OCTOBER 2024

2024 Smoky Mountain Mobility Conference

NOVONIX™

Providing Revolutionary Solutions to the Battery Industry

Highlights

- Leading U.S. based battery materials and technology company with lower carbon footprint
- Binding offtake agreement with **Panasonic Energy** for synthetic graphite production beginning in 2025.
- US$100m Grant from the Department of Energy Manufacturing and Energy Supply Chains Office and US$103m Qualifying Advanced Energy Project Tax Credit to support Riverside buildout along with strategic investments from **LG Energy Solution** and **Phillips 66**.
- Patented all-dry, zero-waste NMC cathode synthesis process demonstrated at pilot scale – reducing cost and environmental footprint.
- Battery Technology Solutions provides competitive advantage to accelerate innovation

NOVONIX™

Riverside Facility in Chattanooga, Tennessee

Competitive Advantage Through Synergistic Operating Structure

NOVONIX™
ANODE MATERIALS

- Leading domestic supplier of battery-grade synthetic graphite
- Large scale and sustainable production to advance North American battery supply chain
- Strategically positioned to accelerate clean energy transition through proprietary technology, advanced R&D and partnerships

NOVONIX™
CATHODE MATERIALS

- Commercializing patented synthesis technology
- Process technology minimizes environmental impact while producing high performance materials
- Pilot line producing samples with total production capacity of up to 10 tpa

NOVONIX™
BATTERY TECHNOLOGY SOLUTIONS

- Develops industry leading Ultra-High Precision Coulometry cell testing equipment
- Offers R&D Services with in-house pilot line, cell testing, and expertise to accelerate customer development programs

NOVONIX is at the Forefront of Battery Technology

UHPC Hardware

Enables Quick Reliable Predictions of Battery Lifetime

UHPC

R&D Services

Materials Development and Characterization

Analytical materials lab

Cell Design and Prototyping

Pouch and cylindrical cell manufacturing pilot line

Cell Testing

Diagnostic tools and performance testing

NOVONIX Battery Technology Solutions (BTS) provides cutting edge technology that is highly sought after for R&D services to create the next generation battery — potentially accelerating R&D from years to weeks with proprietary technology

