

Energy Solutions

FASTERDISCOVERIES

LOWER COSTS

REDUCED ENVIRONMENTAL IMPACT

Disclaimer and Forward-Looking Statements

GENERAL ADVISORY

This presentation has been prepared by management of NXT Energy Solutions Inc. ("NXT" or the "Company") based on publicly available information, internally developed data, and other sources. The information does not claim to be all-inclusive and should not be solely relied upon. Investors should review public filings and consider professional advice before making investment decisions. This presentation contains forward-looking statements regarding future plans, growth opportunities, securing of contracts, financial position, and market conditions. These statements are based on assumptions, expectations, and known risks, including NXT's ability to secure capital, market competition, changes in laws, volatility in oil prices, and other operational risks.NXT assumes no obligation to update forward-looking statements as of the date of this presentation, and these statements are subject to change based on new information, future events, or other factors.

CAUTION REGARDING FORWARD-LOOKING STATEMENTS

This presentation contains certain "forward-looking statements" within the meaning of applicable Canadian securities legislation. The Company includes forward-looking statements to assist readers in understanding the Company's future plans and expectations and the use of such information for other purposes may not be appropriate. All statements and disclosures, other than those of historical fact, which address activities, events, outcomes, results or developments that NXT anticipates or expects may or will occur in the future (in whole or in part) should be considered forward-looking statements. In some cases, forward-looking statements can be identified by terms including, but not limited to, "future", "may", "will", "could", "might", "expect", "anticipate", "potential", "enable", "plan", "predict", "continue", "continue", "contemplate", "intend" or other comparable terminology. In particular, this presentation contains, among other things, forward-looking statements pertaining to: the timing and extent of potential growth opportunities in new international and geothermal markets, the intentions and spending estimates of explorations companies, including the potential securing of SFD® contracts, new business ventures, and the satisfaction by third-parties of certain necessary conditions related thereto, including obtaining government and regulatory approvals; the ability to successfully complete the SFD® data acquisition in accordance with the terms of the contract; completion of SFD® recommendations within the contract parameters; ensuring payments of all contract revenue in accordance with the terms of the contract; estimates related to our future financial position and liquidity; general business strategies and objectives; the cost deficiencies associated with the deployment of NXT's SFD® technology in identifying, evaluating and exploiting oil and gas reserves. These forward-looking statements are based on a number of assumptions which may prove to be incorrect. Assumptions have been made with respect to

Although we believe that the assumptions underlying these forward-looking statements are reasonable, they may prove to be incorrect, and we cannot assure that actual results will be consistent with these forward-looking statements. These forward-looking statements are based on current expectations and are subject to a wide range of known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Known risks include, but are not limited to: our ability to generate sufficient ongoing cash flow from operations or to raise adequate capital to allow us to grow the business and continue operations; conducting operations in international markets; the emergence of alternative competitive technologies; protection of our intellectual property and rights to our SFD® technology; reliance on a limited number of aircraft; the loss of key personnel; our dependence on a limited number of clients; foreign currency and interest rate fluctuations may affect our financial position; changes in, or in the interpretation of, laws, regulations or policies; volatility in oil nature and natural gas commodity prices may reduce demand for our services; specialized equipment; geological conditions; flight operation; changes in market competition; general economic conditions; that the Company will be able to access capital, including debt, on acceptable terms; and applicable political and economic conditions. Although the Company has attempted to identify important factors and risks that could cause actual actions, events or results to differ from those anticipated, estimated or intended. For more information relating to risks, see the section titled "Risk Factors" in NXT's current Annual Information Form for the year ended December 31, 2024 and Management and Discussion Analysis for the three and six months ended June 30, 2025.

These forward-looking statements are made as of the date of this presentation and are expressly qualified in their entirety by this cautionary statement. Subject to applicable securities laws, the Company does not assume any obligation to update or revise the forward-looking statements contained herein to reflect events or circumstances occurring after the date of this presentation.



