# NOVONIX

### NOVONIX LIMITED (ACN 157 690 830)



AGM Presentation

30 November 2021

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#### Industry and Market Data

This Presentation contains estimates and information concerning our industry and our business, including estimated market size and projected growth rates of the markets for our products. Unless otherwise expressly stated, we obtained this industry, business, market, and other information from reports, research surveys, studies and similar data prepared by third parties, industry, and general publications, government data and similar sources. This Presentation also includes certain information and data that is derived from internal research. While we believe that our internal research is reliable, such research has not been verified by any third party.

Estimates and information concerning our industry and our business involve a number of assumptions and limitations. Although we are responsible for all of the disclosure contained in this Presentation and we believe the third-party market position, market opportunity and market size data included in this Presentation are reliable, we have not independently verified the accuracy or completeness of this third-party data. Information that is based on projections, assumptions and estimates of our future performance and the future performance of the industry in which we operate is necessarily subject to a high degree of uncertainty and risk due to a variety of factors, which could cause results to differ materially from those expressed in these publications and reports.

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#### Contact Information

#### **Financial Summary**

STOCK INFORMATION @ 26 November 2021			
ASX Code	NVX		
ASX Share Price	A\$10.68		
52 Week Low – High	A\$1.01 – A\$11.35		
Shares on issue	482,563,962		
Market Capitalisation	A\$5.15B		

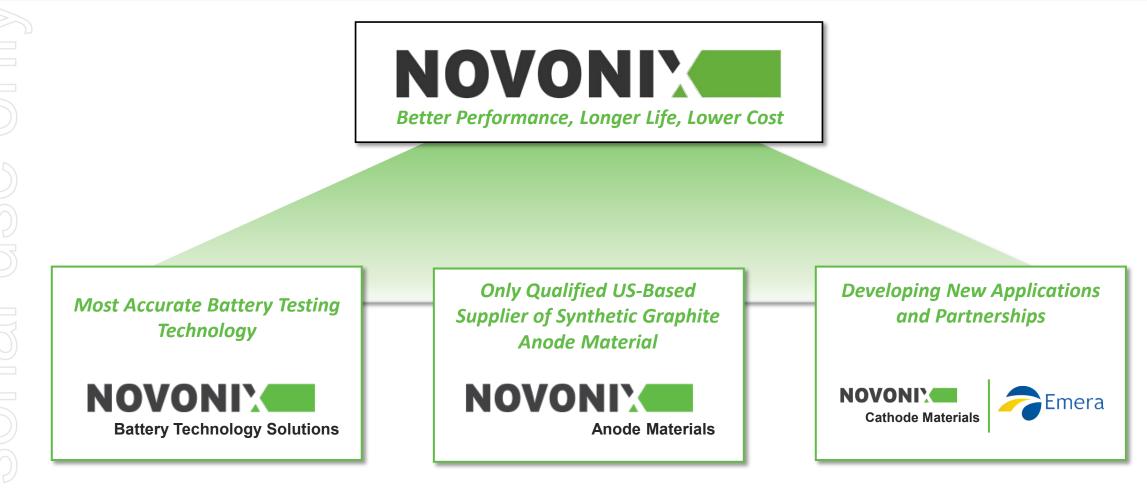
CASH POSITION @ 30 September 2021		
Cash Available	A\$291.0M	

FINANCIAL INFORMATION FY2021		
Revenue	A\$5.2M	
Total Assets @ 30 June 2021	A\$202.9M	
Total Liabilities @ 30 June 2021	A\$18.5M	



### Who We Are

NOVONIX provides battery development and material technology. We develop and supply what we believe to be the most accurate battery testing technology in the world. To our knowledge, we are the only qualified US-based supplier of battery-grade synthetic graphite anode material.