Cathode Materials

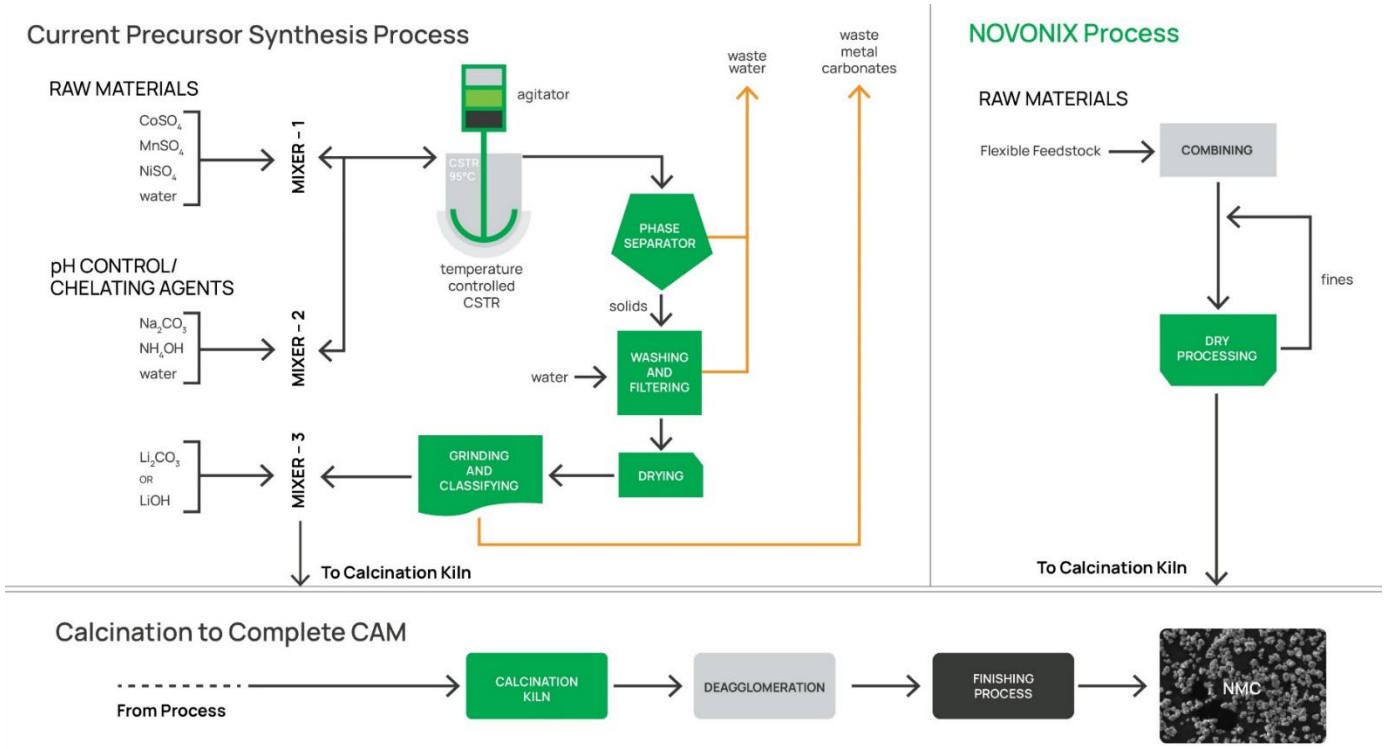
NOVONIX™

Patented Cathode Synthesis Provides Clean and Simple Process

Opportunity Overview

- In 2024 the global cathode active material (CAM) market size value estimated at US$27B, with a forecasted revenue of >US$100B by 2030[1]
- Nickel-based cathode material represents about 30-50% of the cost of a battery cell
- Each tonne of cathode powder generates 3,500-15,000[1,2] liters of water waste and 1-2 tonnes of sodium sulphate waste[1]
- With multiple patent applications filed, cathode synthesis technology provides high nickel cathode materials with:
  - Higher yields at lower costs
  - No water waste
  - Flexible input materials

A Closer Look at the NOVONIX All-Dry, Zero-Waste Synthesis Process



1. Mordor Intelligence, Benchmark Minerals, various Equity Research reports including Bernstein and JP Morgan and NOVONIX estimates
2. J.Power Sources: S. Ahmed, P.A. Nelson, K.G. Gallagher, N. Susarla, D.W. Dees. Cost and energy demand of producing nickel manganese cobalt cathode material for lithium-ion batteries

Cathode Synthesis: Engineering Scoping Study Results

NOVONIX engaged Hatch to provide a 'Process Comparison Study' by contrasting the **NOVONIX All-Dry, Zero-Waste Cathode Synthesis Process** against conventional cathode synthesis for comparative costs and environmental details.

Hatch Study Estimated Findings [FEL-1]

Capital Intensity Lowered by ~30 %	• Fewer unit operations leads to simplified flowsheet • Higher mass feed rate due to 'hydroxide-free' feedstock

