



NXT ANNOUNCES CLOSING OF FIRST TRANCHE OF US\$2.3 MILLION CONVERTIBLE DEBENTURE, NEW BOARD MEMBER AND REVISED AGM DATE

CALGARY, AB, June 5 2023 – NXT Energy Solutions Inc. ("NXT" or the "Company") (TSX: SFD; OTCQB: NSFDF) is pleased to announce it has received US\$1.2 million of the previously announced US\$2.3 million convertible debenture from Ataraxia Capital, an affiliate of Synergy E&P Technologies Limited ("Ataraxia"). Ataraxia intends to advance the remaining amount in the near future.

The securities described herein have not been, and will not be, registered under the United States Securities Act of 1933, as amended (the "1933 Act"), or any state securities laws, and accordingly, may not be offered or sold within the United States except in compliance with the registration requirements of the 1933 Act and applicable state securities requirements or pursuant to exemptions therefrom. This news release shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of the securities in the United States or in any other jurisdiction in which such offer, solicitation or sale would be unlawful.

New Board Member

The Company is also pleased to announce that Mr. Theodore Patsellis is joining the Board of Directors as the representative for Ataraxia as per the terms of the convertible debenture. Mr. Patsellis is a Greek attorney admitted to the Athens Bar Association in 1996, a Greek Ministry of Justice certified Mediator, and the Owner of a Law firm since 2013. He holds a Bachelor Degree from the Athens Capodistrian Law University and an LL.M. degree from the Ludwig-Maximilian University of Munich. Having worked for many years with Ernst & Young, Hill International Inc. and other renowned law firms, Mr. Patsellis has acquired extensive experience working in diversified environments and a variety of business cultures. With a strong German background and the experience of having lived and worked in Germany, Greece, Serbia and Romania as a lawyer and tax professional, he was able to lead a team of professionals involved in large business transactions in the South-East European region. His expertise comprises M&A, Corporate, Transaction Law, Local and International taxation, Corporate Governance and Compliance. His industry knowledge ranges from the Telecommunications and Energy sectors to the Retail, Hospitality and Consumer Products, Pharmaceuticals, and Real Estate. He is currently sitting on the Board of Directors of PANA Holdings in Mauritius and Vivid Living Co. S.A. in Greece.

NXT's Annual Meeting

NXT has rescheduled its annual meeting of shareholders to August 2, 2023 to allow shareholders to approve the Company's new auditor, MNP LLP. The meeting will be held in Calgary, Alberta and the new record date is June 28, 2023.

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 traps and reservoirs with hydrocarbon and geothermal exploration 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 final amount of funds to be raised under the Convertible Debenture. 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 Annual Information Form for the year ended December 31, 2022 and MD&A for the three month period ended March 31, 2023, which have 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.