NOVONI

### Our Leadership and Board of Directors

**Leadership Team** 

#### **Scientific & Technical Advisors**



NOVONI



Nick A. Liveris Chief Financial Officer



Rashda Buttar SVP & General Counsel



Suzanne Yeates Financial Controller & Co Secretary

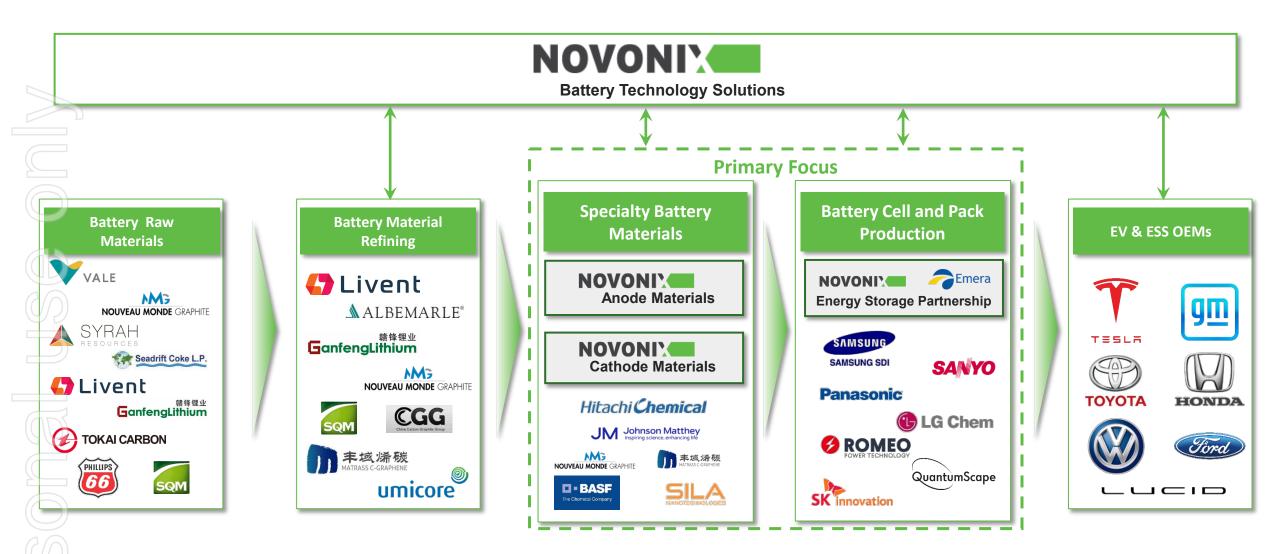


**Chief Scientific Advisor** 

Dr. Mark Obrovac Sponsored Researcher

**Board of Directors** Tony Bellas Andrew N. Liveris AO **Admiral Robert J. Natter** Zhanna Golodryga **Trevor St Baker AO Robert Cooper Greg Baynton** Chairman & Non-Executive Director Non-Executive Director Non-Executive Director **Executive Director** Non-Executive Director Non-Executive Director Non-Executive Director Key leadership and technical experience: 3r PHILLIPS IBM DALHOUSIE UNIVERSITY corporate travel ) erm HESS ارامكو السعودية Saudi Aramco McKinsey & Company 66

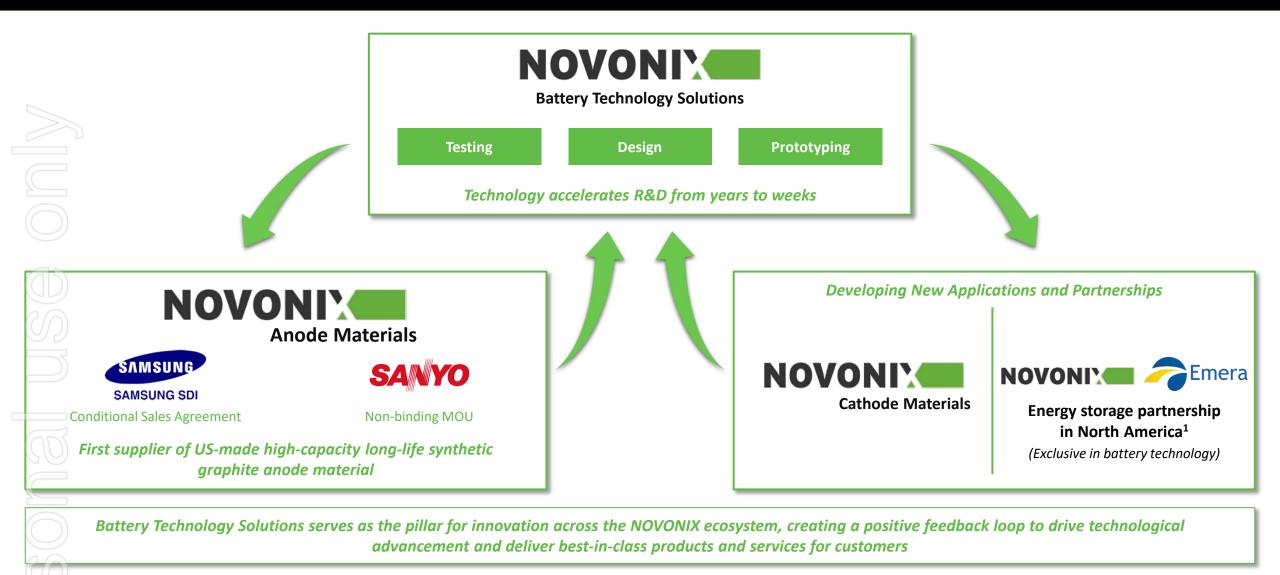
### We Play a Critical Role in the Lithium-Ion Battery Value Chain



Note: Companies presented above are for indicative purposes only and not a representation of customer relationships.



