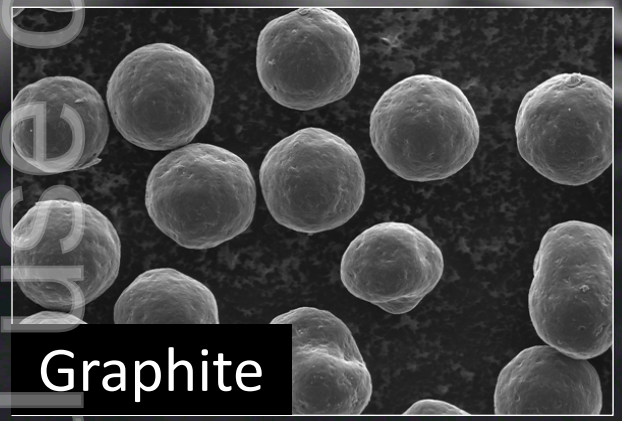
# NOVONIX LIMITED (ACN 157 690 830)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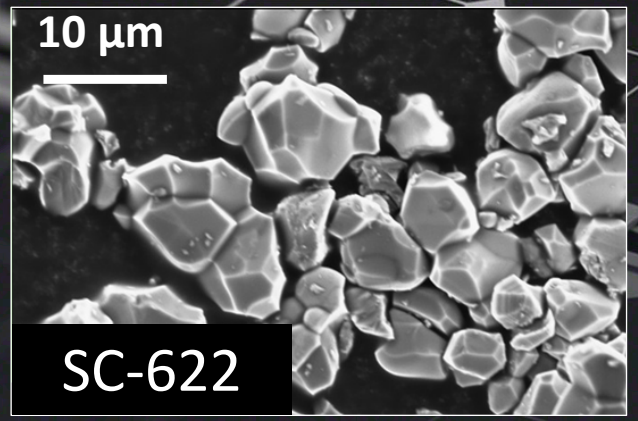

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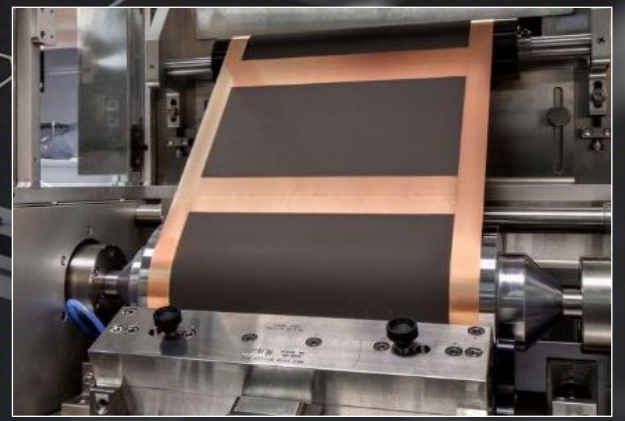
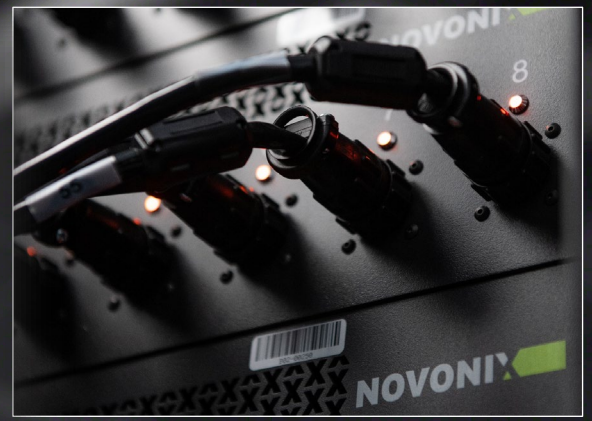





Quarterly Activities Report
January – March 2021

30 April 2021

# Corporate Activities (1 of 2)

## January – March 2021

- NOVONIX was added to the OTCQX Composite Index and the OTCQX International Index – 14 January 2021
- Prof. Jeff Dahn appointed Chief Scientific Advisor to the Company (effective July 2021) – 19 January 2021
- Awarded US$5.57M from U.S. Department of Energy for new furnace technology development – 21 January 2021
- Entered into a new five year research sponsorship agreement with Mark Obrovac's Research Group of Dalhousie University – 12 February 2021
- Announced Emera and NOVONIX to partner on innovative residential energy storage technology – 19 February 2021
- Completed fully underwritten AUD $115M placement of new fully paid ordinary shares to institutional and sophisticated investors at an offer price of $2.90 (Institutional Placement). Proceeds of the capital raise dedicated to scaling NOVONIX Anode Materials to 10,000 tonnes capacity, investment in R&D, and to pursue international partnership opportunities – 26 February 2021
- Raised AUD $16.45M though a placement to Directors of NOVONIX, pending shareholder approval – 26 February 2021
- Cash balance as of 31 March 2021: $131 million

## Agreements with Battery Makers

SANYO Electric Co., Ltd. a subsidiary of Panasonic Corporation of Japan

# Corporate Activities (2 of 2)

**Post-March Quarter:**

- Post-March Quarter:
  - Cancellation of Share Purchase Plan –7 April 2021
  - Approved director placement at EGM – 27 April 2021
  - Generation 2 mass production started, and successful internal qualification of material completed
- NOVONIX continues to:
  - Monitor clean energy policies in North America and Europe and liaise with relevant agencies
  - Provide samples of anode product and engage in discussion of qualification requirements and production capacity planning with prospective cell manufacturer and automotive OEM customers
  - Engage and progress relationships with multiple international partners for potential technology partnership opportunities
  - Leverage NOVONIX Battery Technology Solutions' (BTS) position in the market to identify strategic partnership opportunities for new technology development with new and existing customers

