

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 6-K

**REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE
SECURITIES EXCHANGE ACT OF 1934**

For the month of July, 2023

001-41208

(Commission File Number)

NOVONIX LIMITED

(Translation of registrant's name into English)

Level 38

71 Eagle Street

Brisbane, QLD 4000 Australia

(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.
Form 20-F Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

FORWARD-LOOKING STATEMENTS

The Australian Securities Exchange (“ASX”) announcement filed as Exhibit 99.1 hereto contains forward-looking statements about us and our industry that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in such announcement are forward-looking statements. In some cases, you can identify forward-looking statements because they contain words such as “anticipate,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “will,” or “would,” or the negative of these words or other similar terms or expressions. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements are subject to a number of known and unknown risks, uncertainties, other factors and assumptions, including those factors identified in our filings with the U.S. Securities and Exchange Commission. We undertake no obligation to update any forward-looking statements made in the ASX announcement filed as Exhibit 99.1 hereto to reflect events or circumstances after the date of such announcement or to reflect new information or the occurrence of unanticipated events, except as required by law. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements.

EXHIBIT INDEX

| <u>Exhibit No.</u> | <u>Description</u> |
|---------------------------|---|
| Exhibit 99.1 | <u>ASX Announcement (Cathode Pilot Line), dated July 20, 2023</u> |

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

NOVONIX LIMITED

By: /s/ Dr. John Christopher Burns
Dr. John Christopher Burns
Chief Executive Officer

Date: July 20, 2023

NOVONIX Commissions Zero-Waste Cathode Pilot Line

All-Dry Cathode Material Performance Matches Leading Commercial Alternatives

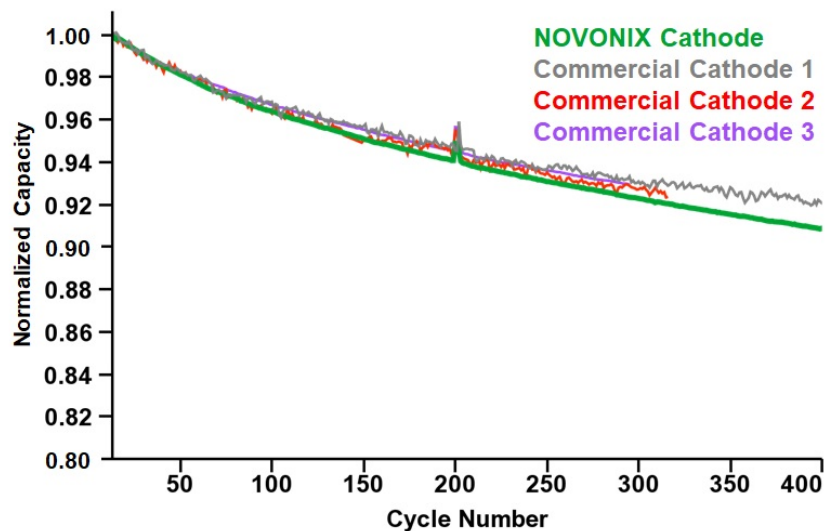
BRISBANE, Australia, July 20, 2023 – NOVONIX Limited (NASDAQ: NVX, ASX: NVX) (“NOVONIX” or the “Company”), a leading battery materials and technology company, announced its Battery Technology Solutions division successfully completed the commissioning of its 10 tonnes per annum (TPA) cathode pilot line. The cathode pilot line’s first product, a mid-nickel grade of single-crystal cathode material (“NMC622”), produced using NOVONIX’s patent-pending, all-dry, zero-waste synthesis technology, matches the performance of leading cathode materials from existing suppliers in full-cell testing. NOVONIX will use the pilot line to further demonstrate the manufacturability of the Company’s long-life cathode materials and technology, including high-nickel (e.g., NMC811) and cobalt-free materials, along with their performance in industrial format lithium-ion cells.

