



NXT ENERGY SOLUTIONS INC.

Consolidated Financial Statements

**For the Years ended
December 31, 2021, 2020 and 2019**



KPMG LLP
205 5th Avenue SW
Suite 3100
Calgary AB T2P 4B9
Tel (403) 691-8000
Fax (403) 691-8008
www.kpmg.ca

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors NXT Energy Solutions Inc.

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of NXT Energy Solutions Inc. (the “Company”) as of December 31, 2021 and 2020, the related consolidated statements of income (loss) and comprehensive income (loss), shareholders’ equity and cash flows for each of the years in the three-year period ended December 31, 2021, and the related notes (collectively, the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company’s current and forecasted cash and cash equivalents and short-term investments position is not expected to be sufficient to meet its obligations that raises substantial doubt about its ability to continue as a going concern. Management’s plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.



We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Indicators of impairment for the intellectual property

As discussed in Note 9 to the consolidated financial statements, the Company had \$14,867,023 of intellectual property as of December 31, 2021, of which \$14,600,600 related to Stress Field Detection rights associated with hydrocarbon detection technology ("SFD"). As discussed in Note 2 to the consolidated financial statements, the Company assesses the recoverability of the intellectual property whenever events or changes in circumstances indicate that its carrying amount may not be recoverable. Since the inception of the Company's operations, there has been inconsistency in the occurrence, amount and timing of SFD related revenue. The Company's assessment of indicators of impairment for the intellectual property includes the consideration of the carrying amount of the Company's net assets compared to a range of indicative fair values determined using the following inputs and significant assumptions:



- the Company’s market capitalization and publicly available control premiums for comparable entities, and
- the Company’s historical and forecasted SFD related revenue and publicly available trading revenue multiples for comparable entities.

We identified the assessment of indicators of impairment for the intellectual property as a critical audit matter. The inconsistency in SFD related revenue indicated a higher risk that the intellectual property may not be recoverable, and therefore involved challenging auditor judgment. The control premiums, forecasted SFD related revenue and trading revenue multiples assumptions used to determine a range of indicative fair values of the Company net assets were challenging to test as they represented subjective determinations of conditions that were also sensitive to variations. Minor changes to those assumptions could have had a significant effect on the Company’s assessment of indicators of impairment. Additionally, the evaluation of the Company’s determination of control premiums and trading revenue multiples required specialized skills and knowledge.

The following are the primary procedures we performed to address the critical audit matter. We evaluated the Company’s forecasted SFD related revenue by comparing to contracted and noncontracted future SFD related revenue and related documentation, including Company press releases and board minutes. We involved a valuation professional with specialized skills and knowledge, who assisted in:

- evaluating the Company’s determination of the control premiums by comparing to a range that was independently developed using publicly available market data for comparable entities.
- evaluating the Company’s determination of the trading revenue multiples applied to historical and forecasted SFD related revenue by comparing to a range that was independently developed using publicly available market data from comparable entities.

We have served as the Company’s auditor since 2006.

A handwritten signature in black ink that reads 'KPMG LLP' with a horizontal line underneath.

Chartered Professional Accountants

Calgary, Canada
March 31, 2022

NXT ENERGY SOLUTIONS INC.

Consolidated Balance Sheets (Expressed in Canadian dollars)

	December 31, 2021	December 31, 2020
		Adjusted - Note 2
Assets		
Current assets		
Cash and cash equivalents	\$ 2,257,855	\$ 2,690,146
Short-term investments (Note 3)	550,000	341,261
Accounts receivable (Note 4)	841,567	965,548
Prepaid expenses and deposits (Note 5)	265,436	77,532
	3,914,858	4,074,487
Long term assets		
Deposits (Note 6)	234,475	425,830
Property and equipment (Note 7)	624,763	707,326
Right of Use Assets (Note 8)	1,943,252	1,991,772
Intellectual property (Note 9)	14,867,023	16,285,333
	\$ 21,584,371	\$ 23,484,748
Liabilities and Shareholders' Equity		
Current liabilities		
Accounts payable and accrued liabilities (Notes 10, 25)	\$ 500,625	\$ 440,537
Contract obligations (Note 11)	-	127,507
Current portion of long-term debt (Note 12)	64,815	-
Current portion of lease obligations (Note 13)	532,936	687,991
	1,098,376	1,256,035
Long-term liabilities		
Long-term debt (Note 12)	935,185	-
Long-term lease obligations (Note 13)	1,369,668	1,401,847
Asset retirement obligations (Note 14)	22,337	22,741
	2,327,190	1,424,588
	3,425,566	2,680,623
Shareholders' equity		
Common shares (Note 16): - authorized unlimited		
Issued: 65,250,710 (2020 - 64,437,790) common shares	95,779,352	95,327,123
Contributed capital	9,381,966	9,355,716
Deficit (Note 2)	(87,002,513)	(83,878,714)
	18,158,805	20,804,125
	\$ 21,584,371	\$ 23,484,748
Going Concern (Note 1)		
Commitments (Note 15)		
Subsequent event (Note 15)		

Signed "George Liszicasz"
Director

Signed "Bruce G. Wilcox"
Director

The accompanying notes are an integral part of these consolidated financial statements.

NXT ENERGY SOLUTIONS INC.

Consolidated Statements of Income (Loss) and Comprehensive Income (Loss)

(Expressed in Canadian dollars)

For the Year ended December 31

	2021	2020	2019
		Adjusted - Note 2	Adjusted - Note 2
Revenue			
SFD® related revenue (Note 22)	\$ 3,134,250	\$ 136,566	\$ 11,976,149
Expenses			
SFD® related costs, net (Note 23)	1,224,168	1,111,070	2,653,055
General and administrative expenses (Note 18, 24 & 25)	3,189,857	3,341,010	3,541,594
Amortization (Notes 7,9)	1,776,484	1,780,806	1,781,181
	6,190,509	6,232,886	7,975,830
Other expenses (income)			
Interest (income) expense, net	37,955	(14,062)	(28,959)
Foreign exchange loss (gain)	8,597	(64,432)	177,736
Intellectual property and other	20,988	10,402	56,833
	67,540	(68,092)	205,610
Income (loss) before income taxes	(3,123,799)	(6,028,228)	3,794,709
Income tax expense (Note 19)	-	-	-
Net income (loss) and comprehensive income (loss)	\$ (3,123,799)	\$ (6,028,228)	\$ 3,794,709
 Net income (loss) per share (Note 17)			
Basic	\$ (0.05)	\$ (0.09)	\$ 0.06
Diluted	\$ (0.05)	\$ (0.09)	\$ 0.06

The accompanying notes are an integral part of these consolidated financial statements.