### NOVONIX Provides Battery Development and Material Technology



(1) We are currently collaborating with Emera to design a battery pack including innovative designs, custom manufacturing and control systems to support Emera Technologies' BlockEnergy microgrid.



ASX: NVX OTCQX: NVNXF

### NOVONIX Notable Milestones

PHILLIPS SAMSUNG Nasdaq ASX 22 Dec 2020: Expanded 09 Aug 2021: Phillips 66 19 Jan 2021: Leading 12 Feb 2021: NOVONIX 09 May 2021: Filed draft announced US\$150m collaboration with Samsung 26 Feb 2021: Completion of researcher, Dr. Jeff Dahn ASX equity raise of A\$115m strategic investment in to utilize the next entered into a new five year registration statement with appointed as Chief Scientific U.S. SEC in connection with generation technology being research sponsorship to support growth of NOVONIX, advancing developed with Harper Advisor, effective July 2021 agreement with Mark NOVONIX Anode Materials a potential initial public NOVONIX's production of with an additional ~A\$16m offering in the U.S. via synthetic graphite for high-International, with deliveries Obrovac's Research Group set to commence in the of Dalhousie University from directors Nasdag performance lithium-ion second half of 2021 batteries December 2020 Todav Harper Harper Emera Apr 2021: Completed 23 Jun 2021: Under contract 20 Oct 2021: 7hanna 22 Dec 2020: Strategic installation of first 21 Jan 2021: NOVONIX 19 Feb 2021: Emera and to purchase and retrofit Golodryga joins the Board of NOVONIX partner on Generation 2 furnace alliance announced with US-Anode Materials selected to former Alstom building in Directors as Phillips 66 right system built by Harper receive US \$5.57mm grant based Harper International to innovative residential Chattanooga, TN. - 400k+ to nominate a Director. Ms. develop specialized furnace from the US Department of energy storage technology under our strategic sqft and will accommodate Golodryga is the SVP, Chief technology to enhance Energy partnership program and planned 8k+ tonne per year **Digital and Administrative** NOVONIX's synthetic graphite initiated build of first Gen 3 production<sup>1</sup> Officer for Phillips 66 manufacturing process furnace 1. Purchase completed on July 28, 2021

ASX: NVX



OTCOX: NVNXF

### Phillips 66 Announces Strategic Investment in NOVONIX

#### Phillips 66

- Phillips 66 is a diversified energy manufacturing and logistics company.
- Phillips 66, with a portfolio of Midstream, Chemicals, Refining, and Marketing and Specialties businesses, the company processes, transports, stores and markets fuels and products globally
- Phillips 66 is a global producer of petroleum needle coke, the key precursor material for synthetic graphite
- Headquartered in Houston, the company
   has 14,000 employees committed to safety
   and operating excellence
- Phillips 66 had \$57 billion of assets as of June 30, 2021
- Phillips 66 produces the precursor for synthetic graphite at advanced facilities located in Lake Charles, LA and Humber, UK

#### Announcement

#### Phillips 66 Announces Strategic Investment in NOVONIX

Investment will expand Phillips 66's presence in the battery supply chain and advance NOVONIX's production of synthetic graphite for high-performance lithium-ion batteries



#### August 09, 2021 10:00 AM Eastern Daylight Time

HOUSTON & BRISBANE, Australia--(BUSINESS WIRE)--Phillips 66 (NYSE: PSX) today announced it has entered into an agreement to acquire a 16% stake in NOVONIX Limited (ASX: NVX, OTC: NVNXF), a Brisbane, Australia-based company that develops and supplies in-demand materials for lithium-ion batteries.

"This strategic investment enables Phillips 66 to directly support the development of the U.S. battery supply chain," said Greg Garland, Chairman and CEO of Phillips 66. "It advances our commitment to pursue lower-carbon solutions while leveraging our leadership position and expertise in the specialty coke market and supporting NOVONIX's emerging position in U.S.-based anode production."

Phillips 66 is a leading global manufacturer of specialty coke, a key precursor in the production of batteries that power electric vehicles, personal electronics, medical devices and energy storage units. NOVONIX, a leading producer of synthetic graphite, processes specialty coke to make high-performance anode material for these batteries. The investment supports the development of a fully domestic supply chain for sales into the U.S. electric vehicle and energy storage system markets.

