

# NioCorp Launches Phased Approach to Commercial Production of Made-in-America Aluminum-Scandium Master Alloy

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NioCorp Partnering with Nanoscale Powders LLC to Explore the Possibility of Establishing the First US-Based Mine-to-Master-Alloy Vertically Integrated Production of the High-Performance Material

NioCorp's Potential Commercial Production of Al-Sc Master Alloy Could Launch Prior to the Company's Planned Production of >100 Tonnes/Year of Scandium Oxide at its Proposed Elk Creek Critical Minerals Project in Nebraska and Would Use Scandium Produced at the Elk Creek Facility as well as From Other Sources

China Now Dominates the Scandium World, but North America is Now Positioned to Emerge as a "Leading Scandium Producer," says NioCorp CEO

CENTENNIAL, May 29, 2023 - [NioCorp Developments Ltd.](#) ("NioCorp" or the "Company") (NASDAQ:NB)(TSX:NB) today announced its intent to launch a phased approach to commercial-scale production of aluminum-scandium ("Al-Sc") master alloy in the US for commercial and defense applications. Coupled with the Company's intended plans to produce more than 100 tonnes per year of scandium oxide from its proposed Elk Creek Critical Minerals Project (the "Elk Creek Project") in southeast Nebraska, and depending upon the results of the Al-Sc master alloy initiative, receipt of necessary funding and other factors, the initiative could establish the US as a leading producer of scandium, according to NioCorp CEO and Executive Chairman Mark A Smith.

Under an exclusive agreement with Boston-based Nanoscale Powders LLC ("Nanoscale") the initial work is expected to result in the production of several ingots of Al-Sc master alloy at potentially commercial amounts of scandium content using a proprietary process developed by Nanoscale that increases efficiency and reduces environmental impacts of Al-Sc production over traditional approaches.

The addition of scandium to aluminum alloys produces a much stronger alloy that reduces weight, improves corrosion resistance, and allows for reliable welding operations. Al-Sc alloy has large emerging applications in automotive and mass transit systems, commercial aviation, space, and defense markets. The traditional method of introducing scandium into Al-Sc alloys is via a master alloy containing 98% aluminum and 2% scandium. NioCorp's and Nanoscale's goal is to demonstrate the ability to make Al-Sc master alloy containing up to 5% scandium.

NioCorp and Nanoscale plan to first demonstrate Nanoscale's technology at pilot scale using purchased scandium feedstock. If proven to be technologically and economically feasible, the goal would be to ramp up commercial production of Al-Sc master alloy prior to the Company's production of scandium oxide at its planned Elk Creek Project once sufficient financing is obtained to allow the Al-Sc master alloy initiative and the Elk Creek Project to proceed to commercial operation. NioCorp believes that providing commercial and defense markets with Al-Sc master alloy will stimulate increased consumption of scandium, which has long been constrained by a lack of supply outside of China.

"Scandium is a game-changer for electric vehicles, mass transit systems, aerospace and defense platforms, and a host of other technologies needed to reduce the carbon intensity of our economy and our world," said Mark A. Smith, CEO and Executive Chairman of NioCorp. "With existing and highly regarded producers such as Rio Tinto, NioCorp's plans to produce more than 100 tonnes per year of scandium oxide and vertically integrating from the mine to the master alloy could enable North America to become a leading scandium producer. I look forward to seeing this initiative move forward and to putting Nebraska and the US in a position of global leadership in the production of scandium and aluminum-scandium alloys."

"In our view, the key to accelerated market uptake of scandium is to provide reliable supplies of Al-Sc master alloy, particularly in a vertically integrated fashion here in the US," said Scott Honan, Chief Operating Officer of NioCorp. "We evaluated a range of options, and Nanoscale and its proven technology provided the most robust solution as we explore the possibility of producing Al-Sc master alloy."