NXT ENERGY SOLUTIONS INC.

Consolidated Statements of Cash Flows

(Expressed in Canadian dollars)

For the Year ended December 31

	2021	2020	2019
		Adjusted - Note 2	Adjusted - Note 2
Cash from (used in):			
Operating activities			
Net income (loss)	\$ (3,123,799)	\$ (6,028,228)	\$ 3,794,709
Items not affecting cash:			
Stock based compensation expense (Note 18)	287,900	168,416	43,809
Amortization	1,776,484	1,780,806	1,781,181
Accretion expense (recovery) (Note 14)	(404)	2,069	2,068
Non-cash lease costs	(11,736)	(11,736)	(11,736)
Change in carrying amount of right of use assets & lease liabilities	24,508	21,470	(2,095)
Unrealized foreign exchange (gain) loss	157	35,143	64,226
Change in non-cash working capital balances (Note 21)	13,717	625,768	(1,464,695)
ARO liabilities settled (Note 14)	-	(809)	(7,366)
	<u>2,090,626</u>	<u>2,621,127</u>	<u>405,392</u>
Net cash from (used in) operating activities	<u>(1,033,173)</u>	<u>(3,407,101)</u>	<u>4,200,101</u>
Financing activities			
Proceeds from the Employee Share Purchase plan	69,259	7,592	-
Proceeds from long-term debt (Note 12)	1,000,000	-	-
Shares purchased and retired (Note 16)	-	-	(1,343,184)
Share issuance costs (Note 16)	(42,697)	-	-
Repayment of financial liability and lease obligation (Note 13 and 15)	(151,134)	(181,208)	(159,906)
Net cash from (used in) financing activities	<u>875,428</u>	<u>(173,616)</u>	<u>(1,503,090)</u>
Investing activities			
Acquisition of intellectual property (Note 9)	(65,310)	-	-
Purchase of property and equipment, net	-	-	(216,691)
Proceeds from (used in) short-term investments	(208,739)	3,436,691	75,939
Net cash from (used in) investing activities	<u>(274,049)</u>	<u>3,436,691</u>	<u>(140,752)</u>
Effect of foreign exchange rate changes on cash and cash equivalents	<u>(497)</u>	<u>(24,073)</u>	<u>(37,546)</u>
Net increase (decrease) in cash and cash equivalents	(432,291)	(168,099)	2,518,713
Cash and cash equivalents, beginning of the year	2,690,146	2,858,245	339,532
Cash and cash equivalents, end of the year	<u>\$ 2,257,855</u>	<u>2,690,146</u>	<u>\$ 2,858,245</u>
Supplemental information			
Cash interest paid (received)	14,284	(21,422)	(16,724)
Cash taxes paid	-	-	-

The accompanying notes are an integral part of these consolidated financial statements.

NXT ENERGY SOLUTIONS INC.

Consolidated Statements of Shareholders' Equity

(Expressed in Canadian dollars)

For the Year ended December 31

	2021	2020	2019
		Adjusted - Note 2	Adjusted - Note 2
Common Shares			
Balance at beginning of the year	\$ 95,327,123	\$ 95,313,064	\$ 96,656,248
Shares purchased and retired during the year (Note 16)	-	-	(1,343,184)
Issuance of common stock on Employee Share Purchase Plan (Note 16)	173,023	14,059	-
Issuance of common stock on Restricted Stock Unit Plan (Note 16)	114,604	-	-
Issuance of common stock on acquisition of SFD [®] Geothermal Right, net of share issuance costs (Note 16)	164,602	-	-
Balance at end of the year	<u>95,779,352</u>	<u>95,327,123</u>	<u>95,313,064</u>
Contributed Capital			
Balance at beginning of the year	9,355,716	9,306,493	9,262,684
Issuance of Equity for intellectual property (Note 16)	207,300	-	-
Transfer of equity to common shares (Note 16)	(207,300)	-	-
Recognition of stock based compensation expense (Note 18)	26,250	49,223	43,809
Balance at end of the year	<u>9,381,966</u>	<u>9,355,716</u>	<u>9,306,493</u>
Deficit			
Balance at beginning of the year	(83,878,714)	(77,850,486)	(81,645,195)
Net (loss) income	(3,123,799)	(6,028,228)	3,794,709
Balance at end of the year	<u>(87,002,513)</u>	<u>(83,878,714)</u>	<u>(77,850,486)</u>
Total Shareholders' Equity at end of the year	<u>\$ 18,158,805</u>	<u>\$ 20,804,125</u>	<u>\$ 26,769,071</u>

The accompanying notes are an integral part of these consolidated financial statements.

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

1. The Company and going concern

NXT Energy Solutions Inc. (the "Company" or "NXT") is a publicly traded company based in Calgary, Alberta Canada.

NXT's proprietary Stress Field Detection ("SFD®") technology is an airborne survey system that 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 in both the hydrocarbon and geothermal industries.

These consolidated financial statements of NXT have been prepared by management in accordance with generally accepted accounting principles of the United States of America ("US GAAP").

These consolidated financial statements reflect adjustments, all of which are normal recurring adjustments that are, in the opinion of management, necessary to reflect fairly the financial position and results of operations for the respective periods.

These consolidated 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 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 has plans in place to reduce operating costs including payroll and other general and administrative costs and is evaluating alternatives to reduce other costs. If required, further financing options that may or may not be available to the Company include issuance of new equity, debentures or bank credit facilities. The need for any of these options will be dependent on the timing of securing new SFD® related revenues and obtaining financing on terms that are acceptable to both the Company and the financier.

NXT continues to develop its pipeline of opportunities to secure new revenue contracts. However, the Company's longer-term success remains dependent upon its ability to convert these opportunities into successful contracts, to continue to attract new client projects, 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 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 these 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 ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

Covid-19 Pandemic

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

The situation 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.

Use of Estimates and Judgements

In preparing these 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, these 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 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.

Critical accounting estimates relate primarily to the use of the going concern assumption, estimated useful lives and the valuation of intellectual property, property and equipment and the measurement of stock-based compensation expense.