"We're excited by Phillips 66's vision for a sustainable future and confidence in our business plan and management team," said NOVONIX CEO and co-founder Chris Burns, Ph.D. "Phillips 66's investment will provide us with the capital needed to support growth and ongoing R&D as we continue to scale our synthetic graphite production and develop new technologies for higher-performance energy storage applications. We look forward to continuing to build our relationship with Phillips 66 as both a strategic partner and investor."

#### Deal Highlights

- Phillips 66 subscribed for 77,962,578 ordinary shares of NOVONIX for a total purchase price of US\$150 million
- Phillips 66 will nominate one director to NOVONIX's Board of Directors
- This investment is driven by Phillips 66's Emerging Energy organization, which is tasked with building a lower-carbon business platform and shares a similar longterm vision and focus on sustainability as NOVONIX
- The investment by Phillips 66 will help support a capacity expansion of an additional 30,000 mt/year, which is expected to be completed by 2025
- The transaction closed September 30, 2021
- No financial advisors, brokers or other intermediaries were used by NOVONIX in this strategic investment



### NOVONIX Enables the Only Fully Domestic US Supply Chain of EV Battery Anode Material (BAM)

#### **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**2.** All processing of precursor to BAMCharles, LA to Chattanooga, TNin Chattanooga under strict(670 miles)environmental standards

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



# Battery Manufactures and Auto OEMs have Announced New Gigafactories to Support NA EV Growth

	Investment \$300M NA NA	2025E Capacity 16 GWh 53 GWh 10 GWh	Status Operating Operating Operating	State MI NV TN	Battery Manufacture IION ELECTRIC iM3NY C LG Chem
	NA	53 GWh	Operating	NV	iM3NY
	NA	10 GWh	Operating	TN	🚯 LG Chem
<u>GM</u>	\$2.3B	15 GWh	Announced Dec'19	ОН	SK innovation SK innovation (BlueOvalSK JV)
TISLA	\$1B	95 GWh	Operating 2021	ТΧ	<b>() K O R E</b> P O W E
	\$1.7B	10 GWh	Operating 2022	GA	BRITISHVOL
	\$5.3B	199 GWh			
	Ŷ	\$1B \$1.7B	\$1B 95 GWh \$1.7B 10 GWh	\$1B95 GWhOperating 2021Image: State of the s	\$1B95 GWhOperating 2021TXImage: TX\$1.7B10 GWhOperating 2022GA

Gigafactories Announced since 2021					
Battery Manufacturer	Auto OEM	Investment	2025E Capacity	Status	State
		\$185M	5 GWh	Operating 2022	QC
iM3NY	NA	NA	32 GWh <sup>(1)</sup>	Operating 2022	NY
🕒 LG Chem	<u>GM</u>	\$2.3B	35 GWh	Operating 2023	TN
SK innovation		~\$0.8B	12 GWh	Operating 2023	GA
(BlueOvalSK JV)	Fired	\$11.4B	129 GWh <sup>(2)</sup>	Operating 2025	KY/TN
<b>KORE</b> POWER	NA	NA	12 GWh	Operating Q2 2023	AZ
BRITISHVOLT	NA	NA	60 GWh <sup>(3)</sup>	NA	QC
C LG Energy Solution	STELLANTIS	NA	40 GWh 40 GWh	Operating Q1 2024 Operating 2025	TBD
ТОУОТА ТОУОТА ТУЛЯНО	TOYOTA	\$1.3B	NA	Operating 2025	TBD
Total:		\$16.0B	365 GWh		

