



NXT ENERGY SOLUTIONS PROVIDES OPERATIONAL UPDATE

CALGARY, AB, February 14, 2025 – NXT Energy Solutions Inc. ("NXT" or the "Company") (TSX: SFD; OTCQB: NSFDF) is pleased to provide the following operational update.

Completion of Data Acquisition Operations for African Survey

NXT has completed SFD® data acquisition over 14 flight days, for an oil and gas exploration company in Africa, through NTX's strategic partner, Synergy Exploration and Production Technologies Limited ("Synergy"). NXT's interpretation recommendations are expected to be delivered during the second quarter of 2025.

Update on SFD® Surveys in Southeast Asia and Pakistan

NXT's Cessna 560 Ultra aircraft will shortly begin its scheduled major maintenance to prepare for two previously announced SFD® surveys. The Southeast Asian SFD® survey is planned to commence in April 2025, with recommendations expected in May 2025. With respect to Pakistan, AL-Haj Enterprises Private Limited's ("AL-Haj") SFD® data acquisition is expected to commence in the third quarter 2025 followed by recommendations during the fourth quarter.

Bruce G. Wilcox, CEO of NXT, commented, "The positive financial impact of our SFD® surveys in Africa, Southeast Asia, and South Asia is expected to be significant for the first quarter, and for full year 2025. NXT is focused on additional regional market penetration with multiple customers in each of these three regions."

2024 Year End and Q1-25 Financial Results

The Company intends to release its fourth quarter and full year 2024 financial results during the week of March 24, 2025, and first quarter 2025 financial results in the first half of May 2025.

About NXT Energy Solutions Inc.

NXT Energy Solutions Inc. is a Calgary-based technology company whose proprietary airborne SFD® survey system, applied in numerous basins around the world, uses the principles of quantum mechanics to infer stress anomalies of exploration interest. The method can be used both onshore and offshore to remotely identify areas conducive to fluid entrapment in order to recommend areas with commercial hydrocarbon and/or geothermal potential. The SFD® survey system enables our clients to focus their 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 information within the meaning of applicable securities laws. Forward-looking information typically contains statements with words such as "anticipate", "believe", "estimate", "will", "expect", "plan", "schedule", "intend", "propose" or similar words suggesting future outcomes or an outlook. Forward-looking information in this press release includes, but is not limited to, information regarding: the timing of the delivery of African SFD[®] survey results, the timing and results of SFD[®] surveys in Southeast Asia and with AL-Haj, the positive financial impact of SFD[®] surveys in Africa, Southeast Asia and South Asia, the impact on revenues of the focused on additional regional market penetration and utilization in Africa, Southeast Asia, and South Asia, and timing of the release of the Company's financial results for full year 2024 and Q1-25. 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. Additional risk factors facing the Company are described in its most recent Annual Information Form for the year ended December 31, 2023 and MD&A for the three and nine months ended September 30, 2024, which have been filed electronically by means of the System for Electronic Document Analysis and Retrieval ("SEDAR+") located at www.sedarplus.ca. 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.