



NXT ENERGY SOLUTIONS ANNOUNCES R&D FUNDING FOR ITS SFD® GEOTHERMAL PROJECT

CALGARY, AB, August 3, 2021 – NXT Energy Solutions Inc. (“NXT” or the “Company”) (TSX:SFD; OTC QB:NSFDF) is pleased to announce it is receiving advisory services and funding of up to \$50,000 from the National Research Council of Canada Industrial Research Assistance Program (“NRC IRAP”) to support the research and development of the Stress Field Detection (SFD®) technology for geothermal applications. The objective of this project will be to test, identify and analyze the desired elements of the SFD® geothermal sensor response over known geothermal areas with the ultimate goal of providing a green upstream geophysical service for advancing renewable power initiatives in Canada and abroad.

George Liszicasz, President and CEO of NXT Energy, noted, “We are extremely pleased to have support from NRC IRAP to advance the application of SFD® to geothermal energy resources. Deploying SFD® for geothermal projects will allow our clients a singular focus on the most favorable subsurface conditions for heat and fluid circulation. We believe that this will increase the chance of success while optimizing the overall time and costs in an ESG friendly manner. When combined with the existing SFD® hydrocarbon application a number of distinct advantages arise such as investment decisions related to early stage geothermal prospecting, “drill / no-drill” calls, and mixed-use geothermal / hydrocarbon cogeneration projects. NXT believes that geothermal power generation and direct use applications will play an outsized role in the evolving energy sector due to its non-intermittent and baseload nature.”

To date, the SFD® technology has been exclusively deployed in the upstream hydrocarbon sector to identify potential hydrocarbon traps onshore and offshore and in a wide variety of worldwide geological settings, including thrust-fold belts, foreland basins, sub/pre-salt plays, and extensional regimes. SFD® surveys have been executed in North and South America, South Asia and Africa.

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 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: completing additional phases of the geothermal project, the SFD[®] technology will reduce geothermal exploration time and costs, that the stated distinct advantages that will arise in investment decisions related to early stage geothermal prospecting, and that geothermal power generation and direct use applications will play an outsized role in the evolving energy sector. 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, 2020 and the Management Discussion and Analysis for the period ended March 31, 2021, 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.