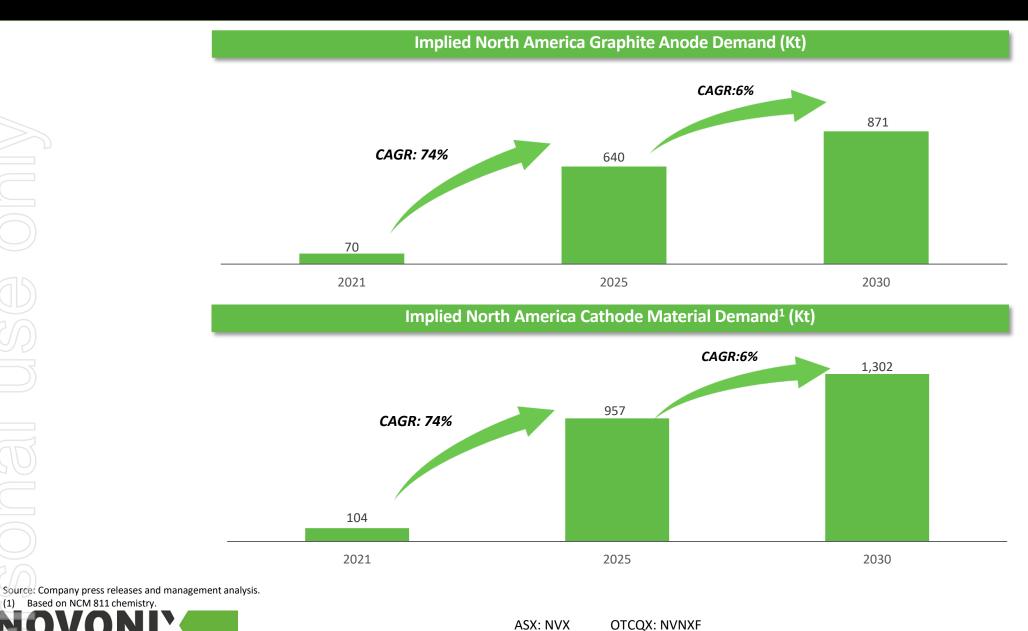
Source: Company press releases and management analysis.

1) Expected capacity by 2028. (2) Expected capacity by 2025 across 3 plants: 2 in Kentucky and 1 in Tennessee. (3) Included in 2030 implied Anode and Cathode material demand.



ASX: NVX OTCQX: NVNXF

### NOVONIX is Critical to Advancing the North American Electrification Story and Supply Chain



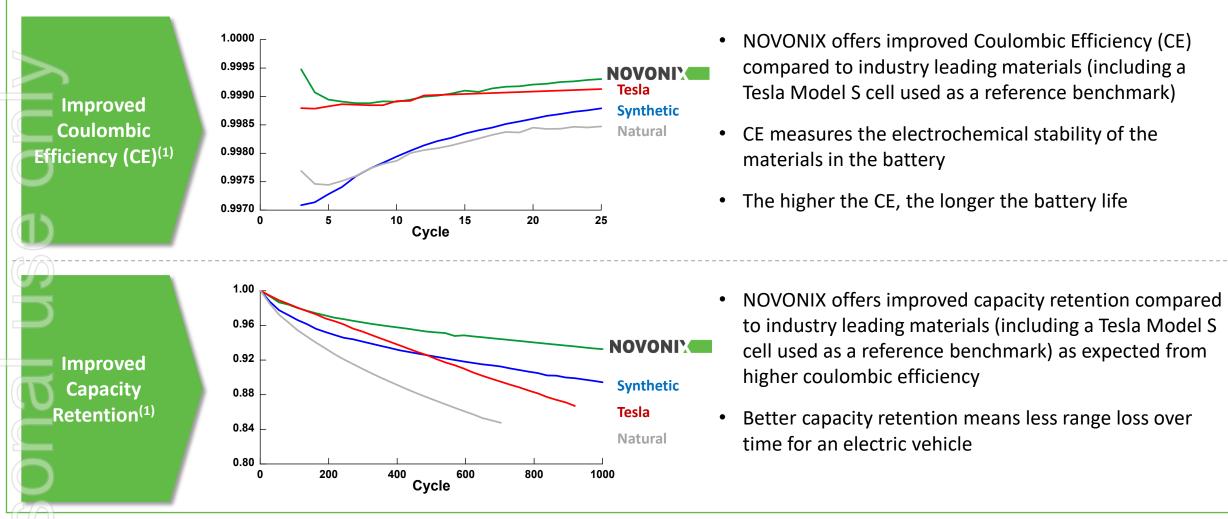
Based on NCM 811 chemistry. (1)

### FY2021: NOVONIX Anode Materials Activities

Q1	Q2	Q3	Q4 to Current
<ul> <li>Produced material using Generation 1 furnace systems for customer sampling</li> <li>Customer Development</li> <li>Samples issued to other prospective customers under confidentiality agreements</li> <li>New engagements with cell manufacturers, auto OEMs (Original Equipment Manufacturers) and ESS (Energy Storage Systems) focused companies</li> </ul>	<ul> <li>Initiated transition plan from Generation 1 furnace technology to Generation 2 systems</li> <li>Continued work on new precursor materials for lower cost and improved performance</li> <li>Targeted development programs for customer focused on electric vehicle and energy storage system requirements</li> <li>Continued sampling programs with domestic and international battery manufacturers and automotive OEMs with strong technical feedback and interest in evaluating mass production materials</li> </ul>	<ul> <li>Completed installation and began production of material through the first Generation 2 furnace system</li> <li>Initiated build of first Generation 3 furnace system to be installed in Tennessee</li> <li>Signed lease expansion to 120,000 sq ft with possession date of May 1, 2021 and progressed site selection process for expansion to 10,000 tpa of total production capacity</li> <li>Progressed engineering work for 30,000 tpa expansion plant to support 2025 production targets</li> </ul>	<ul> <li>Acquired 400,000+ sq ft new manufacturing site, Riverside, to grow to 10,000 tonnes per year by 2023</li> <li>First mass production materials from Generation 2 shipped to Sanyo and Samsung for testing</li> <li>Begin installation of first Generation 3 system in Riverside to complete by the end of this calendar year</li> <li>Continued process technology development and partnership discussions with equipment and material suppliers</li> <li>Progressed additional customer relationships with strong growing demand in the United States for local supply of synthetic graphite</li> </ul>