2. Significant Accounting Policies

Basis of Presentation

These consolidated financial statements for the period ended December 31, 2021 have been prepared by management in accordance with US GAAP.

Consolidation

These consolidated financial statements reflect the accounts of the Company and its wholly owned subsidiaries (all of which are inactive). All significant inter-company balances and transactions among NXT

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

and its subsidiaries have been eliminated and are therefore not reflected in these consolidated financial statements.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash on hand and short term Guaranteed Investment Certificates (“GIC’s”) with an original maturity less than 90 days from the date of acquisition.

Short Term Investments

Short term investments consist of short term GICs, with original maturity dates greater than 90 days and up to one year.

Derivative Instruments

Derivative instruments are recognized on the balance sheet at fair value with any changes in fair value between periods recognized in the determination of net income (loss) for the period. NXT does not apply hedge accounting to any of its derivatives. As at December 31, 2021 and 2020, NXT had no outstanding derivative instruments.

Fair Value Measures

For any balance sheet items recorded at fair value on a recurring basis or non-recurring basis, the Company is required to classify the fair value measure into one of three categories based on the fair value hierarchy noted below.

In Level I, the fair value of assets and liabilities is determined by reference to quoted prices in active markets for identical assets and liabilities that the Company has the ability to assess at the measurement date.

At December 31, 2021, the fair value of the restricted stock units (“RSU”) liability based on share price was determined using Level I inputs.

In Level II, determination of the fair value of assets and liabilities is based on the extrapolation of inputs, other than quoted prices included within Level I, for which all significant inputs are observable directly or indirectly. Such inputs include published exchange rates, interest rates, yield curves and stock quotes from external data service providers. Transfers between Level I and Level II would occur when there is a change in market circumstances.

In Level III, the fair value of assets and liabilities measured on a recurring basis is determined using a market approach based on inputs that are unobservable and significant to the overall fair value measurement. Assets and liabilities measured at fair value can fluctuate between Level II and Level III depending on the proportion of the value of the contract that extends beyond the time frame for which inputs are considered to be observable. As contracts near maturity and observable market data becomes available, the contracts are transferred out of Level III and into Level II.

The determination of the fair value of the acquisition of the Intellectual property (Note 9) was determined using Level III inputs.

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

Measurement of credit losses on financial instruments

The impairment model of financial instruments is based on expected losses rather than incurred losses. In making the assessment of expected losses, the Company considers the following factors: historically realized bad debts; a counterparty's present financial condition and whether a counterparty has breached certain contracts; the probability that a counterparty will enter bankruptcy; changes in economic conditions that correlate to increased levels of default and term to maturity of the specific receivable. These expected credit losses are recognized as an allowance rather than as a direct write-down of the amortized cost basis.

Deposits

Deposits consist of security payments made to lessors for the Company's office and aircraft lease. They are classified as long term if the lease end date is greater than one year.

Property and Equipment

Property and equipment is recorded at cost, less accumulated amortization, which is recorded over the estimated service lives of the assets using the following annual rates and methods:

Computer hardware (including survey equipment)	30% declining balance
Aircraft equipment	10% declining balance
Furniture and other equipment	20% declining balance
Leasehold improvements	10% declining balance

Intellectual Property

Intellectual property acquired is recorded at cost, less accumulated amortization, which is recorded over the estimated minimum useful life of the assets. The Company incurs periodic costs that are expensed when incurred to file patents and to maintain them.

Impairment of Long-Lived Assets

The Company reviews long-lived assets, which includes property, equipment and 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, and with respect to intellectual property, the Company's assessment includes 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 asset.

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

Research and Development Expenditure

Research and development ("R&D") expenditures incurred to develop, improve and test the SFD® survey system and related components are expensed as incurred. Any intellectual property that is acquired for the purpose of enhancing research and development projects, if there is no alternative use for the intellectual property, is expensed in the period acquired. No significant external R&D was incurred in the years ended 2021, 2020 and 2019.

Foreign Currency Translation

The Company's functional currency is the Canadian dollar. Revenues and expenses denominated in foreign currencies are translated into Canadian dollars at the average exchange rate for the applicable period. Monetary assets and liabilities are translated into Canadian dollars at the exchange rate in effect at the end of the applicable period. Non-monetary assets and liabilities are recorded at the relevant exchange rates for the period in which the balances arose. Any related foreign exchange gains and losses resulting from these translations are included in the determination of net income (loss) for the period.

Income Taxes

NXT follows the asset and liability method of accounting for income taxes. This method recognizes deferred income tax assets and liabilities based on temporary differences in reported amounts for financial statement and income tax purposes, at the income tax rates expected to apply in the future periods when the temporary differences are expected to be reversed or realized. The effect of a change in income tax rates on deferred income tax assets and deferred income tax liabilities is recognized in income in the period when the tax rate change is enacted. Valuation allowances are provided when necessary to reduce deferred tax assets to the amount that is more likely than not to be realized.

Stock Based Compensation

NXT follows the fair value method of accounting for stock options, restricted stock units, deferred stock units, and the employee share purchase plan (the "Share Compensation Plans") that are granted to acquire common shares under NXT's Share Compensation Plans. For equity-settled stock-based compensation awards, fair values are determined at the grant date and the expense, net of estimated forfeitures, is recognized over the requisite service period with a corresponding increase recorded in contributed capital. An adjustment is made to compensation for any differences between the estimated forfeitures and the actual forfeitures. For cash-settled stock-based compensation awards, fair values, based on observable prices, are determined at each reporting date and periodic changes are recognized as compensation costs, with a corresponding change to liabilities.

Upon exercise or realization of the equity-settled Share Compensation Plans, the consideration received by NXT, and the related amount which previously recorded in contributed capital, is recognized as an increase in the recorded value of the common shares of the Company.

Net Income (Loss) Per Share

Basic income (loss) per share amounts are calculated by dividing net income (loss) by the weighted average number of common shares that are outstanding for the fiscal period. Shares issued during the

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

period are weighted for the portion of the period that the shares were outstanding. Diluted income per share, in periods when NXT has net income, is computed using the treasury stock method, whereby the weighted average number of shares outstanding is increased to include any additional shares that would be issued from the assumed exercise of stock options and restricted stock units. The incremental number of shares added under the treasury stock method assumes that outstanding stock options and restricted stock units that are exercisable at exercise prices below the Company's average market price (i.e. they were "in-the-money") for the applicable fiscal period are exercised and then that number of incremental shares is reduced by the number of shares that could have been repurchased by the Company from the issuance proceeds, using the average market price of the Company's shares for the applicable fiscal period.