"We look forward to eventually establishing aluminum-scandium master alloy production in the U.S. with NioCorp and ramping up to commercial scale as rapidly as possible," said Andrew Matheson, CEO and a co-founder of Nanoscale. "The growing recognition of scandium's remarkable properties as an alloying agent with aluminum presents many exciting opportunities in both commercial and defense markets, and there clearly is strong latent demand for this material."

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#### FOR MORE INFORMATION:

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#### ABOUT NIOCORP

NioCorp is developing a critical minerals project in Southeast Nebraska that will produce niobium, scandium, and titanium. The Company also is evaluating the potential to produce several rare earths from the Project. Niobium is used to produce specialty alloys as well as High Strength, Low Alloy ("HSLA") steel, which is a lighter, stronger steel used in automotive, structural, and pipeline applications. Scandium is a specialty metal that can be combined with aluminum to make alloys with increased strength and improved corrosion resistance. Scandium is also a critical component of advanced solid oxide fuel cells. Titanium is used in various lightweight alloys and is a key component of pigments used in paper, paint and plastics and is also used for aerospace applications, armor, and medical implants. Magnetic rare earths, such as neodymium, praseodymium, terbium, and dysprosium are critical to the making of Neodymium-Iron-Boron ("NdFeB") magnets, which are used across a wide variety of defense and civilian applications.

#### ABOUT NANOSCALE POWDERS LLC

Nanoscale Powders LLC was founded in Boston in 2008 with an initial focus on energy materials, and particularly solar quality silicon ("polysilicon") for solar electricity applications. Our first reactors produced low boron, low phosphorous, 99.9999% purity silicon metal from standard commercial chemicals. Through several subsequent generations of pilot plant design, we have evolved and broadened our technology, and today can offer a range of metal compositions based on our proprietary and patented processes. We are especially focused on titanium metal, alloys, and intermetallic powders. We have also demonstrated a broad range of refractory metals and alloys, including hafnium and nickel-based powders. In addition, we have produced silicon alloy powders for next-generation lithium ion anode development.

#### FORWARD-LOOKING STATEMENTS

This press release contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995 and forward-looking information within the meaning of applicable Canadian securities laws. Forward-looking statements may include, but are not limited to, statements about NioCorp's expectation and ability to mine ore from the Elk Creek Project, NioCorp launching a phased approach to eventual commercial production of Al-Sc master alloy, the results of the Nanoscale technology at pilot scale and its impact on potential future production levels and efficiency, NioCorp's plans to produce scandium oxide and Al-Sc master alloy and the anticipated production levels of same, market demand for scandium and scandium alloys, the US' ability to emerge as a leading scandium producer, NioCorp's ability to obtain sufficient project financing to launch construction of the Elk Creek Project and move it to commercial production, and NioCorp's expectation and ability to produce niobium, scandium, and titanium at the Elk Creek Project. Forward-looking statements are typically identified by words such as "plan," "believe," "expect," "anticipate," "intend," "outlook," "estimate," "forecast," "project," "continue," "could," "may," "might," "possible," "potential," "predict," "should," "would" and other similar words and expressions, but the absence of these words does not mean that a statement is not forward-looking.