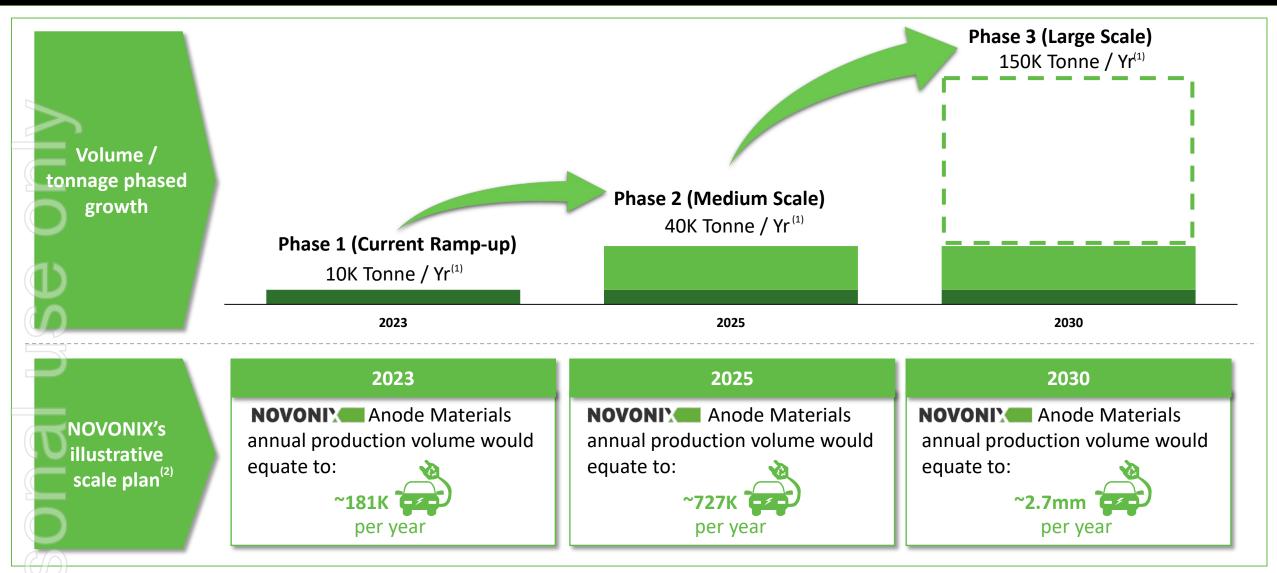
### NOVONIX Anode Material Outperforms in Head-to-Head Testing



1. Data based on internal measurements taken as part of verificiation process.



### Phased Growth Plan For NOVONIX Anode Materials



(1) Company expectations, which may or may not materialize. (2) Assumes 55kg of graphite per EV.



### Secretary of Energy Jennifer M. Granholm Celebrates NOVONIX's New Riverside Facility





#### **Key Observations**

- Purchased on July 28<sup>th</sup>, 2021, this 400,000+ square-foot plant will allow for 10,000 tonnes per year of synthetic graphite anode material production by 2023
- On November 22<sup>nd</sup>, 2021, NOVONIX celebrated Riverside Recharged to inaugurate the new Riverside facility with keynote speaker Secretary of Energy Jennifer M. Granholm
- Other speakers included:
  - Director Andrew Liveris AO
  - Director Zhanna Golodryga
  - CEO Chris Burns
  - U.S. Rep. Chuck Fleishmann

- TN ECD Commissioner Bob Rolfe
- Hamilton County Mayor Jim Coppinger
- City of Chattanooga Mayor Tim Kelly
- Former U.S. Senator Bob Corker
- "The local support for this means not just something for Chattanooga, and it's not just for Tennessee, but it really is for the country. The fact that we're at a facility that once employed about 230 people and that now is going to employ 300 people, making the future of our transportation energy system secure, is such a great day for America." Secretary of Energy Jennifer M. Granholm