No addition to the basic number of shares is made when calculating the diluted number of shares if the diluted per share amounts become anti-dilutive (such as occurs in the case where there is a net loss for the period).

Revenue

SFD® Surveys

The performance obligation for NXT in SFD® surveys is the acquisition, processing, interpretation and integration of Stress Field Detection (SFD®) data. Revenue from the sale of SFD® survey contracts (excluding any related foreign value added taxes) is recognized over time by measuring the progress toward satisfaction of its performance obligation to the customer. All funds received or invoiced in advance of recognition of revenue are reflected as contract obligations and classified as a current liability on our balance sheet.

The Company uses direct survey costs as the input measure to recognize revenue in any fiscal period. The percentage of direct survey costs incurred to date over the total expected survey costs to be incurred, provides an appropriate measure of the stage of the performance obligation being satisfied over time.

SFD® Data Sales

The performance obligation for NXT in SFD® data sales is the delivery of the promised specific services as itemized in the contract with the customer. Revenue from the sale of SFD® data sale (excluding any related foreign value added taxes) is recognized once the services are completed and the data is transferred to the customer.

Leases

The Company determines if an arrangement is an operating or finance lease, as defined under U.S. GAAP, at inception. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. These leases are included in right-of-use ("ROU") assets and lease obligations in the Consolidated Balance Sheet.

ROU assets represent the Company's right to use an underlying asset for the lease term and lease obligations represent the obligation to make lease payments arising from such leases. Lease obligations

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

are recognized at the lease commencement date based on the present value of remaining lease payments over the lease term, taking into consideration conditions such as incentives and termination penalties, as appropriate. A corresponding ROU asset is recognized at the amount of the lease obligation, adjusted for payments made prior to lease commencement or initial direct costs, if any.

When calculating the present value, the Company uses the rate implicit in the lease, or uses its incremental borrowing rate for a similar term and risk profile based on the information available at the commencement date. The Company's lease terms may have options to extend or terminate the lease which are included in the calculation of lease obligations when it is reasonably certain that it will exercise those options. Lease expense for operating leases is recognized on a straight-line basis over the lease term. Office and equipment lease expenses are included within General and administrative expenses; the aircraft lease cost is included within SFD® related costs.

Lease agreements can contain both lease and non-lease components, which are accounted for separately.

During 2021 the Company determined that the amounts previously recorded for the Aircraft lease were calculated incorrectly and the United States Dollar denominated lease liability had not been re-measured to Canadian Dollars each reporting period as required. The result of these corrections are to reduce the value of both the Right of use assets and Lease obligations, with changes to related income statement. The Company has determined that the effect of these adjustments are not material. The Company has recorded the adjustments in the related accounts in the comparative periods in these financial statements. On the balance sheet and income statement, the specific accounts affected are Deposits, Right of use assets, Current portion of lease obligations, Long-term lease obligations, Deficit, SFD® related costs, Interest income (expense), and Foreign exchange loss (gain). The loss per share in each of the comparative periods did not change as a result of these immaterial corrections. The tables below highlight the changes to each account in each of the comparative periods.

	December 31, 2020		
Balance Sheet	As previously reported	Adjustments	Adjusted
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

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

Income Statement	For the year ended December 31, 2020		
	As previously reported	Adjustments	Adjusted
SFD® related costs	\$ 1,091,587	\$ 19,483	\$ 1,111,070
Interest (income) expense	(11,535)	(2,527)	(14,062)
Foreign exchange loss (gain)	(76,029)	11,597	(64,432)
Net loss	(5,999,675)	(28,553)	(6,028,228)
Income Statement	For the year ended December 31, 2019		
	As previously reported	Adjustments	Adjusted
SFD® related costs	\$ 2,611,086	\$ 41,969	\$ 2,653,055
Interest (income) expense	(20,684)	(8,275)	(28,959)
Foreign exchange loss (gain)	233,231	(55,495)	177,736
Net income	3,772,908	21,801	3,794,709
Deficit	77,934,555	(84,069)	77,850,486

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. The disclosures in notes 5, 6, 8, 13, 17, 19 and 23 have also been revised.

Consolidated Statement of Cash Flows

In the preparation of the annual financial statements as at and for the year ended December 31, 2021, the Company has determined that certain amounts previously recorded in the 2019 and 2020 consolidated statements of cash flows were not correctly calculated to properly reflect payments on the financial liability, lease obligation payments and accretion, and application of exchange rates to calculate unrealized foreign exchange (gain) loss including the effect of foreign exchange on changes on cash and cash equivalents. The adjustments to correct the respective financial statement line items are not material and did not change the Cash, SFD® related revenues, or Net income (loss) accounts or basic and diluted loss per share. The Company has recorded the adjustments in the related line items in each of the comparative periods. Line items affected on the Consolidated Statement of Cash Flows by the adjustment are: Non-cash lease costs, Change in the carrying amount of right of use assets and lease liabilities, unrealized foreign exchange (gain) loss, Repayment of financial liability and finance lease obligations, Proceeds from (used in) short-term investments, and Effect of foreign exchange rate changes on cash and cash equivalents. The tables below highlight the changes to each line item in each of the comparative periods.

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

Consolidated Statements of cash flows	For the year ended December 31, 2020		
	As previously reported	Adjustments	Adjusted
Net loss (see Note 2 "Leases")	\$ (5,999,675)	\$ (28,553)	\$ (6,028,228)
Non-cash lease costs	(171,300)	159,564	(11,736)
Change in carrying amount of right of use assets & lease liabilities	-	21,470	21,470
Unrealized foreign exchange (gain) loss	141,799	(106,656)	35,143
Operating activities	(3,452,925)	45,824	(3,407,101)
Repayment of financial liability	(42,515)	(138,693)	(181,208)
Financing activities	(34,923)	(138,693)	(173,616)
Effect of foreign exchange rate changes on cash and cash equivalents	(116,941)	92,868	(24,073)
Net increase (decrease) in cash and cash equivalents	(168,099)	-	(168,099)