The forward-looking statements are based on the current expectations of the management of NioCorp and are inherently subject to uncertainties and changes in circumstances and their potential effects and speak only as of the date of such statement. There can be no assurance that future developments will be those that have been anticipated. Such expectations and assumptions are inherently subject to uncertainties and contingencies regarding future events and, as such, are subject to change. Forward-looking statements involve a number of risks, uncertainties or other factors that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, those discussed and identified in public filings made by NioCorp with the SEC and with the applicable Canadian securities regulatory authorities and the following: the success of the Nanoscale technology at pilot scale and its impact on NioCorp's potential production of Al-Sc master alloy; NioCorp's ability to recognize the anticipated benefits of the business combination with GX Acquisition Corp. II (the "Business Combination") and the standby equity purchase agreement (the "Yorkville Equity Facility Financing Agreement" and, together with the Business Combination, the "Transactions") with YA II PN, Ltd., an investment fund managed by Yorkville Advisors Global, LP, including NioCorp's ability to access the full amount of the expected net proceeds under the Yorkville Equity Facility Financing Agreement over the next three years; unexpected costs related to the Transactions; the outcome of any legal proceedings that may be instituted against NioCorp following closing of the Transactions; NioCorp's ability to receive a final commitment of financing from the Export-Import Bank of the United States on the anticipated timeline, on acceptable terms, or at all; NioCorp's ability to continue to meet the listing standards of The Nasdaq Stock Market LLC; NioCorp's ability to operate as a going concern; risks relating to NioCorp's common shares, including price volatility, lack of dividend payments and dilution or the perception of the likelihood any of the foregoing; NioCorp's requirement of significant additional capital; the extent to which NioCorp's level of indebtedness and/or the terms contained in agreements governing NioCorp's indebtedness or the Yorkville Equity Facility Financing Agreement may impair NioCorp's ability to obtain additional financing; covenants contained in agreements with NioCorp's secured creditors that may affect its assets; NioCorp's limited operating history; NioCorp's history of losses; the restatement of NioCorp's consolidated financial statements as of and for the fiscal years ended June 30, 2022 and 2021 and the interim periods ended September 30, 2021, December 31, 2021, March 31, 2022, September 30, 2022, and December 31, 2022 and the impact of such restatement on NioCorp's future financial statements and other financial measures; the material weakness in NioCorp's internal control over financial reporting, NioCorp's efforts to remediate such material weakness and the timing of remediation; the possibility that NioCorp may qualify as a passive foreign investment company under the U.S. Internal Revenue Code of 1986, as amended (the "Code"); the potential that the Transactions could result in NioCorp becoming subject to materially adverse U.S. federal income tax consequences as a result of the application of Section 7874 and related sections of the Code; cost increases for NioCorp's exploration and, if warranted, development projects; a disruption in, or failure of, NioCorp's information technology systems, including those related to cybersecurity; equipment and supply shortages; current and future off take agreements, joint ventures, and partnerships; NioCorp's ability to attract qualified management; the effects of the COVID-19 pandemic or other global health crises on NioCorp's business plans, financial condition and liquidity; estimates of mineral resources and reserves; mineral exploration and production activities; feasibility study results; the results of metallurgical testing; changes in demand for and price of commodities (such as fuel and electricity) and currencies; competition in the mining industry; changes or disruptions in the securities markets; legislative, political or economic developments, including changes in federal and/or state laws that may significantly affect the mining industry; the impacts of climate change, as well as actions taken or required by governments related to strengthening resilience in the face of potential impacts from climate change; the need to obtain permits and comply with laws and regulations and other regulatory requirements; the timing and reliability of sampling and assay data; the possibility that actual results of work may differ from projections/expectations or may not realize the perceived potential of NioCorp's projects; risks of accidents, equipment breakdowns, and labor disputes or other unanticipated difficulties or interruptions; the possibility of cost overruns or unanticipated expenses in development programs; operating or technical difficulties in connection with exploration, mining, or development activities; management of the water balance at the Elk Creek Project site; land reclamation requirements related to the Elk Creek Project; the speculative nature of mineral exploration and development, including the risks of diminishing quantities of grades of reserves and resources; claims on the title to NioCorp's properties; potential future litigation; and NioCorp's lack of insurance covering all of NioCorp's operations.

Should one or more of these risks or uncertainties materialize or should any of the assumptions made by the management of NioCorp prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements.

All subsequent written and oral forward-looking statements concerning the matters addressed herein and attributable to NioCorp or any person acting on its behalf are expressly qualified in their entirety by the cautionary statements contained or referred to herein. Except to the extent required by applicable law or regulation, NioCorp undertakes no obligation to update these forward-looking statements to reflect events or

circumstances after the date hereof to reflect the occurrence of unanticipated events.

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