

NXT ENERGY SOLUTIONS ANNOUNCES FIRST QUARTER 2023 RESULTS

CALGARY, AB, May 15, 2023 – NXT Energy Solutions Inc. ("NXT" or the "Company") (TSX: SFD; OTCQB: NSFDF) today announced the Company's financial and operating results for the quarter ended March 31, 2023. All dollar amounts herein are in Canadian Dollars unless otherwise identified.

Financial and Operating Highlights

Key financial and operational highlights are summarized below:

- January 25, 2023, the Company closed a Private Placement by issuing 8,510,000 common shares, at \$0.195 per common shares, for aggregate gross proceeds of approximately \$1,659,450, less issuance costs of \$1,170;
- In January, 2023 the Company announced the grant of 2,050,000 incentive stock options at a price of \$0.216 to employees, officers and directors. These incentive stock options will vest upon receipt of cash for SFD® services performed: 1/3 upon collection of US\$6.5 million, 1/3 upon the collection of the next US\$7.0 million and the final 1/3 upon collection of an additional US\$7.5 million;
- In January, the Board of Directors formally empowered a Management Committee of the Board to assume the CEO's duties;
- The Management Committee is working closely with senior management to bring to fruition nearterm potential contracts in Africa and Asia Minor;
- cash at March 31, 2023 was \$0.47 million;
- net working capital was \$(1.17) million at March 31, 2023;
- the Company recorded SFD®-related revenues of \$nil;
- a net loss of \$1.61 million was recorded for Q1-23, including stock-based compensation expense ("SBCE") and amortization expense of \$0.51 million;
- net loss per common share for Q1-23 was \$0.02 basic and \$0.02 diluted;
- cash flow used in operating activities was \$1.40 million during Q1-23; and
- general and administrative ("G&A") expenses decreased by \$0.05 million (6%) in Q1-23 as compared to Q1-22.

Summary highlights of NXT's 2023 first quarter financial statements (with comparative figures to 2022) are noted below. All selected and referenced financial information noted below should be read in conjunction with the Company's 2023 unaudited condensed consolidated interim financial statements, the related Management's Discussion and Analysis ("MD&A").

(All in Canadian \$)

	Q1-23	Q1-22
Operating results:		
SFD®-related revenues	\$ -	\$ -
SFD®-related costs, net	301,634	437,282
General & administrative expenses	861,354	912,550
Amortization and other expenses	451,659	491,036
	(1,614,647)	(1,840,868)
Net loss	(1,614,647)	(1,840,868)
Loss per common share:		
Basic	\$(0.02)	\$(0.03)
Diluted	\$(0.02)	\$(0.03)
Common shares outstanding as at end of the period	77,599,131	65,301,972
Weighted average of common shares outstanding for the period:		
Basic	76,452,260	65,282,940
Diluted	76,452,260	65,282,940
Cash provided by (used in):		
Operating activities	\$ (1,400,019)	\$(913,141)
Financing activities	1,604,133	(11,844)
Investing activities	-	(150,272)
Effect of foreign rate changes on cash	(12)	(13,877)
Net cash outflow	204,102	(1,089,134)
Cash and cash equivalents, beginning of the period	263,437	2,257,855
Cash and cash equivalents, end of the period	467,539	1,168,721
Cash and cash equivalents	467,539	1,168,721
Short-term investments		700,272
Total cash and short-term investments	467,539	1,868,993
Net working capital balance	(1,174,237)	1,346,144

NXT's 2023 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.

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 hydrocarbon and geothermal exploration potential. The SFD® survey system enables our clients to focus their exploration decisions concerning land commitments, data acquisition expenditures and prospect prioritization on areas with the greatest potential. SFD® is environmentally friendly and unaffected by ground security issues or difficult terrain and is the registered trademark of NXT 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, opportunities and discussions, including the timing thereof and business strategies. 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. Additional risk factors facing the Company are described in its most recent Annual Information Form for the year ended December 31, 2022 and MD&A for the three month period ended March 31, 2023, 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 month period ended March 31, 2023 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. Management's discussion and analysis of financial results and the unaudited condensed consolidated interim financial statements and notes for the three months ended March 31, 2023, are available through the Internet in the Investor Relations section of www.nxtenergy.com or under NXT's SEDAR profile at www.sedar.com.