

NXT ENERGY SOLUTIONS ANNOUNCES COMMERCIAL AGREEMENT WITH ALBERTA GREEN VENTURES

CALGARY, AB, February 20, 2019 – NXT Energy Solutions Inc. ("NXT" or the "Company") (TSX: SFD; OTC QB: NSFDF) is pleased to announce it has entered into a binding commercial and co-operation agreement ("Agreement") with one of its largest shareholders, Alberta Green Ventures Limited Partnership ("AGV"), to conduct up to three SFD® surveys within two years. The Agreement is based on a cost plus formula and a gross overriding royalty interest in oil and gas production arising on lands subject to the surveys.

Under the Agreement, NXT and AGV agree to conduct two SFD® Surveys in North America and one internationally. The first SFD® Survey is to be completed by August 31, 2019 and the fees payable by AGV are partially secured by a \$200,000USD non-refundable deposit payable within two months of signing the agreement. AGV has committed to completing an exploration drilling program on each of the lands subject to the SFD® surveys within 2 years of completion of the surveys.

George Liszicasz, President, and CEO of NXT, commented, "NXT and AGV have been working closely together for the last 12 months and this Agreement shows AGV's commitment to NXT and its confidence in our SFD® technology. This also provides an opportunity to directly share in the success of our SFD® recommendations through participation via a royalty component. Furthermore, this arrangement will continue the verification of our SFD® technology in the field."

As part of the consideration for the agreement, the Company has agreed to seek approval to a 12-month extension of the expiry date of certain common share purchase warrants held by AGV. The TSX has granted conditional approval to the extension, subject to disinterested shareholder approval. The Company intends to table a resolution for the approval of disinterested shareholders at the 2019 Annual Shareholder Meeting of the Company to ratify a twelve (12) month extension of AGV's 3,421,648 warrants ("Warrants") to February 16, 2020. If approved each Warrant entitles the holder to acquire one Common Share at an exercise price of \$1.20 for an additional twelve months to February 16, 2020. The date of the Annual Shareholder Meeting is to be set for a date in the second quarter of 2019. Until the extension is approved by shareholders at the meeting, the warrants will not be exercisable by AGV. If the extension is not approved, then the warrants will terminate.

About NXT Energy Solutions Inc.

NXT Energy Solutions Inc. is a Calgary-based technology company whose 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 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 Solutions Inc. provides its clients with an effective and reliable method to reduce time, costs, and risks

related to exploration.

Contact Information

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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 satisfaction of all required conditions (including regulatory and shareholder approvals) for completion of the Warrant extension, the receipt of the non-refundable deposit, completion of each of the SFD surveys, commercially successful wells that will produce gross overriding royalties, and the planned timing of the Annual Shareholder Meeting. 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 MD&A for the period ended September 30, 2018, 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.