Consolidated statements of cash flows	For the year ended December 31, 2019		
	As previously reported	Adjustments	Adjusted
Net income (see Note 2 "Leases")	\$ 3,772,908	\$ 21,801	\$ 3,794,709
Non-cash lease costs	(171,056)	159,320	(11,736)
Change in carrying amount of right of use assets & lease liabilities	-	(2,095)	(2,095)
Unrealized foreign exchange (gain) loss	95,557	(31,331)	64,226
Operating activities	4,052,406	147,695	4,200,101
Repayment of financial liability and finance lease obligations	(42,603)	(117,303)	(159,906)
Financing activities	(1,385,787)	(117,303)	(1,503,090)
Proceeds from (used in) short-term investments	42,764	33,175	75,939
Investing activities	(173,927)	33,175	(140,752)
Effect of foreign exchange rate changes on cash and cash equivalents	26,021	(63,567)	(37,546)
Net increase (decrease) in cash and cash equivalents	2,518,713	-	2,518,713

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

Government grants

Government grants are recognized when there is reasonable assurance that the grant will be received, and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as an expense reduction in the period in which the costs are incurred. Where the grant relates to an asset, it is recognized as a reduction to the net book value of the related asset and then subsequently in net loss over the expected useful life of the related asset through lower charges to amortization and impairment.

3. Short-term investments

As at December 31, 2021 and 2020 all GIC's had less than one year left before maturity. For December 31, 2021, interest rates ranged from 0.85% to 0.87%. (2020: 0.50% to 1.75%.)

	December 31, 2021	December 31, 2020
Days to maturity		
Less than 90 days	\$ -	\$ 191,261
90 days to one year	550,000	150,000
	550,000	341,261

4. Accounts Receivable

Accounts receivable are all current as at December 31, 2021. US\$200,000 (CDN\$246,922) of outstanding trade receivables was received in February 2022.

	December 31, 2021	December 31, 2020
Trade receivables	\$806,460	\$804,059
Other receivables	35,107	161,489
	841,567	965,548
Allowance for doubtful accounts	-	-
Net accounts receivable	841,567	965,548

The entire trade receivable was with one client as at December 31, 2021 and 2020.

5. Prepaid expenses and deposits

Security deposits have been made to the lessors of the office building and the aircraft. The aircraft deposit is denominated in United States Dollars and the amount of US\$150,000 (CDN\$191,166) is expected to be returned to the Company in the second quarter of 2022. (See Note 15).

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

	December 31, 2021	December 31, 2020
		(Adjusted – Note 2)
Prepaid expenses	\$ 74,270	\$ 77,532
Aircraft deposit	191,166	-
	265,436	77,532

6. Deposits

Security deposits have been made to the lessors of the office building and the aircraft. The aircraft deposit is denominated in United States Dollars.

	December 31, 2021	December 31, 2020
		(Adjusted – Note 2)
Building	\$ 43,309	\$ 43,309
Aircraft	191,166	382,521
	234,475	425,830

7. Property and equipment

	December 31, 2021		
	Cost Base	Accumulated Amortization	Net book value
Survey equipment	\$892,637	\$701,911	\$190,726
Computers and software	1,265,045	1,242,504	22,541
Furniture and other equipment	528,419	516,084	12,335
Leasehold improvements	1,084,573	685,412	399,161
	3,770,674	3,145,911	624,763

	December 31, 2020		
	Cost Base	Accumulated Amortization	Net book value
Survey equipment	\$892,637	\$676,442	\$216,195
Computers and software	1,265,045	1,232,844	32,201
Furniture and other equipment	528,419	513,001	15,418
Leasehold improvements	1,084,573	641,061	443,512
	3,770,674	3,063,348	707,326

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

8. Right of use assets

	December 31, 2021		
	Cost Base	Accumulated Amortization	Right of Use
Aircraft	\$1,870,808	\$1,073,365	\$797,443
Office Building	1,805,447	664,372	1,141,075
Printer	17,794	13,060	4,734
	3,694,049	1,750,797	1,943,252

	December 31, 2020		
	Cost Base	Accumulated Amortization	Right of Use
Aircraft	\$1,256,787	\$658,562	\$ 598,225
Office Building	1,799,626	415,559	1,384,067
Printer	17,794	8,314	9,480
	3,074,207	1,082,435	1,991,772

In the fourth quarter of 2021, the Company determined it was reasonably certain it would extend term of its Aircraft Leasing Agreement effective in the second quarter of 2022 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. The incremental borrowing rate is 11.2%. The Company recognized an additional \$615,737 Aircraft ROU assets and US\$481,797 (\$615,737) additional Lease obligations. Should NXT want to repurchase the aircraft at the end of the extended term, the purchase price will be US\$1.21 million.

9. Intellectual property

Acquisition of SFD® Geothermal Right

The Company acquired the SFD® technology rights for geothermal resources (“Geothermal Right”) from Mr. George Liszicasz, President and CEO of NXT (“CEO”) on April 18, 2021. The consideration deliverable by the Company in connection with the acquisition of the Geothermal Right is set forth below:

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 were issued in December 2021;
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 specifically defined funds from operations; and
5. US\$250,000 milestone payment which will become due in the event that the Company executes and completes and receives full payment for an SFD® contract valued at US\$10,000,000 or

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

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, 2021 the Company has recognized \$275,610 for the acquisition Geothermal Right which is the combination of the US\$40,000 (CAD\$50,310) and CAD\$15,000 signature payments, the value of the 300,000 common shares of \$207,300 and other costs of \$3,000. Before the 300,000 common shares were issued by the Company, the value of the common shares was recorded as Contributed capital. Upon TSX approval, the amount recognized of \$207,300 less issuance costs of \$42,697 were reclassified to common shares. 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 of Directors, comprised entirely of independent directors. The Board of Directors delegated authority to the special committee to determine when the milestones have been achieved.

The current book value of 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 5 year aggregate total of approximately \$68,902.

SFD® Hydrocarbon Right

During 2015, NXT acquired the rights to the SFD® technology for use in the exploration of hydrocarbons (“Hydrocarbon Right”) from the CEO, and recorded the acquisition as an intellectual property asset on the balance sheet. The asset was recorded at the fair value of the consideration transferred, including the related tax effect of approximately \$25.3 million.

The Hydrocarbon Right is being amortized on a straight line basis over its estimated useful life of 15 years. The annual amortization expense expected to be recognized is approximately \$1.7 million per year for a 5 year aggregate total of \$8.5 million.

