



NXT ENERGY SOLUTIONS ANNOUNCES FIRST QUARTER 2020 RESULTS

CALGARY, AB, May 14, 2020 – NXT Energy Solutions Inc. ("NXT" or the "Company") (TSX:SFD; OTC QB:NSFDF) today announced the Company's financial and operating results for the quarter ended March 31, 2020. All dollar amounts herein are in Canadian Dollars.

Q1 Financial and Operating Highlights

Key financial and operational highlights for the first quarter include:

- The Company has received a total of US\$8.4 million payments in cash from PE Energy Limited for the SFD® survey in Nigeria, including US\$0.47 million in the first quarter of 2020. The final payment of approximately \$0.5 million USD is expected in the third quarter of 2020.
- Two SFD® recommendations, one in Nigeria and one in the Gulf of Mexico, have been drilled by independent third parties and have been confirmed as commercially successful.
- NXT received confirmation of a patent granted from the European Patent Office bringing the total number of countries granting the patent internationally to 44. The final step is for the validation process of the SFD® technology patent in select European countries.
- In Q3-2019, the Company advanced US\$250,000 (the "Principal Amount") to AGV for the purpose of furthering the shared objectives of NXT and AGV under the Co-operation Agreement. On April 13, 2020, NXT directed AGV to deliver US\$250,000 as repayment of the Principal Amount. AGV made an initial repayment of US\$50,000 on May 1, 2020.
- Cash and short-term investments at March 31, 2020 were \$6.24 million.
- There was \$Nil of survey revenues recorded in Q1-20.
- A net loss of \$1.33 million was recorded for Q1-20, including stock based compensation and amortization expense of \$0.47 million.
- Operating activities used \$0.63 million of cash during Q1-20.
- Net loss per common share for Q1-20 was (\$0.02) basic and (0.02) fully diluted.
- General and administrative costs for Q1-20, as compared to Q1-19, have increased by \$0.05 million or 6%, mostly due to an increase in business development offset by a reduction in headcount.

Message to Shareholders

George Liszicasz, President, and CEO of NXT, commented, "I want to convey my sincere hope that everyone is well and continues to stay healthy at this difficult time.

NXT had a very busy first quarter where my team and I engaged in a broad scale international market business development effort which included a signed memorandum of understanding with an independent oil company with interests in East-Central Africa. Though currently there are several

challenges facing our world and industry, NXT is focused on minimizing risks and continues to advance discussions for SFD[®] survey opportunities within Nigeria, East-Central Africa, Mexico, and selected Asian countries primarily via video conferences. Our clients are still working and there are continuous discussions regarding the projects.

I would like to provide some of additional key operational highlights:

- Following the completion of the Nigerian SFD[®] project last September, one of the recommended top SFD[®] anomalies coincided with one of the top seismic prospects and a well was successfully drilled and completed in late 2019. As a result of this and the successful testing of the SFD[®] technology onshore / offshore independently by the Department of Petroleum Resources ("DPR"), DPR provided a written recommendation of NXT's SFD[®] technology, noting specifically; *'in line with Federal Government aspiration to increase its Oil and Gas reserves base at a considerable reduced cost, risk and optimize exploration cycle, the Stress Field Detection SFD[®] technology is hereby adopted and recommended to be deployed as an independent data exploration tool for hydrocarbon exploration to identify and rank prospect-level leads to focus exploration efforts in the Nigerian Oil and Gas industry'*.
- We expect that the recommendation from the Federal Republic of Nigeria, a regional leader in technological innovation, to resonate broadly throughout the African oil and gas industry. The adaptation of SFD[®] in the Nigerian exploration programs will expose the technology to multiple international oil companies which can be a game-changer for NXT.
- With respect to our 2017 SFD[®] Gulf of Mexico survey over the 2.1 bid-round offshore blocks, one of the areas indicated by SFD[®] as prospective has now been drilled by third parties. A commercial discovery resulted with early estimates of in place reserves greater than 200 million barrels of oil equivalent (MMBOE). Additionally, and perhaps just as importantly, from a capital expenditure allocation perspective, another seismic prospect, considered non-prospective by NXT, was drilled as part of the same campaign and was declared unsuccessful.
- NXT received confirmation of a patent granted from the European Patent Office. This brings the total number of countries granting the patent to 44. A final step is for validation of the SFD[®] technology patent in select European countries. In addition, the Company is designing and building a new fleet of sensor systems for improved efficiency, better resolution and increased capacity.
- For further and more detailed information on patents, drilling results and DPR qualification letter please to our website www.nxtenergy.com.
- In the first quarter of 2020, NXT finalized the first phase of its survey over the Queen Charlotte Fault ("QCF") located offshore British Columbia. The purpose of the continuing QCF study is to identify seismically active areas and to differentiate subsurface stress states in deep water settings. The Company is in the process of evaluating the acquired SFD[®] data."

Summary highlights of NXT's 2020 first quarter financial statements (with comparative figures to 2019) are noted below. All selected and referenced financial information noted below should be read in conjunction with the Company's first quarter 2020 unaudited condensed consolidated interim financial statements and the related management's discussion and analysis ("MD&A").

