



**ASX ANNOUNCEMENT**  
(ASX: **NVX**)

20 December 2021

## **Preliminary Results of Environmental Impact Study**

**NOVONIX Limited (ASX: NVX, OTCQX: NVN XF)** (“NOVONIX” or “the Company”) is excited to announce that the preliminary results from an assessment by an independent globally recognised sustainability and life cycle assessment consultancy shows NOVONIX Anode Material offers an approximate 60% decrease in CO<sub>2</sub> emissions in a lifecycle assessment.

NOVONIX has appointed Minviro Ltd. (“Minviro”), a UK-based and globally recognised sustainability and life cycle assessment consultancy, to conduct a life cycle assessment (LCA) on a grade of the Company’s synthetic graphite EV and ESS battery anode product, GX-23.

LCA is a robust, globally-recognised tool for quantifying the direct and embodied environmental impacts associated with a particular product or process. By taking into account all material and energy inputs, direct emissions and waste products within a given production process, LCAs provide a detailed account of the environmental footprint of a project and identify environmental ‘hotspots’ in process flows. LCAs go beyond simple carbon accounting and can quantify acidification potential, disease incidence related to particulate emissions and water use impacts, amongst other categories. Furthermore, the approach identifies scope 1, 2 and 3 CO<sub>2</sub> emissions (from the Greenhouse Gas Protocol) that are often overlooked in other methodologies and can contribute substantial environmental burdens to projects overall.

This current study involves a complete ‘cradle-to-gate’ assessment of a grade of synthetic graphite from NOVONIX Anode Materials division’s production process, and benchmarks all results against other natural and synthetic anode grade graphite projects. It will also explore impacts associated with the use phase of synthetic graphite anodes by contextualising the product’s environmental performance relative to the kWh of a final lithium-ion battery in an electric vehicle and kilometers travelled. All results will be reviewed by a third-party under ISO-compliance, ensuring all results are scientifically robust and transparent, for communication to the public.

Preliminary results, that have yet to be finalized and are not yet third-party peer reviewed, show that as compared to data extracted from graphite processing facilities in Inner Mongolia and Heilongjiang Provinces, China, NOVONIX Anode Material’s division’s GX-23 synthetic graphite product offers an approximate 60% decrease in CO<sub>2</sub> emissions. If final results, which will be third party peer reviewed, confirm this preliminary data, NOVONIX Anode Materials GX-23 product will show that it is 2.5x better for the environment than Chinese synthetic graphite EV and ESS battery anode material.



Dr. Chris Burns, CEO of NOVONIX states: "As we continue to see tremendous growth in demand for key battery materials such as synthetic graphite, cell manufacturers and automotive OEMs are not only looking for companies that can produce high performance materials at competitive costs but also those that prioritize environmental responsibility. We are excited to work with Minviro to evaluate our production technology compared to industry and look for opportunities to continue to lower the environmental impact of producing battery grade graphite."

Dr Robert Pell, Founder & Director of Minviro states: "We are excited to be working with NOVONIX on quantifying the impact of their production process, especially considering the importance of the material to the low-carbon transition".

NOVONIX's Anode Materials division is based in Chattanooga, Tennessee, North America, where it is scaling up capacity to produce 150,000 metric tons per year of synthetic graphite by 2030. The results of the Minviro-led LCA will help NOVONIX optimise its project's environmental performance and allow it to lead in sustainability-focused decision-making within the sector.

#### **About Minviro**

Minviro is a London based and globally recognized consultancy and technology company, specialising in carrying out life cycle assessments in the technology metal space. The company provides quantitative environmental and climate impact data for mineral resource projects, battery manufacturers and OEMs to make environmentally informed decisions

#### **About NOVONIX**

NOVONIX Limited is an integrated developer and supplier of high-performance materials, equipment and services for the global lithium-ion battery industry with operations in the U.S. and Canada and sales in more than 14 countries. NOVONIX's mission is to enable a clean energy future by producing longer-life and lower-cost battery materials and technologies.

This has been approved by NOVONIX Chairman, Robert J. Natter, Admiral, USN Ret.

#### **For NOVONIX Limited:**

[IR@novonixgroup.com](mailto:IR@novonixgroup.com) (investors)

[media@novonixgroup.com](mailto:media@novonixgroup.com) (media)

#### **For Minviro Limited:**

Dr Robert Pell  
Founder & CEO  
[robert@minviro.com](mailto:robert@minviro.com)