CURRENT ENERGY INDUSTRY CHALLENGES

The World's Energy Demand Is Rising Amid Increasingly Challenging Exploration Conditions



RISING COSTS

Exploration costs per barrel of oil equivalent continue to rise.



DECLINING SUCCESS

Despite higher exploration spending, discovered volumes fell to a record low of 5 billion barrels of oil equivalent.



ENVIRONMENTAL CONCERNS

On-the-ground exploration activities often result in substantial environmental impacts.





"DESPITE RISING INVESTMENTS, DISCOVERED VOLUMES ARE FALLING TO NEW LOWS...

ESTIMATES SHOW THAT IN THE FIRST HALF OF 2023, EXPLORERS FOUND **42% LOWER** [TOTAL BARRELS OF OIL EQUIVALENT] THAN THE FIRST HALF OF 2022."

RYSTAD ENERGY | AUGUST 2023

OUR SOLUTION:

STRESS FIELD DETECTION (SFD®)

LOWERING COSTS AND DISCOVERY TIME

- Proprietary, airborne geophysical survey technology developed by NXT.
- Uses gravity-based sensors to identify stress anomalies of high exploration potential.
- Patented in 47 countries.
- Increases exploration success while substantially reducing costs and environmental impacts





SFD vs. Seismic Comparison UP TO 90% SURVEY COST REDUCTION DONE IN MONTHS, NOT YEARS

Comparison of 10,000 sq km Exploration Block Expenditure

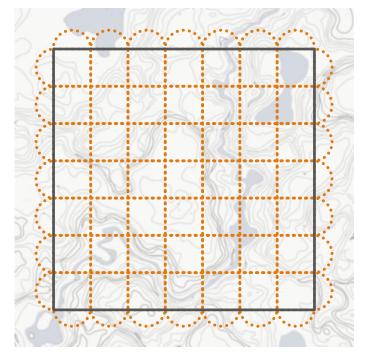
\$5,000,000 SFD SURVEY

VS

\$5,000,000 SEISMIC SURVEY

2,200-line
Kilometers

2 Months



250-line Kilometers

2.5+ Years

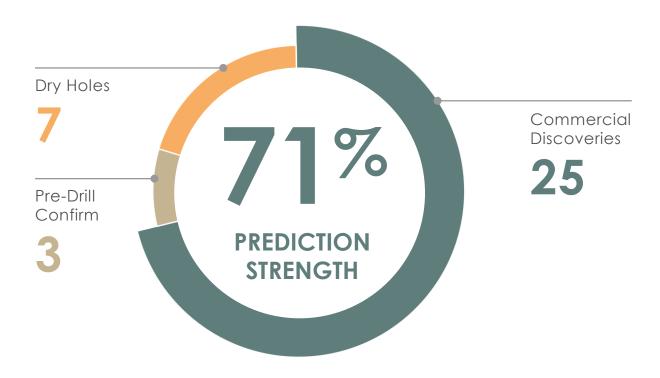


Source: www.netl.doe.gov (Rough Terrain - High Resolution 2D Seismic Cost)



MAXIMIZING EXPLORATION SUCCESS

From 2009 to 2024, **35 wildcat SFD® Recommendations** have been drilled internationally resulting in **25 new commercial discoveries** and only 7 dry holes

