



NXT ENERGY SOLUTIONS ANNOUNCES SECOND QUARTER 2020 RESULTS AND UPDATE ON TECHNICAL PROGRESS

CALGARY, AB, August 13, 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 June 30, 2020. All dollar amounts are in Canadian Dollars unless otherwise stated.

Q2 Financial and Operating Highlights

Key financial and operational highlights for the second quarter include:

- An additional SFD® acquisition system consisting of eight new sensors was built and tested during the quarter which includes four cascade devices. NXT now has four SFD® systems which increases our operational readiness and reliability.
- R&D work focused on improving interpretation algorithms to increase efficiency of the interpretation process and transform the SFD® data to align more with the presentation of results of seismic surveys in the geophysical industry.
- Partial repayment was received from Alberta Green Ventures Limited Partnership ("AGV") in respect of the US\$250,000 loan to AGV for the purpose of furthering shared objectives under the Co-operation Agreement. AGV repaid the balance of the amounts owing on July 3, 2020.
- Cash and short-term investments at June 30, 2020 were \$4.90 million.
- Survey revenues in Q2-20 and 2020 YTD were \$0.137 million.
- A net loss of \$1.48 million was recorded for Q2-20, including stock based compensation and amortization expense of \$0.45 million.
- A net loss of \$2.81 million was recorded for YTD 2020, including stock based compensation and amortization expense of \$0.92 million.
- Operating activities used \$1.10 million of cash during Q2-20 and \$1.70 million YTD 2020.
- Net loss per common share for Q2-20 was (\$0.02) basic and (0.02) diluted.
- Net loss per common share for YTD 2020 was (\$0.04) basic and (0.04) diluted.
- General and administrative costs for Q2-20 as compared to Q2-19 increased by \$0.04 million or 5%, mostly due to an increase in professional fees.
- General and administrative costs for YTD 2020 as compared to YTD 2019 increased by \$0.09 million or 5%, mostly due to an increase in travel in Q1-20 and an increase in professional fees.

Message to Shareholders

George Liszicasz, President, and CEO of NXT commented, "The world wide reduction in exploration arising from the COVID-19 related slowdown of economic activity and the international price war has negatively impacted NXT's financial results and activity but has also provided an opportunity for our technical team

to focus on developing new algorithms to assist in the interpretation of SFD® data. The application of these transformations and methods have enabled us to extract additional information, speed up our processing and provide a platform for the development of algorithmic interpretation. Further work is required, however, we believe that the new analyses will materially increase the efficiency of interpretation and standardize our results with the geophysical industry and client expectations.

As commodity prices recover, and economies are restarting, we are observing an increase in activity with our customers. NXT's focus is on advancing SFD® survey opportunities within Nigeria, East-Central Africa, Mexico, and in South America."

Highlights of NXT's 2020 second 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 second quarter 2020 unaudited condensed consolidated interim financial statements and the related management's discussion and analysis ("MD&A").

(All in Canadian \$)

	Q2-20	Q2-19	2020 YTD	2019 YTD
Operating results:				
Survey revenues	\$ 136,566	\$10,954,617	\$ 136,566	\$10,954,617
Survey expenses	231,885	1,412,380	533,846	1,790,113
General & administrative expenses	802,647	767,401	1,776,981	1,689,150
Stock based compensation expense	7,525	3,775	29,190	7,550
Amortization and other expenses, net	574,218	685,173	608,559	1,145,236
	1,616,275	2,868,729	2,948,576	4,632,049
Net loss (income) and comprehensive loss (income)	\$(1,479,709)	\$8,085,888	\$(2,812,010)	\$6,322,568
Loss per common share – basic	\$(0.02)	\$0.12	\$(0.04)	\$0.09
Loss per common share – diluted	\$(0.02)	\$0.11	\$(0.04)	\$0.09
Number of common shares outstanding as at end of the period	64,406,891	68,573,558	64,406,891	68,573,558
Weighted average number of common shares outstanding for the period:				
Basic	64,406,891	68,573,558	64,406,891	68,573,558
Diluted	64,406,891	73,267,206	64,406,891	73,274,112
Cash provided by (used in):				
Operating activities	\$(1,097,591)	\$(389,631)	\$(1,696,781)	\$(1,266,256)
Financing activities	(31,357)	(10,554)	(42,515)	(20,931)
Investing activities	834,302	900,000	863,726	2,100,000
Effect of foreign rate changes on cash	(159,499)	5,360	(37,313)	4,006
Net cash inflow (outflow)	(454,145)	505,175	(912,883)	816,819
Cash and cash equivalents, beginning of the period	2,399,507	651,176	2,858,245	339,532
Cash and cash equivalents, end of the period	1,945,362	1,156,351	1,945,362	1,156,351
Cash and cash equivalents	1,945,362	1,156,351	1,945,362	1,156,351
Short-term investments	2,957,568	1,800,000	3,466,440	1,800,000
Total cash and short-term investments	4,902,930	2,956,351	5,411,802	2,956,351
Net working capital balance	5,086,263	10,450,774	5,086,263	10,450,774

NXT's 2020 second 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 second quarter financial and operating results are as follows:

Date:	Wednesday, August 19, 2020
Time:	4:30 p.m. Eastern Time (2:30 p.m. Mountain Time)
North American Participants Call:	1-855-783-0506
Participant Pass Code	9290546

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.

Contact Information

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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: business negotiations and opportunities; business strategies and objectives; successful integration of the new SFD[®] System; and continued research on the interpretation algorithms. 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 three and six month periods ended June 30, 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 three and six month periods ended June 30, 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 three and six months ended June 30, 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.