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### FY2021: NOVONIX BTS Activities

Q1	Q2	Q3	Q4 to Current
<ul> <li>Continued work with Dr. Mark Obrovac's group at Dalhousie and internal team on new IP generation</li> <li>Worked with various lithium suppliers (Lake Resources and others) in the process expanding on precursor production and final cathode production</li> <li>Focus of technical work:</li> <li>High Nickel Cathode Materials, Including Cobalt- Free</li> <li>Dopant and Coatings for Improved Performance</li> <li>Single Crystal Cathode (SCC) and Polycrystalline Cathode Processes</li> </ul>	<ul> <li>Expanded staff and initiated build out of addition to existing BTS facility, adding ~65% additional space for continued growth</li> <li>Expanded capital equipment to allow for increased bandwidth to support external and internal cell building and testing projects</li> <li>New projects commenced for global customers in mobility, energy storage and consumer electronics</li> </ul>	<ul> <li>Continued strong revenue growth and expansion of hardware sales and R&amp;D service offerings</li> <li>Entered into conditional Agreement of Purchase and Sale on new ~35,000 sq ft facility in Halifax area for continued expansion</li> </ul>	<ul> <li>Grew revenue by ~24% compared to FY20</li> <li>Expanded staff to 46 at end of FY21 compared to 20 at end of FY20</li> <li>Completing addition to existing Bluewater Road facility for cell assembly and testing</li> <li>Closed on new ~35,000 sq ft facility in Halifax area and started facility renovations</li> <li>Received approval for up to CA\$1,281,819 through a payroll rebate from Nova Scotia Business Inc over 5 years to support hiring plans</li> <li>Continued strong revenue growth and expansion of hardware sales and R&amp;D service offerings into FY22</li> </ul>



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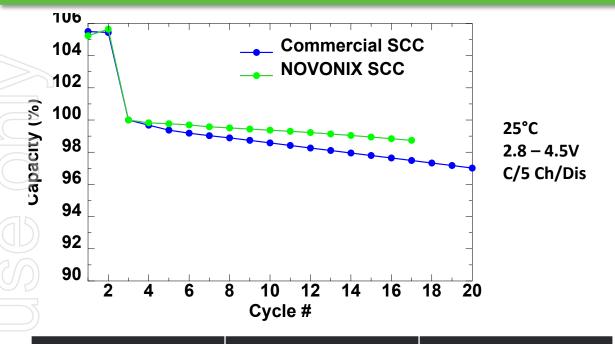
### FY2021: NOVONIX Cathode Activities

Q1	Q2	Q3	Q4 to Current
<ul> <li>Began planning for investment and team growth based on patent application filings</li> </ul>	<ul> <li>Pilot line 90% commissioned with final piece of equipment delayed in shipping</li> <li>Analytical lab fully commissioned</li> <li>Newly synthesized materials continuing electrochemical testing for internal qualification</li> <li>Began engagement with multiple current commercial precursor and cathode suppliers to discuss technology and opportunities</li> </ul>	<ul> <li>Initial Phase 1 pilot line operational for material optimization and performance characterization</li> <li>Continued process development internally and collaboratively with Dr. Obrovac's group at Dalhousie pursuing new IP</li> <li>Equipment selection and facility planning initiated for 10 tonne per annum capable demonstration line to be installed in new BTS facility in 2022.</li> </ul>	<ul> <li>Began renovations at new facility to allow for pilot line commissioning in 2022</li> <li>Received approval for \$475,000 CAD grant from NRC-IRAP to support expansion of cathode development team</li> <li>\$1.675M CAD grant from Canadian federally funded non-profit organization to support expansion of cathode synthesis technology</li> <li>Continued progress in technology development and demonstration of material performance</li> </ul>



# Early Cathode Synthesis Technology Results Demonstrate Results Better or Comparable with Long Life Commercial Single Crystal Cathode (SCC)

Normalized Electrochemical Results (Coin Cell)