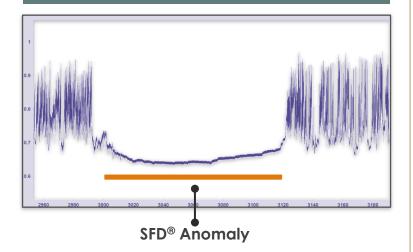






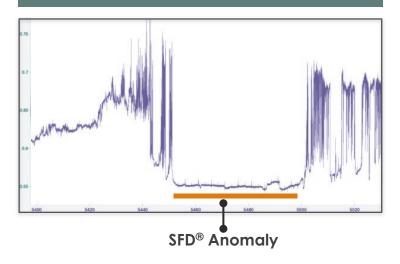
SAMPLE SFD® SIGNAL RESPONSES





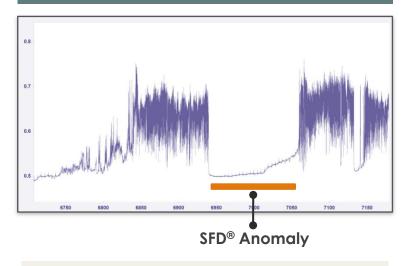
RESERVES
4,500 MMBBL

Gilby Field, Canada



RESERVES
325 MMBBL
1,830 BCF

Ladyfern Field, Canada

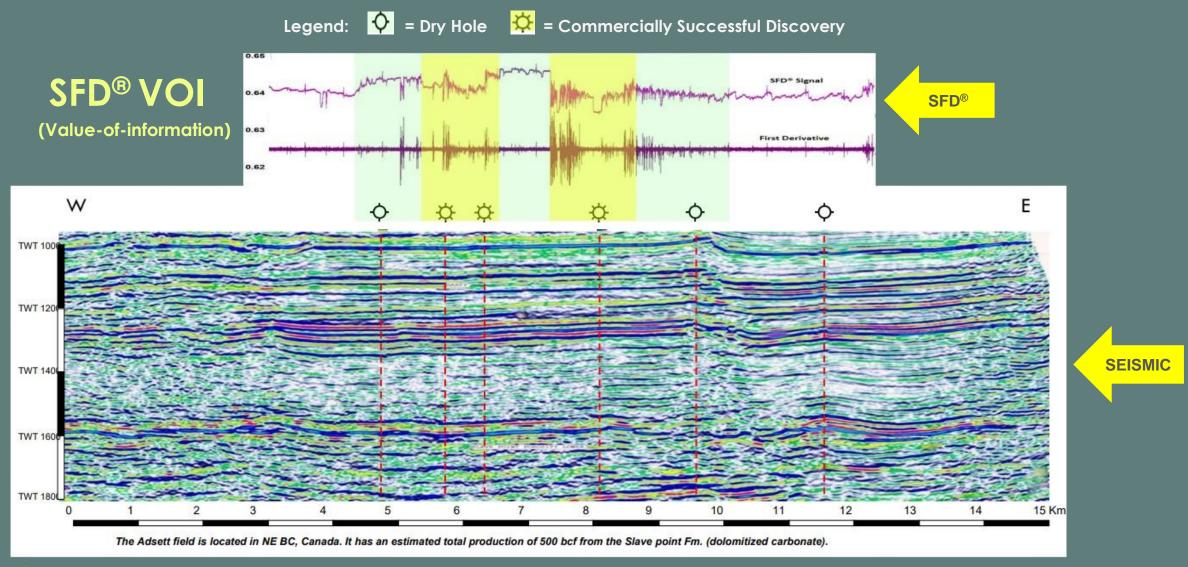


RESERVES 1,860 BCF

SFD®: The only tool that identifies trapped fluid at Stage 1 of exploration



SFD® PLUS SEISMIC A WINNING COMBINATION





SELECTED COMPANIES LEVERAGING OUR TECHNOLOGY











MEXICO - NOC



BOLIVIA - NOC



COLOMBIA - NOC

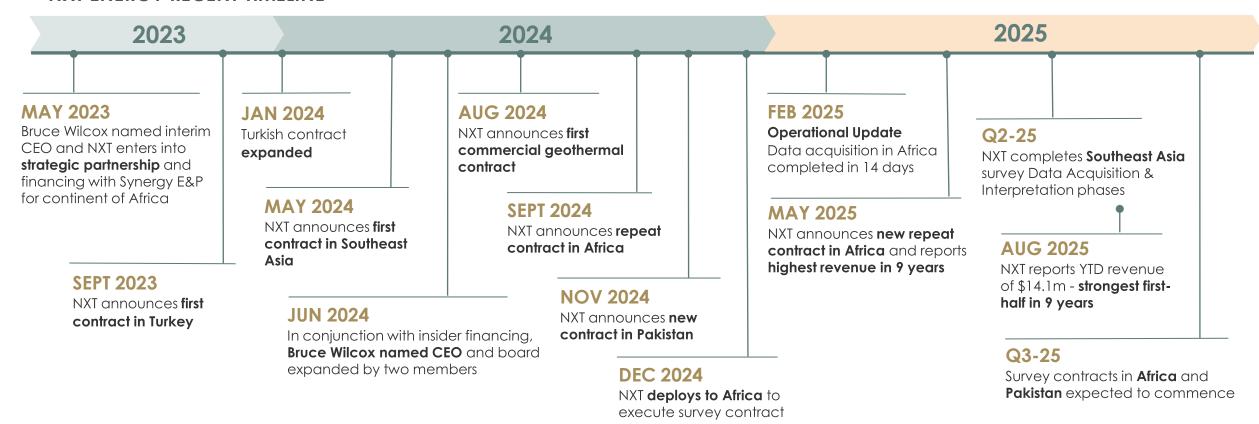


CANADA - INDEPENDENT

TURNING POINT:

New Leadership and Key Milestones

NXT ENERGY RECENT TIMELINE





GROWTH STRATEGY: FREQUENCY, ADJACENCY, AND REPEATABILITY

Building Client Base with Regional Successes and Strategic Expansion











RESEARCH AND DEVELOPMENT:

Geothermal Application of the SFD® Technology

ADVANCING INTO RENEWABLE ENERGY MARKETS

Leveraging SFD® technology for geothermal exploration.

SIMILAR SUBSURFACE FEATURES

Identifies crucial factors like porosity, permeability, and cap rock.

GOVERNMENT SUPPORT

Phase-1 of the National Research Council of Canada Industrial Research Assistance Program (IRAP) R&D grant secured for sensor modification and testing.

PROVEN REVENUE MODEL

Initial commercialization through a fee-for-service model.

GAINING INDUSTRY ACCEPTANCE

First commercial contract signed with Alberta Geothermal Resource Recovery Inc.





EXPERIENCED MANAGEMENT TEAM