	December 31, 2021		
	Cost Base	Accumulated amortization	Net book Value
SFD® Hydrocarbon Right acquired	\$ 25,271,000	\$10,670,400	\$14,600,600
SFD® Geothermal Right acquired	275,610	9,187	266,423
	25,546,610	10,679,587	14,867,023

	December 31, 2020		
	Cost Base	Accumulated amortization	Net book Value
SFD® Hydrocarbon Right acquired	\$ 25,271,000	\$8,985,667	\$16,285,333
	25,271,000	8,985,667	16,285,333

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

10. Accounts payable and accrued liabilities

	December 31, 2021	December 31, 2020
Accrued liabilities related to:		
Consultants and professional fees	\$ 203,732	\$ 183,920
Payroll	79,544	120,318
Expenses owed to an executive officer (Note 26)	11,467	-
Vacation Accrued	102,536	71,699
	397,279	375,937
Trade payables and other	103,346	64,600
	500,625	440,537

11. Contract Obligations

In December, 2020, the Company received a deposit of US\$100,000 to sell pre-existing SFD® data. The SFD® data was delivered to the customer in the second quarter of 2021.

	December 31, 2021	December 31, 2020
Contract obligations	\$ -	\$ 127,507

12. Long-term debt

On May 26, 2021, the Company received \$1,000,000 from the Business Development Bank of Canada's ("BDC") Highly Affected Sectors Credit Availability Program ("HASCAP Loan"), funded by the Royal Bank of Canada. 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.

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

Maturity of long-term debt:	
2022	104,167
2023	146,481
2024	142,037
2025	137,593
2026	133,148
2027 to 2031	534,907
Total principal and interest payments	1,198,333
Less interest	(198,333)
Total principal remaining	1,000,000
Current portion of long-term debt	64,815
Non-current portion of long-term debt	935,185

13. Lease obligation

	December 31, 2021	December 31, 2020
		(Adjusted – Note 2)
Aircraft	\$ 712,762	\$ 640,550
Office Building	1,185,356	1,440,056
Printer	4,486	9,232
	1,902,604	2,089,838
Current portion of lease obligations	532,936	687,991
Long-term lease obligations	1,369,668	1,401,847

Maturity of lease liabilities:		Weighted Average Remaining Lease Term
2022	\$702,215	3.4 years
2023	711,284	2.3 years
2024	481,885	1.5 years
2025	275,389	0.8 years
Total lease payments	2,170,773	
Less imputed interest	(268,169)	
Total discounted lease payments	1,902,604	
Current portion of lease obligations	532,936	
Non-current portion of lease obligations	1,369,668	

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

	Lease Term	Option to Extend	Incremental Borrowing Rate
Aircraft	April 2024	Executed	11.2%
Office Building	September 2025	No	8.2%
Printer	November 2022	No	8.9%

The Company's total lease expenditures for the year ended December 31, 2021 was \$1,198,211 (2020 - \$1,262,109).

14. Asset Retirement Obligations

Asset retirement obligations ("ARO") relate to minor non-operated interests in oil and natural gas wells in which NXT has outstanding abandonment and reclamation obligations in accordance with government regulations. The estimated future abandonment liability is based on estimates of the future timing and costs to abandon, remediate and reclaim the well sites within the next five years. The net present value of the ARO is as noted below, and has been calculated using an inflation rate of 3.4% and discounted using a credit-adjusted risk-free interest rate of 10%.

	2021	2020	2019
ARO balance, beginning of the year	\$ 22,741	\$ 21,481	\$ 26,779
Accretion expense	2,069	2,069	2,068
Change in ARO estimates	(2,473)	-	-
Costs incurred	-	(809)	(7,366)
ARO balance, end of the year	22,337	22,741	21,481

15. Commitments

The table below is the non-lease operating cost components associated with the costs of the building lease.

For the fiscal year ending December 31,	Office Premises
2022	\$ 239,988
2023	239,988
2024	239,988
2025	179,991
	899,955

On March 15, 2022, the Company surrendered 828 square feet of its office building lease to the landlord. As a result its non-lease operating cost commitments for the building lease will reduced by approximately \$13,881 for 2022, 17,537 for 2023 and 2024, and \$13,150 for 2025. The Company incurred a surrender fee of \$14,000 which will be expensed in the first quarter of 2022. The Company will derecognize the following amounts on its balance sheet at the surrender date:

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

Right of Use Assets	\$ 77,043
Lease obligations	80,081

In April 2017, NXT completed a sale and leaseback agreement of its aircraft with a Calgary based international aircraft services organization (the “Lessor”). The terms of the agreement resulted in NXT selling its Cessna Citation aircraft that was purchased in 2015 for US\$2.0 million, for the sum of US\$2.3 million. NXT has leased the aircraft over an initial term of 60 months and retains all existing operating rights and obligations. Proceeds to NXT from the sale were approximately \$3.14 million. The net book value of the asset of \$2.37 million was derecognized and the resulting gain on disposition of \$0.77 million was deferred. The aircraft is recognized on the balance sheet as a right of use asset with a corresponding lease obligation liability. The deferred gain on disposition is considered a financial liability that is being reduced as aircraft lease payments are made. The balance of the financial liability is included in the aircraft lease obligation in Note 13.

16. Common shares

The Company is authorized to issue an unlimited number of common shares, of which the following are issued and outstanding:

	December 31, 2021		For the years ended December 31, 2020	
	# of shares	\$ amount	# of shares	\$ amount
As at the beginning of the year	64,437,790	\$95,327,123	64,406,891	\$95,313,064
Issuance for Employee Share Purchase Plan	304,550	173,023	30,899	14,059
Issuance for Restricted Stock Units	208,370	114,604	-	-
Issuance for SFD® Geothermal Right (Note 9)	300,000	164,602	-	-
As at the end of the year	65,250,710	95,779,352	64,437,790	95,327,123

	For the Year Ended December 31, 2019	
	# of shares	\$ amount
As at the beginning of the year	68,573,558	\$96,656,248
Shares retired during the year	(4,166,667)	(1,343,184)
As at the end of the year	64,406,891	95,313,064

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

In December 2021, the TSX approved the issuance of 300,000 common shares for the SFD® Geothermal Right for a value of \$207,300 less issuance costs of \$42,697 (Note 9). Before the approval of the TSX, the Company recorded the value of the common share consideration in Contributed capital.

