



NXT ENERGY SOLUTIONS ANNOUNCES SFD® SURVEY CONTRACT

CALGARY, AB, September 5, 2023 – NXT Energy Solutions Inc. ("NXT" or the "Company") (TSX: SFD; OTCQB: NSFDF) is pleased to announce that it has executed a contract to provide an SFD® survey to an independent oil and gas exploration company in Turkiye, which is strategically located at the junction of Eastern Europe, Central Asia and the Middle East. Data acquisition operations for this contract are expected to commence in October 2023, and NXT's interpretations and recommendations are expected to be delivered during the fourth quarter of 2023.

Bruce G. Wilcox, interim CEO of NXT, stated "I believe this new contract will play a key role in new business development in Turkiye and the nearby geography. I would like to thank the entire NXT team for their efforts in finalizing this agreement with a new SFD® client, and would also like to thank NXT's shareholders for their continued support of the Company."

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

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: the expected timing of the acquisition, interpretation and recommendations of the SFD® survey and new business opportunities in Turkiye and nearby geographies. 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. 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 and six months ended June 30, 2023, which have been filed electronically by means of the System for Electronic Document Analysis and Retrieval ("SEDAR") located at www.sedarplus.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.