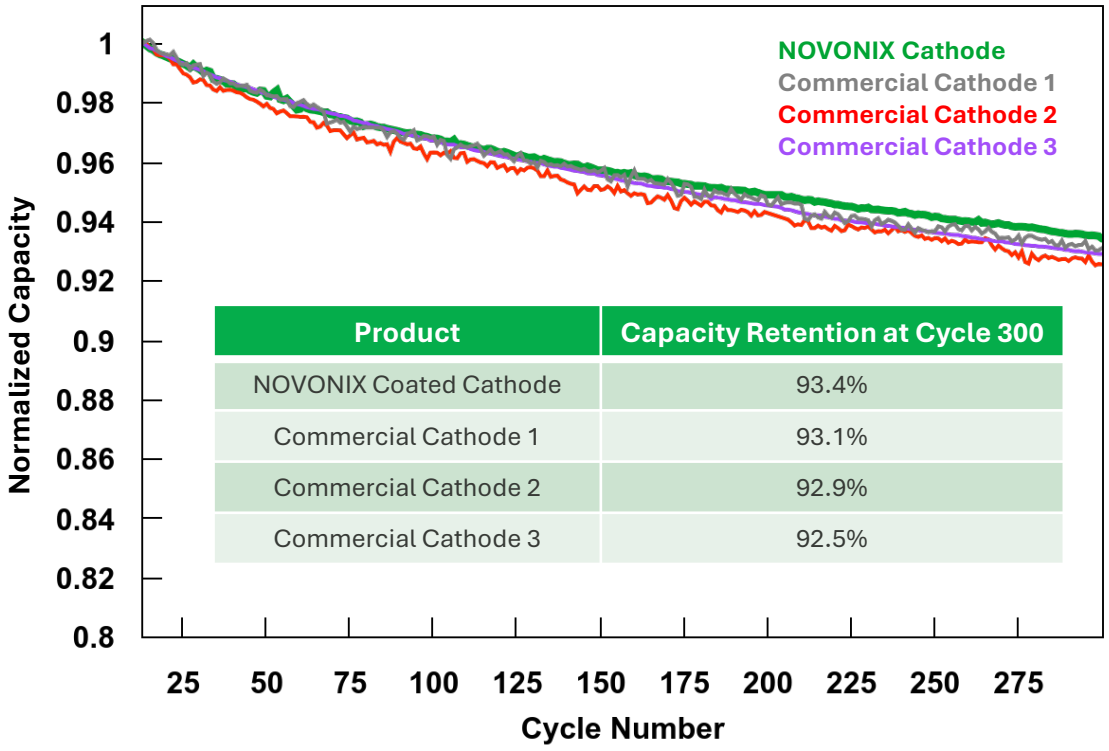
Operational Process Expenses Lowered by ~50%	• Fewer unit operations leads to lower labor costs
	• Low-to-no processing reagents
	• Lower power consumption
	  • More efficient calcination
	  • Fewer processing steps
	• Lower maintenance costs
	• Lower waste treatment costs

More Environmentally Friendly process	• ~27% lower power consumption & CO2 intensity • ~65% less water usage • Eliminates production of sodium sulphate biproduct • No ammonia required removing a significant safety risk

Note: Please see Hatch disclaimer shown in Sept 12, 2023 press release on Study description and estimates.