In 2019, the Company purchased 4,166,667 common shares in the capital of the Company at a price of \$0.30 per common share for total gross costs of \$1.25 million plus related costs of \$93,184 through a targeted issuer bid. The 4,166,667 shares were cancelled immediately after they were purchased.

17. Earnings (Loss) per share

	For the years ended December 31,		
	2021	2020	2019
		(Adjusted – Note 2)	(Adjusted – Note 2)
Net income (loss) for the year	\$(3,123,799)	\$(6,028,228)	\$3,794,709
Weighted average number of shares outstanding for the year:			
Basic	64,658,380	64,409,170	68,156,059
Diluted	64,658,380	64,409,170	68,156,059
Net Income (loss) per share – Basic	\$(0.05)	\$(0.09)	\$0.06
Net Income (loss) per share – Diluted	\$(0.05)	\$(0.09)	\$0.06

During 2019 all stock options were out of the money and are not included in the diluted weighted average number of shares.

18. Share based compensation

The Company has an equity compensation program in place for its executives, employees and directors. Executives and employees are given equity compensation grants that vest based on a recipient's continued employment. The Company's stock-based compensation awards outstanding as at December 31, 2021, include stock options, RSUs, deferred share units ("DSUs") and the ESP Plan. The following tables provide information about stock option, RSU, DSU, and ESP Plan activity.

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

For the years ended December 31,

	2021	2020	2019
Stock Option Expense	\$ 26,250	\$ 34,223	\$ 43,809
Deferred Share Units	-	15,000	-
Restricted Stock Units	154,715	111,060	-
Employee Share Purchase Plan	106,935	8,133	-
Total stock based compensation expense	287,900	168,416	43,809

Stock Options:

The following is a summary of stock options which are outstanding as at December 31, 2021

Exercise price per share	# of options outstanding	# of options exercisable	Average remaining life (in years)
\$0.44	21,360	21,360	4.5
\$0.49	8,500	8,500	4.2
\$0.51	16,000	16,000	3.7
\$0.52	100,000	100,000	2.5
\$0.55	30,000	30,000	3.1
\$0.59	150,000	150,000	1.8
\$0.62	18,050	18,050	5.0
\$0.68	14,750	14,750	4.7
	358,660	358,660	2.7

A continuity of the number of stock options which are outstanding at the end of the current year and as at the prior fiscal year ended December 31, 2020 and 2019 is as follows:

	For the year ended December 31, 2021		For the year ended December 31, 2020	
	# of stock options	weighted average exercise price	# of stock options	Weighted Average exercise price
Options outstanding, start of the year	421,000	\$0.83	1,169,500	\$1.48
Granted	62,660	\$0.56	46,000	\$0.54
Expired	(125,000)	\$(1.48)	(794,500)	\$(1.77)
Forfeited	-	-	-	-
Options outstanding, end of the year	358,660	\$0.56	421,000	\$0.83
Options exercisable, end of the year	358,660	\$0.56	421,000	\$0.83

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

	For the year ended December 31, 2019	
	# of stock options	weighted average exercise price
Options outstanding, start of the year	1,297,000	\$1.58
Granted	100,000	\$0.52
Expired	(47,500)	\$(1.51)
Forfeited	(180,000)	\$(1.70)
Options outstanding, end of the year	1,169,500	\$1.48
Options exercisable, end of the year	1,119,000	\$1.52

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.

Stock based compensation expense ("SBCE") is calculated based on the fair value attributed to grants of stock options using the Black-Scholes valuation model and utilizing the following weighted average assumptions:

For the year ended	2021	2020	2019
Expected dividends paid per common share	Nil	Nil	Nil
Expected life in years	5.0	5.0	5.0
Weighted average expected volatility in the price of common shares	108%	138%	65%
Weighted average risk free interest rate	0.38%	1.12%	1.68%
Weighted average fair market value per share at grant date	\$0.56	\$0.54	\$0.52
Intrinsic (or "in-the-money") value per share of options exercised	\$ -	\$ -	\$ -

Deferred Stock Units ("DSUs"):

A continuity of the number of DSUs which are outstanding at the end of the current year and as at the prior fiscal year ended December 31, 2020 are as follows:

	For the years ended	
Opening balance	2021	2020
DSUs outstanding, start of the year	37,354	-
Granted	-	37,354
Closing balance	37,354	37,354

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

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

Restricted Stock Units (“RSUs”):

The Company’s first grant of RSUs began in 2020. 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.

A continuity of the number of RSUs, including fair value (“FV”) which are outstanding at the end of the current period and as the end of the prior fiscal year ended December 31, 2020 is as follows:

	December 31, 2021		For the years ended, December 31, 2020	
	# of RSUs	FV/Unit	# of RSUs	FV/Unit
RSUs outstanding, start of the year	1,200,000	\$0.79	-	-
Granted	-	-	1,200,000	\$0.45
Common shares issued	(208,370)	(\$0.55)	-	-
Payroll withholdings settled in cash	(139,964)	(\$0.55)	-	-
Forfeited	(155,000)	(\$0.79)	-	-
RSUs outstanding, end of the year	696,666	\$0.61	1,200,000	\$0.79

Employee Share Purchase Plan (“ESP Plan”):

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 (the “TSX”). During 2021 and 2020 the Company has elected to issue common shares from treasury.

A continuity of the number of commons shares under the ESP Plan which are outstanding at the end of the current year and as at the prior fiscal year ended December 31, 2020 is as follows:

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

	December 31, 2021		For the years ended, December 31, 2020	
	# of shares	\$ amount	# of shares	\$ amount
Purchased by employees	127,790	\$ 69,260	16,686	\$ 7,592
Matched by the Company	102,641	55,733	14,213	6,467
Bonus match by the Company	74,119	48,030	-	-
Total Common Shares issued	304,550	173,023	30,899	14,059

If the employee does not withdraw common shares from the ESP Plan in the first year of their participation, the Company will match an additional 100% of the employee contributions, up to \$15,000 per employee (the "Bonus Match"). The Company matched employee contributions for a total of \$52,867, less any payroll withholdings in the fourth quarter of 2021. As at December 31, 2021 the Company has accrued \$nil for the Bonus Match (\$1,666 as at December 31, 2020).

