

NXT ENERGY HAS BEEN ADVISED OF FUTURE SHARE PURCHASE ARRANGEMENT ENTERED INTO BY ITS LARGEST SHAREHOLDER

CALGARY, ALBERTA, January 20, 2014 - NXT Energy Solutions Inc. ("NXT Energy" or the "Company") (TSX-V:SFD; OTC:NSFDF) and its largest shareholder, Mr. George Liszicasz, jointly advise that he has entered into a share purchase arrangement with designated Company directors, officers, employees and advisors. In recognition of their efforts, sacrifices and dedication to the success of NXT Energy, Mr. Liszicasz (the "Grantor") has personally granted rights to these individuals to acquire a total of 1,000,000 of the common shares which he will become entitled to hold (the "Rights") upon the intended future conversion of a portion of the preferred shares which he owns.

Mr. Liszicasz, President & CEO of the Company, currently holds 8,000,000 non-voting, convertible preferred shares which were issued in 2006 pursuant to a technology transfer agreement covering the Company's use of the Stress Field Detection ("SFD®") technology. The preferred shares are convertible at the Company's option on or before December 31, 2015, with earlier conversion of 2,000,000 of them (including the 1,000,000 which are subject to the Rights) triggered when the Company reaches cumulative revenues of US \$50 million.

Mr. Liszicasz noted "I am extremely proud of the progress the Company has made to date in advancing use of the SFD®" technology. I have personally granted these Rights to recognize a number of individuals who have distinguished themselves by providing significant contributions and being integral in building the Company. I want to aid in ensuring the retention of key people in NXT. In addition, I wish to emphasize that any future exercises of the Rights will not be dilutive to the Company's shareholders".

Each of the Rights are subject to certain vesting provisions and will entitle the holder to acquire from the Grantor one common share of NXT Energy at a fixed exercise price of \$1.77 and will expire on December 31, 2015. Of the total number of Rights granted, 365,000 were to certain directors and officers, 370,000 to key employees of the Company, and the balance to advisors and consultants. These Rights are supplemental to existing incentives which have been granted under the Company's existing stock option plan.

In addition to holding 100% of the outstanding preferred shares, Mr. Liszicasz also holds 7,196,490 (16.9%) of NXT Energy's 42,578,326 outstanding common shares.

NXT Energy Solutions Inc. is a Calgary based company whose proprietary Stress Field Detection ("SFD®") survey system provides an effective and reliable method to reduce time, costs, and risks related to hydrocarbon exploration. The SFD® system utilizes quantum-scale sensors to detect gravity field perturbations in an airborne exploration survey method. SFD® can be used both onshore and offshore to remotely identify areas with exploration potential for traps and reservoirs, and 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.

Disclaimer and 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, 2012 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.

Specific forward-looking statements include the potential future conversion of the Company's preferred shares.

For further information, please contact:

Investor Relations

kin communications inc. 604-684-6730 / 1-866-684-6730 sfd@kincommunications.com www.kincommunications.com

Greg Leavens NXT Energy Solutions Inc. V-P Finance & CFO 403-206-0805

George Liszicasz NXT Energy Solutions Inc. President & CEO 403-206-0800 www.nxtenergy.com

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