NMC622 Cathode Cycling Performance Competitive with Commercial Materials

Full-Cell Cycling Performance of NOVONIX Single-Crystal NMC622

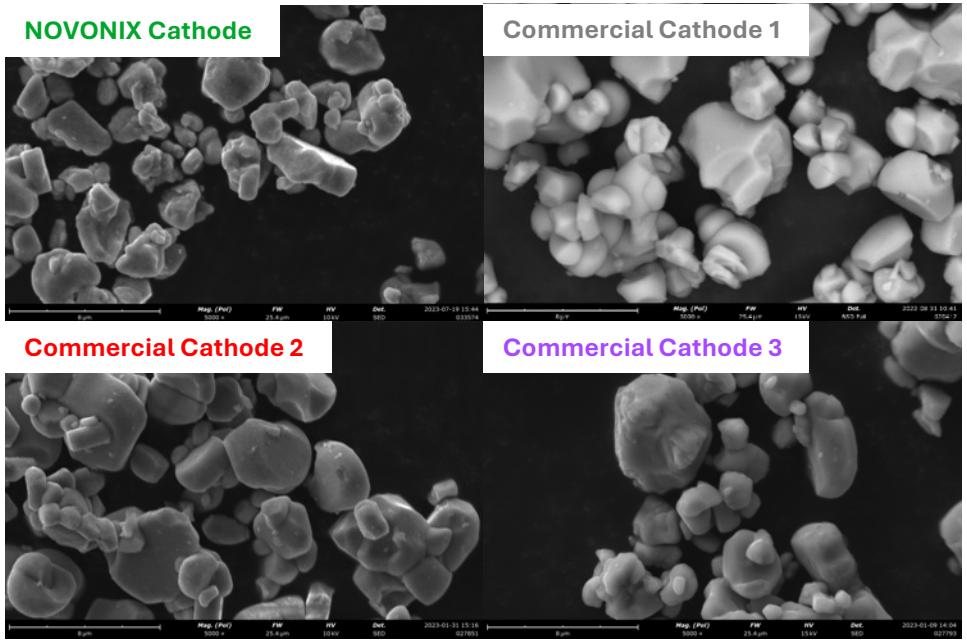


Product	Capacity Retention at Cycle 300
NOVONIX Coated Cathode	93.4%
Commercial Cathode 1	93.1%
Commercial Cathode 2	92.9%
Commercial Cathode 3	92.5%

40°C; 2.8-4.3V; 1.2M $LiPF_6$ EC:EMC:DMC(25:5:70)+3VC; [Charge] : CC-0.33C; [Discharge] : CC-0.33C

SEM Images of Single-Crystal NMC622

Normalized electrochemical results in 1Ah pouch cell show that surface-coated NOVONIX NMC622 has comparable electrochemical performance to commercial NMC materials



Anode Materials

NOVONIX™

NOVONIX is Localizing the Synthetic Graphite Supply Chain

NOVONIX Anode Material Progress & Advantages

Domestic Supply
Producing high-performance synthetic graphite materials sustainably for local supply of Tier 1 battery and OEM customers

High Performance
Our products are developed to meet or exceed Tier 1 EV OEMs specifications

Cleaner, More Efficient Technology
Produced with cleaner energy sources with virtually zero emissions and uses no chemicals harmful to the environment

Strategic Relationships
Leveraging close collaboration with partners and customers to bring our anode materials to market

Key Strategic Relationships

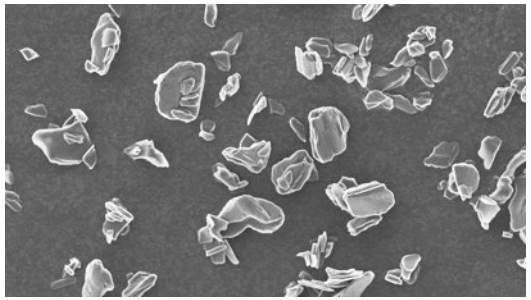
Customer Agreements Anchor Customers for Riverside Facility	Panasonic ENERGY KORE
Technology Agreements Progressing Qualification to Lead to Future Supply Agreements	LG Energy Solution PHILLIPS 66 PowerCo SAMSUNG SDI
Strategic Investors Invested US$180 Million	LG Energy Solution PHILLIPS 66
Strategic Suppliers Raw Material Suppliers and Technology	PHILLIPS 66 Harper International