19. Income Tax Expense

NXT periodically earns revenues while operating outside of Canada in foreign jurisdictions. Payments made to NXT for services rendered to clients and branch offices in certain countries may be subject to foreign income and withholding taxes. Such taxes incurred are only recoverable in certain limited circumstances, including potential utilization in Canada as a foreign tax credit, or against future taxable earnings from the foreign jurisdictions.

Income tax expense is different from the expected amount that would be computed by applying the statutory Canadian federal and provincial income tax rates to NXT's income (loss) before income taxes as follows:

	For the years ended December 31,		
	2021	2020	2019
		(Adjusted – Note 2)	(Adjusted – Note 2)
Net loss before income taxes	\$(3,123,799)	\$(6,028,228)	\$3,794,709
Canadian statutory income tax rate	23.0%	24.0 %	26.5 %
Income tax (recovery) at statutory income tax rate	(718,474)	(1,446,775)	1,005,598
Effect of non- deductible expenses and other items:			
Stock-based compensation and other expenses	67,948	44,225	11,609
Change in statutory tax rates	(92,850)	(131,242)	918,821
Foreign exchange adjustments	662	29,910	82,433
Other (Expired losses)	1,206,056	258,091	43,592
Change in valuation allowance	463,342	(1,245,791)	2,062,053
Income tax expense (recovery)	(463,342)	1,245,791	(2,062,053)

Effective July 1, 2020, the Province of Alberta decreased its corporate tax rate from 10% to 8%.

A valuation allowance has been provided for the Company's deferred income tax assets due to uncertainty regarding the amount and timing of their potential future utilization, as follows:

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

	For the years ended December 31,		
	2021	2020	2019
Net operating losses carried forward:			
Canada (expiration dates 2027 to 2040)	\$ 8,051,504	\$ 7,809,363	\$ 6,840,817
USA (expiration dates 2022 to 2026)	248,289	1,223,212	1,494,711
Timing differences on property & equipment, Right of Use of Assets, Lease obligations and financing costs	1,674,085	1,945,086	1,805,012
SRED Expenditures	575,747	369,522	348,341
Foreign Tax Credit	285,772	285,772	285,772
	10,835,397	11,632,955	10,774,653
Intellectual property	(3,411,411)	(3,745,627)	(4,133,115)
Less valuation allowance	7,423,986	7,887,328	6,641,538
	(7,423,986)	(7,887,328)	(6,641,538)

20. Financial instruments

a) Non-derivative financial instruments:

The Company's non-derivative financial instruments consist of cash and cash equivalents, short-term investments, accounts receivable, deposits, accounts payables and accrued liabilities, long-term debt and lease obligations. The carrying value of these financial instruments, excluding leases, approximates their fair values due to their short terms to maturity.

Credit Risk

Credit risk arises from the potential that the Company may incur a loss if 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 December 31, 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 December 31, 2021, the

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

Company held net U.S. dollar assets totaling US\$1,177,291. Accordingly, a hypothetical 10% change in the value of one United States dollar expressed in Canadian dollars as at December 31, 2021 would have had an approximately \$150,039 effect on the unrealized foreign exchange gain or loss for the period.

b) Derivative financial instruments

As at December 31, 2021 and 2020, the Company held no derivative financial instruments.

21. Change in non-cash operating working capital

The changes in non-cash operating working capital balances are comprised of:

	For the years ended December 31,		
	2021	2020	2019
Accounts receivable	\$ 123,587	\$ 406,114	\$ (1,339,409)
Note receivable	-	324,700	(332,175)
Prepaid expenses and deposits	3,262	19,600	(31,972)
Accounts payable and accrued liabilities	14,375	(120,767)	104,745
Contractual obligations	(127,507)	(3,879)	134,116
	13,717	625,768	(1,464,695)

22. Geographic information

The Company generates revenue from its SFD[®] survey system that enables the clients to focus their exploration decisions concerning land commitments, data acquisition expenditures and prospect prioritization on areas with the greatest potential. NXT conducts all of its survey operations from its head office in Canada, and occasionally maintains administrative offices in foreign locations if and when needed. Revenue fluctuations are a normal part of SFD[®] survey system sales and can vary significantly year-over-year.

Revenues for the years ended December 31, 2021 and 2019 were generated solely from a single client and the Hydrocarbon Right. There were no revenues from the Geothermal Right. Revenues for the year ended December 31, 2020 were the result of the forfeiture of a non-refundable deposit.

	For the years ended December 31,		
	2021	2020	2019
International	\$ 3,134,250	\$ -	\$ 11,976,149
Other	-	136,566	-
	3,134,250	136,566	11,976,149

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

23. SFD® related costs

SFD® related costs include the following:

	For the years ended December 31,		
	2021	2020	2019
Aircraft Operations		(Adjusted – Note 2)	(Adjusted – Note 2)
Charter Hire Reimbursements	\$ (389,513)	\$ (662,383)	\$ (613,038)
Lease payments	412,742	453,101	442,816
Operating Expenses	1,085,640	1,320,352	1,459,536
	1,108,869	1,111,070	1,289,314
Survey Projects	115,299	-	1,363,741
	1,224,168	1,111,070	2,653,055

24. Government Grants

During the years ended December 31, 2021 and 2020, the Company received government grants through the Canada Emergency Wage Subsidy (“CEWS”), the Canada Emergency Rent Subsidy (“CERS”) and the National Research Council of Canada Industrial Research Assistance Program (“NRC IRAP”). The CEWS, CERS and the NRC IRAP were recognized as a reduction to general and administrative expenses.

	For the years ended December 31,		
	2021	2020	2019
CEWS	\$ 226,607	\$ 292,161	\$ -
CERS	188,983	58,526	-
NRC IRAP	50,000	-	-
Government grants recognized	465,590	350,687	-

25. Other related party transactions

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 \$16,000 (\$1,570 as at December 31, 2020) payable to this law firm.

Accounts payable and accrued liabilities includes \$11,467 (\$NIL as at December 31, 2020) related to reimbursement of expenses owing to an executive officer.

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 Note 9, the Company acquired the Geothermal Right from its Chairman, President and Chief Executive Officer, Mr. Liszicasz.

NXT ENERGY SOLUTIONS INC.

Notes to the Consolidated Financial Statements

As at and for the years ended December 31, 2021, 2020 and 2019

(Expressed in Canadian dollars unless otherwise stated)

	For the years ended December 31,		
	2021	2020	2019
Legal Fees	\$ 85,815	\$ 224,479	\$276,261
Design Services	4,013	-	-