

NXT ENERGY SOLUTIONS ANNOUNCES 2023 YEAR-END RESULTS AND INVESTOR CONFERENCE CALL

CALGARY, AB, March 27, 2024 – NXT Energy Solutions Inc. ("NXT" or the "Company") (TSX: SFD; OTCQB: NSFDF) today announced the Company's financial and operating results for the quarter and year ended December 31, 2023 as well as significant subsequent events. All dollar amounts herein are in Canadian Dollars unless otherwise identified.

Financial and Operating Highlights

Key financial and operational highlights are summarized below:

- during the fourth quarter, the Company commenced the Turkish SFD® Survey for an independent oil and gas exploration company in Türkiye;
- the Company recorded SFD®-related revenues of approximately \$2.15 million;
- a total of US\$1.15 million (CDN\$1.58 million) of cash was received from the convertible debentures that were previously announced on November 9, 2023 (the "Debentures");
- cash at December 31, 2023 was approximately \$0.40 million;
- net working capital was approximately (\$1.86) million at December 31, 2023 versus approximately (\$3.47) million at September 30, 2023;
- a net loss of \$0.43 million was recorded for Q4-23, including stock-based compensation expense ("SBCE") and amortization expense of approximately \$0.50 million;
- a net loss of approximately \$5.45 million was recorded for YE-23, including SBCE and amortization expense of approximately \$1.97 million;
- net loss per common share for Q4-23 was \$0.01 per share (basic and diluted);
- net loss per common share for YE-23 was \$0.07 per share (basic and diluted);
- cash flow used in operating activities was approximately \$1.47 million during Q4-23 and \$4.83 million in the 2023 financial year; and
- general and administrative ("G&A") expenses decreased by approximately \$0.04 million (5%) in Q4-23 as compared to Q4-22 and G&A expenses decreased by approximately \$0.32 million (8%) in YE-23 as compared to YE-22.

Key financial and operational highlights occurring subsequent to December 31, 2023 are summarized below:

- NXT completed the Turkish SFD® Survey, delivered the final results thereof to its Turkish customers and completed the integration of SFD® data with such customers' existing geological and geophysical data;
- The Debentures were finalized for a total of US\$1.87 million (CDN\$2.54 million). US\$0.72 million (approximately CDN\$0.97 million) of that was received in January 2024;
- NXT and HULOOLQ LTD. (known as "Qamia"), an Abu Dhabi based start-up focused on "deep tech" disruptive technologies, entered into a sales agency agreement covering the United Arab Emirates; and

• On March 22, the Company extended its lease on its aircraft for an additional three years as a capital lease. Under the terms of the lease, the Company will own the aircraft at the end of the term.

Bruce G. Wilcox, Interim CEO of NXT, stated, "My hope is that 2023 will be looked back upon as a watershed moment for the Company as we continue efforts to increase revenues, and ultimately enhance shareholder value. In May 2023, NXT announced a strategic alliance partnership with Synergy E&P Technologies Limited which included an exclusive license to market and distribute NXT's SFD® solutions in Africa. In September 2023, NXT announced its first SFD® survey contract in Türkiye. In October 2023, the Company was a finalist for Best Exploration Technology at the World Oil 2023 Gulf Energy Excellence Awards in Houston. Most recently, a new sales agency agreement was announced with HULOOLQ LTD. (known as "Qamia"), an Abu Dhabi based start-up focused on "deep tech" disruptive technologies, which covers the United Arab Emirates. Through our collective efforts on these and other strategic initiatives, I have increased confidence 2024 should bode well for the future of the Company. On behalf of our Board of Directors and the entire team at NXT, I want to thank all of our shareholders for their continued support."

Summary highlights of NXT's 2023 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 audited consolidated Financial Statements, the related Management's Discussion and Analysis ("MD&A").

(All in Canadian \$)	Q4-23	Q4-22	2023	2022
Operating results:				
SFD®-related revenues	\$2,145,716	\$ -	\$2,145,716	\$ -
SFD®-related costs, net	1,280,927	203,891	2,249,126	1,178,183
General & administrative expenses	775,881	813,771	3,420,143	3,736,431
Amortization and other expenses	439,869	442,097	1,759,473	1,768,727
	2,496,667	1,459,759	7,428,742	6,683,341
Net loss	(425,701)	(1,469,549)	(5,451,112)	(6,733,076)
Loss per common share:				
Basic	\$(0.01)	\$(0.02)	\$(0.07)	\$(0.10)
Diluted	\$(0.01)	\$(0.02)	\$(0.07)	\$(0.10)
Common shares outstanding as at end of the period	78,025,237	68,949,109	78,025,237	68,949,109
Weighted average of common shares outstanding: Basic & Diluted	78,000,168	65,602,875	77,464,094	65,602,875
Cash provided by (used in):				
Operating activities	\$(1,468,589)	\$(704,187)	\$(4,831,950)	\$ (2,934,003)
Financing activities	1,539,226	413,790	5,009,117	389,217
Investing activities	(32,322)	-	(32,322)	550,000
Effect of foreign rate changes on cash	(6,011)	(20,008)	(6,569)	368
Net cash inflow (outflow)	32,304	(310,405)	138,276	(1,994,418)
Cash and cash equivalents, beginning of the period	369,408	573,842	263,437	2,257,855
Cash and cash equivalents, end of the period	401,713	263,437	401,713	263,437
Total cash and short-term investments	401,713	263,437	401,713	263,437
Net working capital balance	(1,855,629)	(1,681,003)	(1,855,629)	(1,681,003)

NXT's 2023 financial and operating results have been filed in Canada on SEDAR+ at www.sedarplus.ca, 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.

Investor Conference Call:

Date:	Tuesday, April 2, 2024	
Time:	4:30 p.m. Eastern Time (2:30 p.m. Mountain Time)	
Participants call:	1-800-806-5484	
Conference ID:	4949676#	

About NXT Energy Solutions Inc.

NXT Energy Solutions Inc. is a Calgary-based technology company whose proprietary airborne SFD® survey system, applied in numerous basins around the world, uses the principles of quantum mechanics to infer stress anomalies of exploration interest. The method can be used both onshore and offshore to remotely identify areas conducive to fluid entrapment in order to recommend areas with commercial hydrocarbon and/or geothermal 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

For investor and media inquiries please contact:

Eugene Woychyshyn
Vice President of Finance & CFO
302, 3320 – 17th AVE SW
Calgary, AB, T3E 0B4
+1 403 206 0805
nxt info@nxtenergy.com
www.nxtenergy.com

Michael Baker Investor Relations 302, 3320 – 17th AVE SW Calgary, AB, T3E 0B4 +1 403 264 7020 nxt_info@nxtenergy.com www.nxtenergy.com

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, discussions, including the timing thereof and business strategies. Although the Company believes that the expectations and assumptions on which the forwardlooking 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, 2023 and MD&A for the three and twelve month periods ended December 31, 2023, which have been filed electronically by means of the System for Electronic Document Analysis and Retrieval ("SEDAR+") located at www.sedarplus.ca. 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 twelve month periods ended December 31, 2023 which is available under NXT's profile on SEDAR+ at www.sedarplus.ca, 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 audited consolidated financial statements and notes for the twelve months ended December 31, 2023, are available in the Investor Relations section of www.nxtenergy.com, or under NXT's SEDAR+ profile at www.sedarplus.ca.