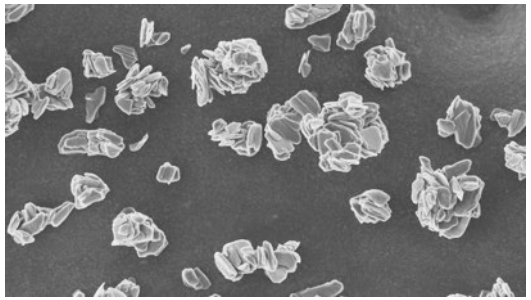
NOVONIX's Product Technology Advantage

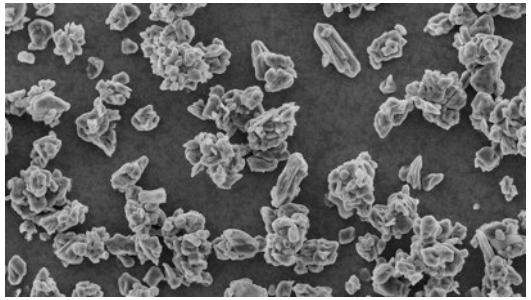
NOVONIX Advantage

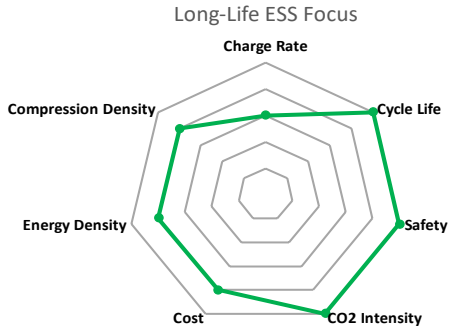
- Applications such as electric vehicles and energy storage systems require differing properties:
  - Fast Charge
  - High Energy Density
  - Long Cycle Life
- NOVONIX's proprietary process provides consistent, high performance synthetic graphite, utilizing low emissions processing
- Life Cycle Assessment[1] demonstrated a ~60% decrease in global warming potential

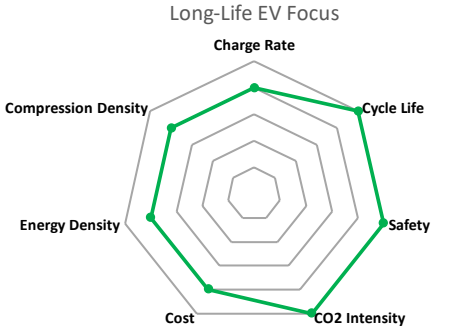
Product Engineered Specifically for Customers' Needs

