

NanoXplore Announces Successful Commissioning of Graphene-enhanced Silicon and Anode Active Material Pilot Lines

MONTREAL, Dec. 19, 2023 -- NanoXplore Inc. ("NanoXplore" or "the Corporation") (TSX: GRA and OTCQX: NNXPF), a world-leading graphene company, proudly announces the successful commissioning of two anode material pilot lines, achieving remarkable energy density and product validation. This marks a pivotal moment in NanoXplore's ongoing commitment to advancing sustainable energy storage solutions.

NanoXplore's proprietary silicon graphene technology (SiG™) produced in the pilot line, has achieved an outstanding energy density of 1150 Wh/L, and demonstrated compatibility with conventional graphite anodes, resulting in an energy density of over 800 Wh/L. NanoXplore remains dedicated to pushing the boundaries of energy storage capabilities using its advanced materials technology. The SiG™ family is supported by 11 patents which cover a range of different chemistries and extend to all cylindrical cell form factors.

The commissioning of SiG™ pilot line was completed in September 2023, marking a timely achievement in line with our strategic goals. The current commissioned capacity is 100 tons per year. The anode material has been successfully validated in 21700 cylindrical cells further emphasizing the adaptability and compatibility of the technology with established cell form-factors.

By leveraging low-cost feedstock, the Corporation ensured cost competitiveness in the market and positioned itself as a leader in delivering high-performance energy storage solutions at an economical price point.

Additionally, we are excited to announce key highlights of SG-X™ pilot line commissioning, featuring three coated spherical purified graphite (CSPG) anode materials. We have three validated and available CSPG products, covering a wide range of performances and applications. This diversity enables NanoXplore to address a broad spectrum of market needs with tailored solutions.

The commissioning of the CSPG pilot line is now completed and can operate with a capacity of 200 tons per year.

NanoXplore's CEO, Soroush Nazarpour, expressed enthusiasm about these successes: "As we mark the commissioning and validation of our two anode material pilot lines, I would like to underscore NanoXplore's dedication to innovation in the battery space and commitment to delivering cost-competitive, and high-performance solutions that redefine the energy storage landscape. The outstanding energy density achieved with our silicon graphene technology demonstrates the transformative potential of our advancements. With our CSPG products, we are committed to offering diverse, tailored solutions to meet our customers' evolving needs. Both these materials are currently being used in VoltaXplore's batteries and are important technology differentiators for VoltaXplore's business and its upcoming gigafactory."

About NanoXplore

NanoXplore is a graphene company, a manufacturer and supplier of high-volume graphene powder for use in transportation and industrial markets. Also, the Corporation provides standard and custom graphene-enhanced plastic and composite products to various customers in transportation, packaging, electronics, and other industrial sectors. The Corporation is also a silicon-graphene-enhanced Li-ion battery manufacturer for the Electric Vehicle and grid storage markets. NanoXplore is headquartered in Montreal, Quebec with manufacturing facilities in Canada, the United States and Europe.

Forward-Looking Statements

This press release contains forward-looking statements and forward-looking information (together, "forward-looking statements") within the meaning of applicable securities laws. All statements, other than statements of historical facts, are forward-looking statements, and subject to risks and uncertainties. All forward-looking statements are based on our beliefs as well as assumptions based on information available at the time the assumption was made and on management's experience and perception of historical trends, current conditions and expected future developments, as well as other factors deemed appropriate in the circumstances. No assurance can be given that these assumptions and expectations will prove to be correct. Forward-looking statements are not facts, but only predications and can generally be identified by the use of statements that include phrases such as "anticipate", "believe", "continue", "could", "estimate", "foresee", "grow", "expect", "plan", "intend", "forecast", "future", "guidance", "may", "predict", "project", "should", "strategy", "target", "will" or similar expressions suggesting future outcomes.

Forward-looking information is not a guarantee of future performance and involves a number of risks and uncertainties. Such forward-looking information necessarily involves known and unknown risks and uncertainties, including the relevant assumptions and risks factors set out in NanoXplore's most recent annual management discussion and analysis filed on SEDAR+ at www.sedarplus.ca, which may cause NanoXplore's actual results to differ materially from any projections of future results expressed or implied by such forward-looking information. These risks, uncertainties and other factors include, among others, the uncertain and unpredictable condition of global economy, notably as a consequence of the Covid-19 pandemic. Any forward-looking information is made as of the date hereof and, except as required by law, NanoXplore does not undertake any obligation to update or revise any forward-looking statement as a result of new information, subsequent events or

otherwise.

Forward-looking statements reflect management's current beliefs, expectations and assumptions and are based on information currently available to management. Readers are cautioned not to place undue reliance on forward-looking statements, as there can be no assurance that the future circumstances, outcomes or results anticipated or implied by such forward-looking statements will occur or that plans, intentions or expectations upon which the forward-looking statements are based will occur. By their nature, forward-looking statements involve known and unknown risks and uncertainties and other factors that could cause actual results to differ materially from those contemplated by such statements.

No securities regulatory authority has either approved or disapproved the contents of this press release.

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