



NXT ENERGY SOLUTIONS INC. 2017 ANNOUNCES GRANT OF PATENT, NEW GENERATION OF SFD® SENSORS AND CONTRACT UPDATE

CALGARY, ALBERTA, January 11, 2017 - NXT Energy Solutions Inc. (“NXT Energy” or the “Company”) (TSX: SFD; OTCQB: NSFDF), is pleased to announce the first international patent of the Stress Field Detection (“SFD®”) Technology and the development of a new generation of sensors that will enhance the company’s ability to provide higher quality survey results. NXT is also pleased to provide an update in respect to the current contract negotiations with a number of prospective international clients.

George Liszicasz, NXT Energy’s President and CEO, stated that *“NXT embarked on an intensive, focused marketing effort for its proprietary SFD® technology during the course of 2016 and we are very encouraged that our campaign has built a robust pipeline of prospective opportunities to utilize SFD® over the next two to three years. We are pleased to report that NXT is now actively pursuing contracts across seven different countries including the expected finalization of a US \$29 million contract with Shine Quest in Sri Lanka. We are also proud of the continued technical advancements in SFD® design in 2016 which will enhance the capabilities of our proven, proprietary SFD® survey system”*.

In 2017, NXT’s goal is to apply our next generation of sensor design to further demonstrate SFD’s® technical capabilities in large-scale oil and gas exploration programs worldwide. Additionally, the continued expansion of our patent protection and the new advancements allow NXT to share the successes and benefits of our technology with our current and future clients.”

1) Patent Granted and Status of Other Applications

NXT is pleased to announce a positive development in our strategy to obtain worldwide patent protection for the SFD® technology. A decision to grant an international patent has been made for the airborne SFD® technology application, which, based on quantum mechanical principles, is the first of its kind to have been commercially developed. In addition, NXT has patent applications pending in numerous international jurisdictions.

2) SFD® Sensor Development

NXT’s technical team, led by George Liszicasz, has spent considerable time over the course of 2016 on successfully developing and field-testing a new generation of SFD® sensors based on unique configurations of sensor elements. The new design will provide the following enhanced features to our survey process:

- Higher detection sensitivity to gravitational sources of interest, providing clients with better delineation of subsurface trapped fluid systems (potential hydrocarbon reservoirs)
- Greater clarity and differentiation of individual geological anomalies
- Increased sensor stability and signal integrity that are expected to significantly improve the efficiency and accuracy of the interpretation process.

The design advancements are being incorporated in a new patent application.

3) Sri Lanka Contract Update

NXT's client, Shine Quest FZC, continues discussions with the Sri Lankan Government for the launch of a multi-client survey over the Mannar Basin in Sri Lanka. Although negotiations have taken longer than expected, the Company is not aware of any issues that will impact the parties' ability to successfully conclude the transaction.

4) 2017 Outlook for NXT and its SFD® Technology

In addition to the Sri Lanka project, progress is being made with opportunities in Mexico, Ghana, the Middle East, Asia and Russia, and NXT anticipates it will secure a number of contracts in 2017. Development of the pipeline of prospective opportunities will continue throughout the year.

NXT is now actively marketing its extensive SFD® data library, consisting of 100,000 line-kms of data that have been recorded in numerous countries over the last 10 years. This data library is packaged to incorporate all available geological and geophysical data to generate a series of SFD® recommended prospects for sale. Marketing the data to participants in the oil and gas industry has been a long-term goal of NXT and the initial test-marketing has been positively received. NXT anticipates bringing this additional revenue stream online in 2017.

For further information about NXT, please contact NXT's Head office at nxt_info@nxtenergy.com

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 Energy 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 Energy are described in its most recent MD&A for the year ended December 31, 2015 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.

For further information, please contact:

Bev Stewart

V-P Finance & CFO

NXT Energy Solutions Inc.

403-206-0807

info@nxtenergy.com

www.nxtenergy.com

Kin Communications

Investor Relations

1-866-684-6730 / 604-684-6730

sfd@kincommunications.com

Neither the TSX nor its Regulation Services Provider (as that term is defined in the policies of the TSX) nor the OTC QB Markets accept responsibility for the adequacy or accuracy of this release.