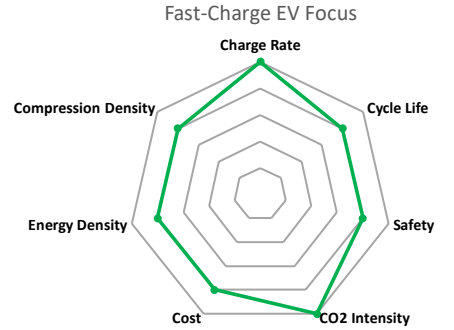








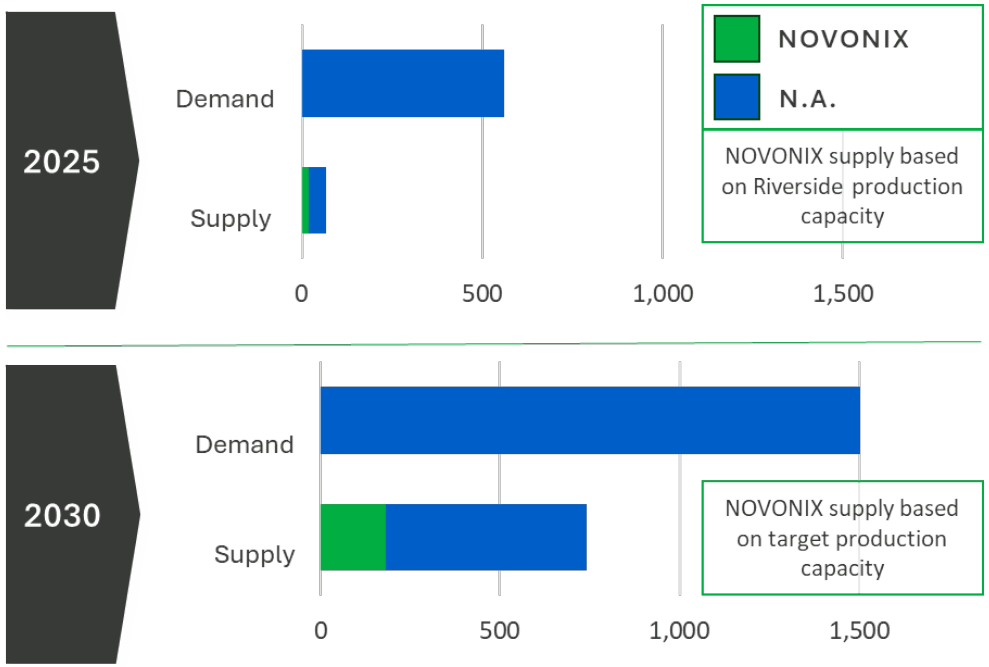




1. The Life Cycle Assessment (LCA) conducted by Minviro Ltd. demonstrated a ~60% decrease in global warming potential (GWP) relative to conventional anode grade synthetic graphite versus Chinese product.

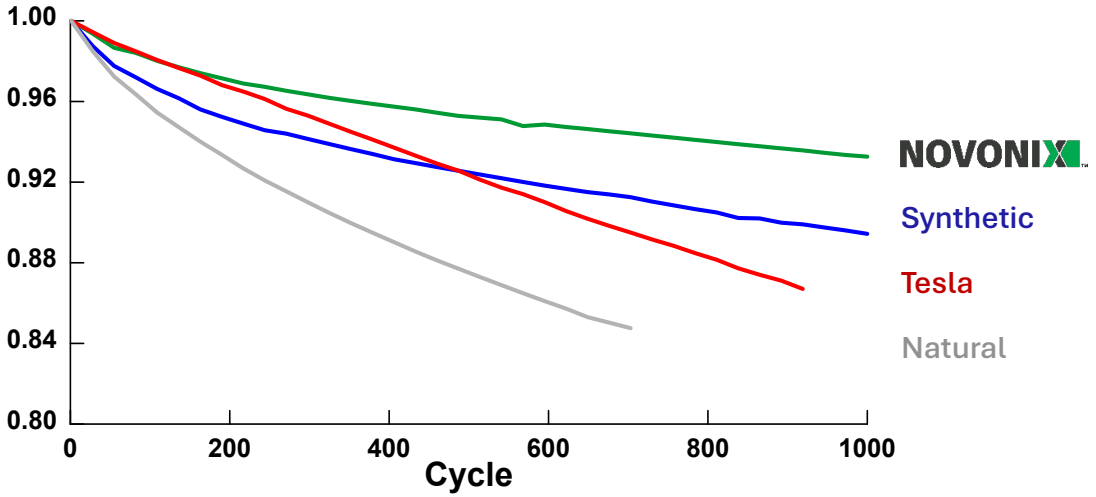
Production Capacity will Benefit From Expected Demand

North American Graphite Shortfall, Ex-China (K tpa)[1]



NOVONIX has agreements with Panasonic Energy, LGES, Kore Power, and PowerCo (cell manufacturing partners) and their facility plans account for ~42% of North American forecasted customer demand in 2030[1].

Anode Material Outperforms in Testing



- NOVONIX offers **improved capacity retention** compared to industry leading materials (including a Tesla Model S cell used as a reference benchmark)
- Better capacity retention means **less range loss over time** for an electric vehicle