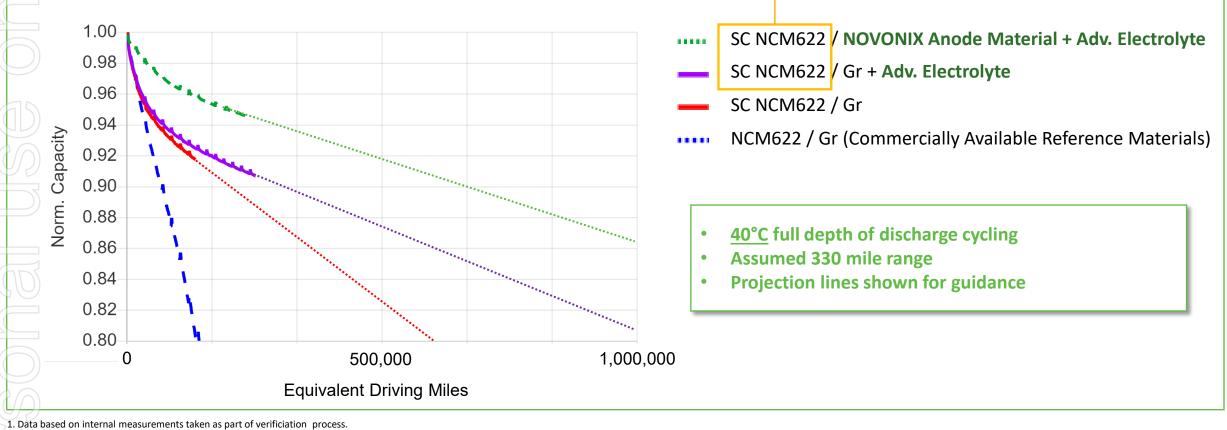
Product:	Commercial SCC	NOVONIX SCC
Reversible Capacity:	100%	104%
First Cycle Efficiency:	100%	101%

### **Key Observations** Normalized electrochemical results in coin cell tests show NOVONIX outperforming in reversible capacity, first cycle efficiency, and cycling performance NOVONIX continues to optimize material through processing as well as through the use of coatings and dopants to further improve performance Polycrystalline cathode comparative performance test work also ongoing, with polycrystalline cathodes having some advantages over SCC

### NOVONIX's Complete Battery Cell Technology is Leading the Way for Next Generation EV Batteries

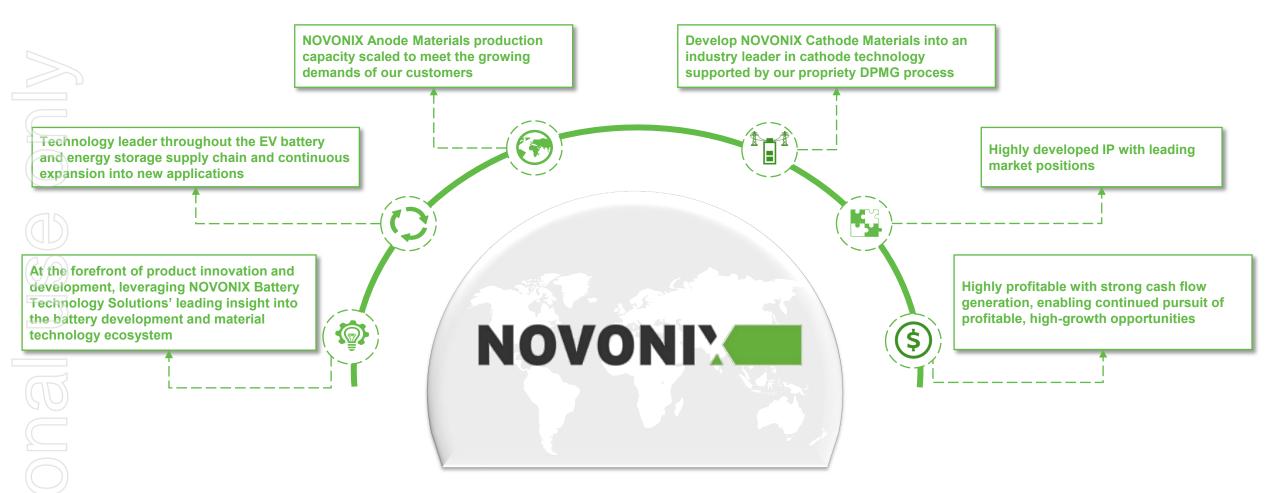
Demonstrated and Projected Performance Predicted to Exceed 1 Million Miles<sup>(1)</sup>

- SC NCM622 shown here is the same Commercial SCC reference material shown in previous slide ٠
- Next step to build full cells for performance testing to include in this data set and demonstrate NOVONIX anode, cathode and electrolyte technologies in a single cell





### Our Goals for the Future of NOVONIX





### **Contact Information**

**NOVONIX Anode Materials** 

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#### NOVONIX BTS

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#### 110 Simmonds Drive, Dartmouth, NS B3B 1N9, Canada



Send all investor queries to: IR@novonixgroup.com

This announcement has been authorised for release to the ASX by the Chairman, Tony Bellas.