Dr. Chris Burns, CEO of NOVONIX, noted, “NOVONIX’s all-dry, zero-waste cathode synthesis demonstrates our efforts to remain at the forefront of product and processing technology for the battery industry. Our Battery Technology Solutions division is actively developing innovative battery materials that enable simplified, improved performance as well as more environmentally sustainable manufacturing processes necessary for the North American battery ecosystem. This capability places us in a unique position to serve the nickel-based cathode material market, which we and industry experts believe will require over 3 million tonnes per annum and represent an over \$100B market opportunity by 2030. This complements our anode material business as we look to become a major supplier of anode and cathode materials and technologies outside of Asia.”

NOVONIX increased its investment in its proprietary cathode synthesis technology over the past two years. The patent-pending process – and the innovations resulting from it – are transformational for the battery industry, decreasing processing complexity which should result in a substantial reduction in costs and waste (e.g., elimination of sodium sulfate) in the cathode manufacturing process.

The NMC622 cathode material serves as a platform to expand upon the all-dry process into high-nickel and cobalt-free chemistries, demonstrating the flexibility of the NOVONIX technology across a range of critical cathode materials. The Company previously shared performance data from their all-dry, mid-nickel cathode powder that was built into 1-Ah pouch battery cells, by leveraging their cell prototyping line, and benchmarked against commercial cathode powders of the same chemistry. The data, seen in the figure below, showed that cells containing NOVONIX all-dry, zero-waste cathode powder had similar capacity retention out to 400+ cycles as high-quality, commercial, mid-nickel, single-crystal cathode powders without any ‘finishing’ or surface treatments. Early physical property measurements of mid-nickel cathode powders produced on the 10 tpa pilot line indicate similar, if not superior, expected electrochemical performance from the scaled material.

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The positive performance results around NMC622 mark a critical step in enabling the Company to proceed with plans to scale larger test samples and begin commercial discussions with potential partners and customers for its cathode technology.

This announcement has been authorized for release by NOVONIX Chairman, Admiral Robert J. Natter, USN Ret.

About NOVONIX

NOVONIX is a leading battery technology company revolutionizing the global lithium-ion battery industry with innovative, sustainable technologies, high-performance materials, and more efficient production methods. The Company manufactures industry-leading battery cell testing equipment in Canada and is growing its high-performance synthetic graphite anode material manufacturing operations in the United States. Through advanced R&D capabilities, proprietary technology, and strategic partnerships, NOVONIX has gained a prominent position in the electric vehicle and energy storage solutions battery industry and is powering a cleaner energy future. To learn more, visit us at www.novonixgroup.com or on [LinkedIn](#), and [Twitter](#).

For NOVONIX Limited

Scott Espenshade, ir@novonixgroup.com (investors)

Lori Mcleod, media@novonixgroup.com (media)

Forward-Looking Statements

This communication contains forward-looking statements about the Company and the industry in which we operate. Forward-looking statements can generally be identified by use of words such as “anticipate,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “will,” or “would,” or other similar expressions. Examples of forward-looking statements in this communication include, among others, statements we make regarding our cathode technology and our plans to scale operations. We have based such statements on our current expectations and projections about

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future events and trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. Such forward-looking statements involve and are subject to known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such factors include, among others, the success of the technology results in industrial format lithium-ion cells, our ability to scale to other technologies, how discussions progress with potential buyers, and the accuracy of our estimates regarding market size, expenses, future revenue, capital requirements and needs for additional financing, and regulatory developments in the United States, Australia and other jurisdictions. Detailed information regarding these and other factors that could affect our business and results is included in our filings, including the Company's most recent transition and annual reports on Form 20-F, particularly the "Operating and Financial Review and Prospects" and "Risk Factors" sections of those reports. Copies of these filings may be obtained by visiting our Investor Relations website at www.novonixgroup.com or the SEC's website at www.sec.gov. Forward-looking statements are not guarantees of future performance or outcomes, and actual performance and outcomes may differ materially from those made in or suggested by the forward-looking statements contained in this communication. Accordingly, you should not place undue reliance on forward-looking statements. Any forward-looking statement in this communication is based only on information currently available to us and speaks only as of the date on which it is made. We undertake no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

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