1. Benchmark Minerals Intelligence (August 2024), Company Reports, NOVONIX estimates.

NOVONIX has Demonstrated Breakthrough Technology at Mass Production Scale

Acheson Furnace Facility, China

NOVONIX Generation 3 Continuous Induction Furnace Systems, Chattanooga, TN

Enabling Domestic US Supply Chain for EV Battery Grade Synthetic Graphite

Chinese Synthetic Graphite Supply Chain

1. Needle coke ships to Qingdao from Humber, UK **(12,500 miles)**

2. Road transport of precursor to grinding site near Shanghai **(450 miles)**

3. Road transport of ground needle coke to Inner Mongolia **(1,050 miles)**

4. Graphitization in Inner Mongolia powered by brown coal with no environmental standards or emissions controls

5. Road transport of graphite to southern China **(1,500 miles)**

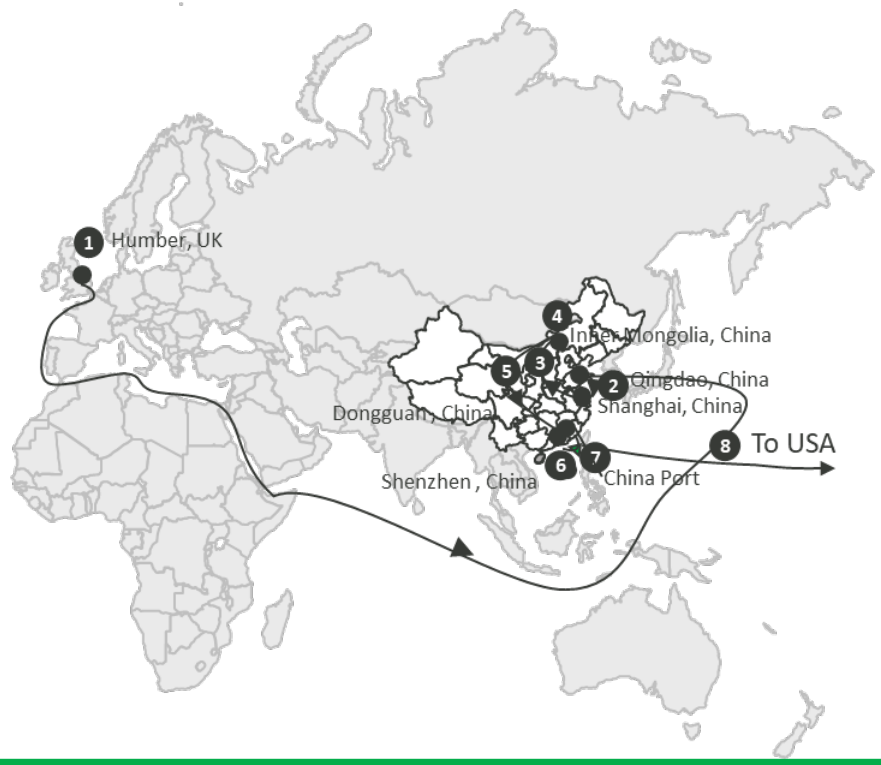
6. Processing of graphite into BAM

7. Land transport of BAM to China port **(50 miles)**

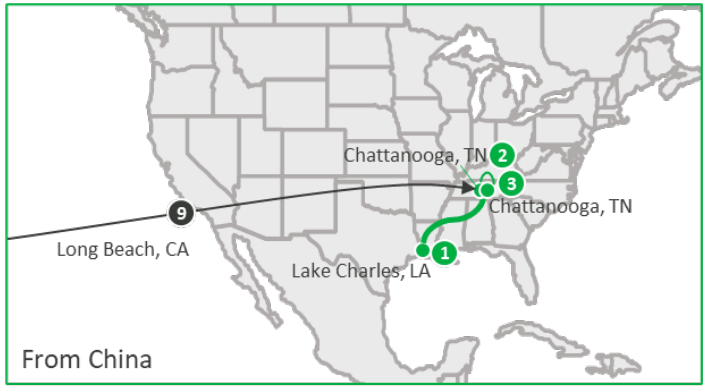
8. BAM ships to US port in CA **(7,300 miles)**

9. Land transport of BAM to end-user in TN **(1,800 miles)**

24,650 Total Miles



NOVONIX Supply Chain



1. Needle coke transported from Lake Charles, LA to Chattanooga, TN **(670 miles)**

2. All processing of precursor to BAM in Chattanooga under strict environmental standards

3. Delivery of BAM to end-user in Chattanooga, TN **(34 miles)**

LGES, for illustrative purposes

704 Total Miles

NOVONIX facilitates a cleaner, more secure, supply chain of high-quality synthetic anode material to the North American market vs. Chinese competitors

