

NXT ENERGY SOLUTIONS INC. MAKES A TARGETED ISSUER BID FOR COMMON SHARES OWNED BY ALBERTA GREEN VENTURES LIMITED PARTNERSHIP

CALGARY, AB, November 18, 2019 / GLOBE NEWSWIRE / – NXT Energy Solutions Inc. (NXT or the Company) (TSX:SFD; OTC QB:NSFDF) is pleased to announce that it has entered into an agreement with Alberta Green Ventures Limited Partnership (AGV) whereby NXT will purchase from AGV up to 4,166,667 common shares in the capital of the Company (the Targeted Issuer Bid Shares) at a price of C\$0.30 per Targeted Issuer Bid Share for total gross proceeds of approximately C\$1,250,000.00 (the Targeted Issuer Bid) providing cash to AGV and ultimately reducing its fully diluted holding to approximately 9.47% of the issued and outstanding common shares in the capital of the Company (the Common Shares), such that AGV would no longer be an "insider" of the Company. NXT is making the Targeted Issuer Bid at a time when NXT has cash from the recent completion of its contract in Nigeria, contract prospects, and the Common Shares are trading at a low multiple of year-to-date earnings as reported in the company's financials on November 14, 2019.

In addition to the Targeted Issuer Bid, NXT and AGV have agreed that: (i) all 3,421,648 common share purchase warrants (the **Warrants**) previously acquired by AGV expired as of October 31, 2019; and (ii) the deadline under the previously disclosed Co-operation Agreement to complete at least one of three SFD® surveys will be extended from December 31, 2019 to June 30, 2020. For more information on the Co-operation Agreement, please refer to the Company's press release dated February 20, 2019.

On November 15, 2019, NXT purchased from AGV 2,230,000 of the Targeted Issuer Bid Shares for total gross proceeds of C\$669,000. Subject to receipt of all necessary regulatory approvals including approval by the Toronto Stock Exchange (the **TSX**) and acceptance by the Alberta Securities Commission (the **ASC**) of the Company's application for exemptive relief as discussed below, NXT will acquire the remaining 1,936,667 Targeted Issuer Bid Shares for total gross proceeds of C\$581,000.

As at market close on November 14, 2019: (i) the 4,166,667 Targeted Issuer Bid Shares represented approximately 6.08% of the outstanding Common Shares; (ii) the purchase price of C\$0.30 per Targeted Issuer Bid Share represents a discount of approximately 25.0% to the market price of the Common Shares, being approximately C\$0.40; and (iii) the total gross proceeds of approximately C\$1,250,000 represent approximately 4.7% of the Company's market capitalization of approximately C\$27.4 million.

The Targeted Issuer Bid constitutes an "issuer bid" and a "related party transaction" under applicable securities laws, and the acquisition of the remaining 1,936,667 Targeted Issuer Bid Shares is conditional upon NXT being exempted from typically applicable requirements. An application for exemptive relief has been submitted to the ASC and is currently pending, and an application for approval will be submitted to the TSX.

The Targeted Issued Bid, enables the Company to make a strategic acquisition of its Common Shares for cancellation at a discount to market price and outside of the market, improving the equity position of all NXT shareholders.

Eugene Woychyshyn, Vice President of Finance & CFO of NXT, commented, "AGV made 4,166,667 NXT Common Shares available and the Company decided that this was a good time to step in and purchase these Common Shares for cancellation based on our current financial state and potential future contract

opportunities. This transaction also included the cancellation of AGV's 3,421,648 Warrants. The position of the Board of Directors and management is that this transaction will benefit our shareholders. AGV continues to be a significant partner to NXT, first as one of its largest shareholders and second, as we together continue exploring SFD® opportunities in several regions in the world in furtherance of our two previously disclosed commercial agreements. We look forward to our continued cooperation."

About NXT Energy Solutions Inc.

NXT Energy Solutions Inc. is a Calgary-based technology company with its principal office at Suite 302, 3320 – 17th Avenue SW, Calgary, Alberta, Canada. NXT's 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 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 Solutions Inc. provides its clients with an effective and reliable method to reduce time, costs, and risks related to exploration.

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Forward-Looking Statements

Certain information provided in this press release may constitute forward-looking statements within the meaning of applicable securities laws. Forward-looking statements in this press release include, but are not limited to: the Targeted Issuer Bid, including, as applicable, the number and price of the securities acquired thereunder, the impact thereof on the Company's other shareholders and AGV's status as an insider of the Company and the ability of NXT to rely on and obtain all necessary and required regulatory approvals and exemptions in connection therewith and to obtain such approvals and exemptions in a timely and efficient manner, the Company's contract prospects; and the completion by AGV of one of three SFD® survey projects by the extended deadline. 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. Risk factors facing the Company are described in its most recent management discussion and analysis for the three and nine month periods ended September 30, 2019, which has 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.