

NXT Announces Operational Update and Investor Conference Call

CALGARY, ALBERTA, December 12, 2011 - NXT Energy Solutions Inc. ("NXT" or the "Company") (TSX-V:SFD; NASDAQ-OTCBB:NSFDF), announces progress updates on its various SFD[®] projects.

Colombia:

NXT has completed airborne SFD[®] data acquisition operations on four exploration blocks in Colombia and expects to receive a progress payment exceeding 50% of the US \$3 million contract value before December 31. NXT's Final Report on the project is expected to be delivered to the client in mid January, 2012.

Argentina:

The SFD[®] survey aircraft is currently redeploying to Argentina to commence a US \$1.7 million project. NXT expects to complete SFD[®] data acquisition in January, 2012.

Guatemala:

NXT expects to sign a binding agreement on the recently awarded US \$0.7 million survey contract in December 2011, and plans to commence SFD[®] survey operations for this project in January, 2012.

South Asia:

The Company expects final permitting for the signed US \$2.7 million SFD[®] survey contract to be granted in January, 2012 and is anticipating SFD[®] operations to commence in Q1, 2012.

George Liszicasz, NXT's President & CEO, noted "I am very proud of our team, their timely execution of the sizeable Colombia project, and the quality of our growing client base. Our efforts to expand our presence into key Latin America markets is gathering momentum and yielding successes".

NXT will be hosting an investor conference call to discuss its operational updates and plans for the upcoming year at 11 a.m. mountain standard time on Thursday, December 15, 2011. Callers may dial 1-888-231-8191 (Toronto local dial 647-427-7450) and enter conference ID 35279936.

In addition, NXT notes that a number of holders of common share purchase warrants have recently voluntarily exercised a total of 700,000 warrants at an exercise price of \$0.60 per share ahead of the February 16, 2012 expiry date. This resulted in proceeds to the Company of \$420,000.

NXT is a Calgary based company whose proprietary airborne Stress Field Detection ("SFD[®]") survey system provides a revolutionary survey method that can be used both onshore and offshore to remotely identify potential hydrocarbon traps and reservoirs. NXT provides its clients an efficient and reliable method to reduce time, costs, and risks related to exploration surveys. The SFD[®] survey system enables our clients to more efficiently focus their hydrocarbon exploration decisions concerning land commitments, data acquisition expenditures and prospect prioritization onto the 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.

Forward-Looking Statements

This news release includes forward-looking statements. When used in this document, words such as "intended", "anticipate", "expects", "plans" 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 a forward-looking statement 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.

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