Our Proprietary Graphitization Process, Leading the Clean Energy Transformation

Inputs

- Clean Power Sources1
- Energy input 57% carbon-free (15% renewable) with target to be net-zero by 2050
- Highest Purity Input Materials
- Minimizes emissions and contaminants
- Sourcing Input Materials to use in Electric Vehicles and Energy Storage System Applications that would Otherwise be Used in Higher Emission Sectors

Process

- Proprietary Furnace Technology
- Increased energy efficiency
- No chemical purification

Outputs

- NOVONIX's Anode Materials Support Higher Performance Lithium-Ion Batteries Resulting in the Need for Less Future Input Materials
- Negligible Facility Emissions

The Life Cycle Assessment (LCA) conducted by Minviro Ltd. demonstrated a ~60% decrease in global warming potential (GWP) relative to conventional anode grade synthetic graphite produced in Inner Mongolia, China and a ~30% decrease in GWP when compared to the anode grade natural graphite in Heilongjiang Province, China

Anode Materials Phase 2

NOVONIX™

NOVONIX Anode Materials Phase 2

Greenfield Plan Overview

- A new Greenfield facility is planned to support an initial 30,000 tonnes per annum (tpa) by 2028, with potential to expand up to 75,000 tonnes
- Site selected and being held by state and county in Tennessee
- NOVONIX is advanced in the application process with the DOE Loan Programs Office for financing support for this new facility

Site Rendering

Greenfield Site Rendering

Goals for the Future of NOVONIX

Scaling anode materials production capacity to 150K tpa

Recognized battery technology leader

Forefront of product innovation

Patented, All-Dry Zero-Waste Cathode technology supported by our propriety processing

Highly developed IP with leading market positions

Foresee strong cash flow generation and margins

Proprietary Process Technologies Lead the Clean Energy Transformation

NOVONIX ESG Commitment

Environmental
Our mission is to develop innovative, sustainable technologies and high-performance materials to service the electric vehicle and energy storage industries

Social
The health, safety, and wellbeing of our employees and the communities we operate in are essential to NOVONIX's success and growth

Governance
NOVONIX believes corporate governance is central to its business objectives and a critical element contributing to the preservation of shareholder value

Environmental Benefits of NOVONIX Technology

	Anode Technology	Cathode Technology
Inputs	• Clean power sources[1] • High purity input materials	• Reduced power requirements • No reagents
Process	• Proprietary furnace and process technology • Increased energy efficiency • No chemical purification	• Proprietary all-dry, zero-waste cathode synthesis technology • Simplified processing requirements and flowsheet
Outputs	• Support higher-performance lithium-ion batteries resulting in longer life • Negligible facility emissions • LCA[2] demonstrated a ~60% decrease in global warming potential	• No sodium sulfate waste • Eliminates process waste-water • Negligible facility emissions

1. Tennessee Valley Authority, 2022 Sustainability Report notes 52% of power is from carbon-free sources.
2. The Life Cycle Assessment (LCA) conducted by Minviro Ltd. demonstrated a ~60% decrease in global warming potential (GWP) relative to conventional anode grade synthetic graphite versus Chinese product.

Contact Information

Corporate

Dr. Chris Burns, CEO

Robert Long, CFO

Suzanne Yeates, Secretary

Scott Espenshade, Investor Relations

Investor Relations: IR@novonixgroup.com

Media Relations: media@novonixgroup.com

NOVONIX Limited (ASX:NVX)
ACN 157 690 830
Level 38, 71 Eagle Street
Brisbane, QLD 4000 Australia

Operations

177 Bluewater Road
Bedford, Nova Scotia
Canada, B4B 1H1

110 Simmonds Drive
Dartmouth, Nova Scotia
Canada, B3B 1N9

NOVONIX™
BATTERY TECHNOLOGY SOLUTIONS

1029 West 19th Street
Chattanooga, Tennessee
USA, 37408

353 Corporate Place
Chattanooga, Tennessee
USA, 37419

NOVONIX™
ANODE MATERIALS


NOVONIX
TM