Combined Decades of Experience in Energy and Public Markets



BRUCE G. WILCOX
Chief Executive Officer
Previously CEO Cumberland
Associates, LLC New York
Based Long/Short Equity Func



VP Finance and CFO
Previously Imaging Dynamics,
FMC Corporation



RASHID TIPPU

Director of Geoscience,
Asia, Africa, MEA

Previously Schlumberger, OMV



XIANG GUI, PH.D.

Director of Research &
Development

Co-Inventor SFD®



ENRIQUE HUNG

Director of Geoscience,
Americas & Europe

Previously Chevron, PDVSA



MOHAMMAD SAQIB
Head of Interpretation
and Operations



KEY TRADING FACTS







Trading Symbols	TSX:SFD/OTCQB:NSFDF
Corporate Headquarters	Calgary - Alberta, Canada
Stock Price (August 12, 2025)	C\$0.90 / US\$0.65
Outstanding Shares (August 11, 2025)	108.97M
Fully Diluted Shares (August 11, 2025)	118.27M
Market Cap (August 12, 2025)	C\$98.1M / US\$70.8M
Insider Ownership (August 11, 2025)	49.2%
FD Insider Ownership (August 11, 2025)	49.0%
52-Week Trading Range	C\$0.15 - C\$0.90 US\$0.095 - US\$0.65
Cash and Short-term Investments (June 30, 2025)	C\$2.15M
Debt Excluding operating leases (June 30, 2025)	C\$3.51M
Trailing 12M Revenue (June 30,2025)	C\$14.16M



SUMMARY

- FAST, CLEAN, COST EFFECTIVE & ACCURATE
- INCREASING INDUSTRY ACCEPTANCE & RECOGNITION
- NEW REGIONAL BUSINESS GROWTH STRATEGY: FREQUENCY, ADJACENCY & REPEATABILITY
- HIGHEST YEAR-TO-DATE REVENUE IN 9 YEARS
- NEW SURVEYS COMMENCING IN Q3 2025



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Energy Solutions

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