



NXT RECEIVES PAYMENT TOWARDS THE CLOSING OF SECOND TRANCHE OF THE US\$2.3 MILLION CONVERTIBLE DEBENTURE

CALGARY, AB, July 10 2023 – NXT Energy Solutions Inc. ("NXT" or the "Company") (TSX: SFD; OTCQB: NSFDF) is pleased to announce it has received an additional US\$0.2 million of the previously announced US\$2.3 million convertible debenture from Ataraxia Capital, an affiliate of Synergy E&P Technologies Limited ("Ataraxia"). The total amount received to date is US\$1.4 million. The terms of the US\$1.4 million of the Convertible Debenture received to date include an interest rate of 10%, paid quarterly, and a fixed conversion price of CAD\$0.194 (US\$0.143) per common share. Ataraxia intends to advance the remaining US\$900,000 in the near future with the conversion price adjusted to reflect the higher market price of NXT's shares.

The proceeds from the Convertible Debenture will fund general and administrative costs including business development and marketing activities to convert NXT's existing opportunity pipeline into firm contracts.

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.

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.

Contact Information

For investor and media inquiries please contact:

Eugene Woychyshyn
Vice President of Finance & CFO
302, 3320 – 17th AVE SW
Calgary, AB, T3E 0B4
+1 403 206 0805
nxt_info@nxtenergy.com
www.nxtenergy.com

Michael Baker
Investor Relations
302, 3320 – 17th AVE SW
Calgary, AB, T3E 0B4
+1 403 264 7020
nxt_info@nxtenergy.com
www.nxtenergy.com

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 and the future conversion price of 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.