(All in Canadian \$)

Three months ended March 31

	2020	2019
Operating results:		
Survey revenues	\$ -	\$ -
Survey expenses	301,961	377,733
General & administrative expenses	974,334	921,749
Stock based compensation expense	21,665	3,775
Amortization and other expenses, net	448,381	443,697
	1,746,341	1,746,954
Comprehensive loss for the period	\$(1,332,301)	\$(1,763,320)
Loss per common share – basic	\$ (0.02)	\$ (0.03)
Loss per common share – diluted	\$ (0.02)	\$ (0.03)
Number of common shares outstanding as at end of the period	64,406,891	68,573,558
Weighted average number of common shares outstanding for the period:		
Basic	64,406,891	68,573,558
Diluted	64,406,891	68,573,558
Cash provided by (used in):		
Operating activities	\$(634,660)	\$(881,482)
Financing activities	(11,158)	(10,377)
Investing activities	29,424	1,200,000
Effect of exchange rate changes on cash	157,656	3,503
Net cash inflow (outflow)	(458,738)	311,644
Cash and cash equivalents, beginning of the period	2,858,245	339,532
Cash and cash equivalents, end of the period	2,399,507	651,176
Cash and cash equivalents	2,399,507	651,176
Short-term investments	3,843,212	2,700,000
Total cash and short-term investments	6,242,719	3,351,176
Net working capital balance	6,159,548	1,976,283

NXT's 2020 first quarter financial and operating results have been filed in Canada on SEDAR at www.sedar.com, and will soon be available in the USA on EDGAR at www.sec.gov/edgar, as well as on NXT's website at www.nxtenergy.com.

Details of the conference call to discuss the 2020 first quarter financial and operating results are as follows:

Date:	Tuesday, May 19, 2020
Time:	4:30 p.m. Eastern Time (2:30 p.m. Mountain Time)
Participants Call:	1-855-783-0506
Conference ID	9897452

About NXT Energy Solutions Inc.

NXT Energy Solutions Inc. is a Calgary-based technology company whose proprietary SFD[®] survey system utilizes quantum-scale sensors to detect gravity field perturbations in an airborne survey method which can be used both onshore and offshore to remotely identify traps and reservoirs with exploration potential. The SFD[®] survey system enables our clients to focus their hydrocarbon exploration decisions concerning land commitments, data acquisition expenditures and prospect prioritization on areas with the greatest potential. SFD[®] is environmentally friendly and unaffected by ground security issues or difficult terrain and is the registered trademark of NXT Energy Solutions Inc. NXT Energy Solutions Inc. provides its clients with an effective and reliable method to reduce time, costs, and risks related to exploration.

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Forward-Looking Statements

Certain information provided in this press release may constitute forward-looking information within the meaning of applicable securities laws. Forward-looking information typically contains statements with words such as "anticipate", "believe", "estimate", "will", "expect", "plan", "schedule", "intend", "propose" or similar words suggesting future outcomes or an outlook. Forward-looking information in this press release includes, but is not limited to, information regarding: the repayment of the Principle Amount; business negotiations and opportunities, including the extent to which the DPR recommendation may further the development thereof; results disclosure and discussions, including the timing thereof; business strategies and objectives, successful completion of the validation of patents in select European countries; and continued research on the QCF study. Although the Company believes that the expectations and assumptions on which the forward-looking statements are based are reasonable, undue reliance should not be placed on the forward-looking statements because the Company can give no assurance that they will prove to be correct. Since forward-looking statements address future events and conditions, by their very nature they involve inherent risks and uncertainties. Actual results could differ materially from those currently

anticipated due to a number of factors and risks, including those related to the novel coronavirus (2019-nCoV/COVID-19), and the potentially negative effects thereof on the Company's workforce, its supply chain or demand for its products. Additional risk factors facing the Company are described in its most recent Annual Information Form for the year ended December 31, 2019 and the MD&A for the period ended March 31, 2020, which have been filed electronically by means of the System for Electronic Document Analysis and Retrieval (SEDAR) located at www.sedar.com. The forward-looking statements contained in this press release are made as of the date hereof, and except as may be required by applicable securities laws, the Company assumes no obligation to update publicly or revise any forward-looking statements made herein or otherwise, whether as a result of new information, future events or otherwise.

Non-GAAP Measures

This news release contains disclosure respecting non-GAAP performance measures including net working capital which does not have a standardized meaning prescribed by US GAAP and may not be comparable to similar measures presented by other entities. This measure is included to enhance the overall understanding of NXT's ability to assess liquidity at a point in time. Readers are urged to review the section entitled "Non-GAAP Measures" in NXT's MD&A for the period ended March 31, 2020 which is available under NXT's profile on SEDAR at www.sedar.com, for a further discussion of such non-GAAP measures. The financial information accompanying this news release was prepared in accordance with US GAAP unless otherwise noted. The MD&A and the unaudited condensed consolidated interim financial statements and notes for the year ended March 31, 2020, are available through the Internet in the Investor Relations section of www.nxtenergy.com or under NXT's SEDAR profile at www.sedar.com.