

NXT ANNOUNCES PUBLICATION OF EUROPEAN PATENT APPLICATION AND PROVIDES WORLDWIDE UPDATES

CALGARY, ALBERTA, October 2, 2017 - **NXT Energy Solutions Inc.** ("NXT" or the "Company") (TSX:SFD; OTC QB: NSFDF) announces that the Company's European Patent Application was published on September 27, 2017 providing the Company's Stress Field Detection ("SFD®") Technology with broad protection among Contracting States to the European Patent Convention. This significant milestone represents NXT's latest progress in a patent process initiated more than five years ago with the objectives of protection and affirmation of the credibility of the technology through a rigorous international review process.

SFD® is unique among hydrocarbon exploration methods in that the sensors are flown over areas of geological interest and signals are generated dynamically in response to changes in gravity associated with changes in stress rather than through a series of static measurements. SFD® signals have a very high correlation with seismic anomalies materially reducing the time and expense associated with conventional exploration. SFD® is an independent reconnaissance tool for analyzing the presence of a valid trapping configuration in a variety of geological settings, such as structural/stratigraphic traps in conventional exploration as well as anomalous fluid trapping conditions in unconventional regimes, such as shale gas and tight oil.

Squire Patton Boggs LLP, a leading US intellectual property law firm, filed the original provisional patent application: "Gravity Transducer and Application to Hydrocarbon Exploration" in the United States on May 22, 2012. A Patent Co-operation Treaty (PCT) application was filed on May 22, 2013 followed by 2014 filings in numerous countries including: Canada, Japan, China, Russia, Mexico, Brazil, India, and 38 contracting states to the European Patent Convention. A "Continuation-In-Part" (CIP) application was filed in November 2014 in respect to the enhancements of the technology. A further CIP application was submitted in August, 2017 in respect to a newly-developed highly effective sensor design.

So far, SFD® patents have been granted in Russia (January 2017), Japan (July 2017) and Canada (August 2017), and the notices of Allowance have been also received from Mexico (July 2017) and the United States (July 2017), which are areas of prime commercial focus for the Company.

NXT Energy is a Calgary based company whose proprietary Stress Field Detection ("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 areas with exploration potential for traps and reservoirs. 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 provides its clients with an effective and reliable method to reduce time, costs, and risks related to exploration.

Forward-Looking Statements

This news release may include forward-looking statements. When used in this document, words such as "intends", "plans", "anticipates", "expects" and "scheduled", are forward-looking statements. Forward-looking statements are subject to a wide range of risks and uncertainties, and although the Company believes that the expectations represented by such forward-looking statements are reasonable, there can be no assurance that such expectations will be realized. Any number of factors can cause actual results to differ materially from those in the forward-looking statements. Risk factors facing NXT are described in its most recent MD&A for the year ended December 31, 2013 which has been filed electronically by means of the System for Electronic Document Analysis and Retrieval ("SEDAR") located at www.sedar.com. Such forward-looking statements are made as at the date of this news release, and the Company assumes no obligation to update or revise them, either publicly or otherwise, to reflect new events, information or circumstances, except as may be required under applicable securities law.

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