Company.

Fees incurred were as follows:

	Q3-21	Q3-20	YTD 2021	YTD 2020
Legal fees	\$ 15,087	\$ 78,654	\$ 65,698	\$ 226,371
Design services	-	-	4,013	-

One of the members of NXT's Board of Directors is a partner in a law firm which provides legal advice to NXT. Accounts payable and accrued liabilities includes a total of \$5,000 (\$1,570 as at December 31, 2020) payable to this law firm.

Accounts receivable include a total of \$9,598 (\$nil as at December 31, 2020) from the Company's CEO.

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

The Geothermal Right was acquired from the Company's CEO on April 18, 2021. As discussed in the section "*Discussion of Operations - Acquisition of the Geothermal Right*", the Company acquired the Geothermal Right from its Chairman, President and Chief Executive Officer, Mr. Liszicasz in Q2-21.

## Critical Accounting 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, the measurement of stock-based compensation expense, valuation of deferred income tax assets, and estimates for asset retirement obligations. Estimates and assumptions used are based upon management's best estimate as at the date of the 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. Descriptions of estimates and assumptions, the methodologies used to calculate such estimates and

assumptions, and trends, commitments, events and uncertainties relevant to such estimates and assumptions, are substantially unchanged from those described in NXT's annual audited consolidated financial statements as at and for the year-ended December 31, 2020.

### Changes in Accounting Policies

The condensed consolidated interim financial statements of NXT for Q3-21 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, 2020 available on NXT's website at [www.nxtenergy.com](http://www.nxtenergy.com) and on SEDAR at [www.sedar.com](http://www.sedar.com).

#### Leases

On January 1, 2019, NXT adopted ASC Topic 842, Leases ("Topic 842") and related amendments, using the modified retrospective approach recognizing a cumulative effect adjustment at the beginning of the reporting period in which Topic 842 was applied. Results for reporting periods beginning after January 1, 2019, are presented in accordance with Topic 842, while prior periods have not been restated and are reported in accordance with ASC Topic 840, Leases ("Topic 840"). On transition, NXT elected certain practical expedients permitted under Topic 842 which include:

- a) No reassessment of the classification of leases previously assessed under Topic 840.
- b) The use of hindsight in determining the lease term where the contract contains terms to extend or terminate the lease.

During third quarter of 2021 the Company determined that the amounts previously recorded for the aircraft lease were calculated incorrectly and the US\$ 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 accounts. The Company has determined that the effect of these adjustments are not material. Thus the Company has recorded the adjustments in the related accounts in the comparative periods in these financial statements. The specific accounts affected are deposits, right of use assets, current portion of lease obligations, long-term lease obligations, deficit, survey 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. Thus the Company has retrospectively recorded the adjustments in the related accounts. The charts below highlight the changes to each account in each of the comparative periods.



	December 31, 2020		
	As previously reported	Adjustments	Revised
Deposits	\$ 526,560	\$ (100,730)	\$ 425,830
Right of use assets	2,415,430	(423,658)	1,991,772
Current portion of lease obligations	(773,465)	85,474	(687,991)
Long-term portion of lease obligations	(1,896,277)	494,430	(1,401,847)
Deficit	83,934,230	(55,516)	83,878,714
	84,206,478	-	84,206,478

	For the three months ended September 30, 2020		
	As previously reported	Adjustments	Revised
Survey costs	\$ 253,188	\$ 4,081	\$ 257,269
Interest (income) expense	(36)	(511)	(547)
Foreign exchange loss (gain)	60,417	(18,205)	42,212
Net loss	(1,502,456)	14,635	(1,487,821)

	For the nine months ended September 30, 2020		
	As previously reported	Adjustments	Revised
Survey costs	\$ 787,034	\$ 17,350	\$ 804,384
Interest (income) expense	(17,045)	(2,006)	(19,051)
Foreign exchange loss (gain)	(213,110)	44,972	(168,138)
Net loss	(4,314,466)	(60,316)	(4,374,782)

Accounting for the above adjustments, the adoption of Topic 842 resulted in the initial recognition of right-of-use assets of approximately \$3.2 million, current lease liabilities of approximately \$0.7 million, and non-current lease liabilities of approximately \$2.8 million as at January 1, 2019. Before the above retrospective adjustments, at January 1, 2019, the Company recorded the initial recognition of right-of-use assets of approximately \$3.5 million, current lease liabilities of approximately \$0.7 million, and non-current lease liabilities of approximately \$3.4 million.

### 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 September 30, 2021 and September 30, 2020, the Company held no derivative financial instruments. For more information relating to risks, see the section titled "*Liquidity and Capital Resources – Net Working Capital*".

### Outstanding Share Capital

	November 15, 2021	September 30, 2021	December 31, 2020
Common Shares	64,933,648	64,829,554	64,437,790
Options	378,110	378,110	421,000
Deferred Share Units	37,354	37,354	37,354
Restricted Share Units	696,666	696,666	1,200,000
ESP Plan Shares	-	102,530	23,532
Common Shares for the Geothermal Right	300,000	300,000	-
Total share capital and dilutive securities	66,345,778	66,344,214	66,119,676

	Director & Officer Share Capital at September 30, 2021	December 31, 2020
Frank Ingriselli <sup>1</sup>	50,000	50,000
George Liszicasz <sup>1&amp;2</sup>	15,075,646	15,030,683
Charles Selby <sup>1</sup>	408,161	408,161
John Tilson <sup>1</sup>	5,916,208	5,552,208
Bruce G. Wilcox <sup>1</sup>	410,000	365,000
Eugene Woychyshyn <sup>2</sup>	144,438	54,442
Total Director and Officer Share Capital	22,004,453	21,460,494

<sup>1</sup> Director of NXT

<sup>2</sup> Officer of NXT

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

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

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

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

In 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 engagement of external consultants and legal counsel as well.

The Responsible Officers concluded that, as at September 30, 2021, its ICFR are not effective and as a result its DCPs are not sufficiently effective. NXT reached this conclusion based upon its assessment that there is a more than remote likelihood that its ICFR will not prevent or detect material misstatements if they should exist in the Company's consolidated financial statements. The Responsible Officers continue

to take certain actions to mitigate these material weaknesses including: (i) the implementation of controls with regards to the review procedures surrounding its disclosure; and (ii) engagement of third-party specialists. In addition, the Chief Financial Officer engages subject matter consultants as the need arises. There were no changes to the Company's ICFR in Q3-21.

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

### **Additional Information**

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