# NOVONIX Anode Materials Activities

**January – March 2021**

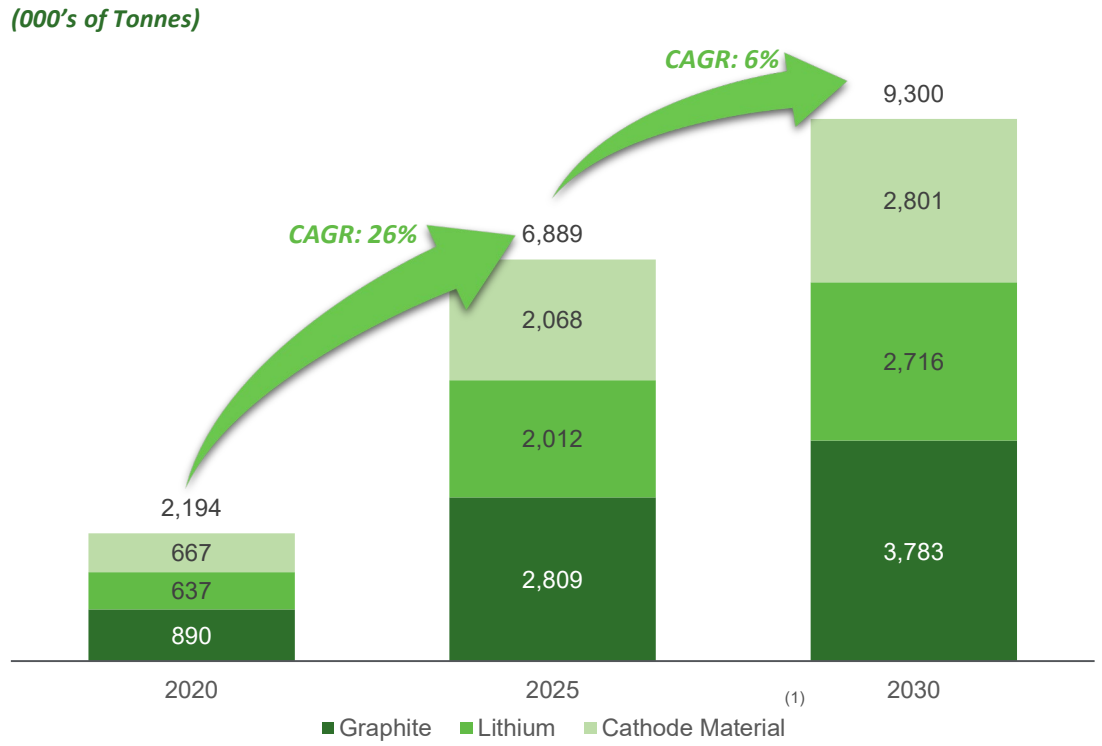
- Furnace Systems and Production Capacity:
  - Completed installation of first Generation 2 furnace system built by Harper under our strategic partnership program
  - Began production of material through Generation 2 system to support next steps in customer qualification programs for Samsung SDI, Sanyo and other cell and automotive manufacturers as potential customers [Post Quarter Event]
  - Material produced in Generation 2 system passed internal qualification through labs in both Tennessee and through battery testing at BTS and prepared for shipment to customers [Post Quarter Event]
  - Initiated build of first Generation 3 furnace system to be installed in Tennessee before the end of calendar year
  - Continued ordering necessary equipment to meet ongoing production targets
- Facilities and Expansion Plans
  - Signed lease expansion to 120,000 sq ft with possession date of May 1, 2021
  - Significantly progressed site selection process for expansion to 10,000 tpa of total production capacity
  - Continued engineering and planning work for 30,000 tpa expansion plant to support 2025 production targets

# Battery Technology Solutions (BTS) Activities

## January – March 2021

- Continued strong revenue growth and expansion of hardware sales and R&D service offerings
- Target completion of ~8,800 sq ft building addition to current facility of July 2021.
- Entered into conditional Agreement of Purchase and Sale on new ~35,000 sq ft facility in Halifax area for continued expansion [Post Quarter Activity]
- Cathode Commercialization Activities:
  - Initial Phase 1 pilot line operational since February for material optimization and performance characterization
  - Hiring to expand internal cathode development team
  - Continued process development internally and collaboratively with Dr. Obrovac's group at Dalhousie pursuing new IP
  - Equipment selection and facility planning initiated for 10 tonne per annum capable demonstration line to be installed in new BTS facility in 2022.

## Battery Material Demand Forecast




**Cathode material demand is projected to increase >4x over the next decade**

Source: Benchmark Mineral Intelligence January 2021 Assessment.
(1) Cathode Material based on aggregate of Nickel, Magnesium, and Cobalt (NMC).

# Sources and Uses of Proceeds of $115M Institutional Placement

## Sources & Uses

| Sources[1] | $ million |
|---|---|
| Institutional Placement | 115 |
| **Total** | **115** |

| Uses | $ million |
|---|---|
| A. NOVONIX Anode Materials | 95 |
| B. Research & Development (including Cathode Commercialization Program) | 10 |
| C. International Growth Opportunities & Corporate Costs | 10 |
| **Total** | **115** |

## Use of Offer Proceeds

### A. NOVONIX Anode Materials

- Capex and working capital to scale production to 10,000tpa
- Includes new site expansion and equipment coming online over the next 24 months, as well as working capital associated with increased production levels
- Increased scale is expected to enhance offering to customers that may have minimum contracting volume requirements.

### B. Research & Development

- Two year development program for NOVONIX Cathode Materials, with focus on scaling up process technology; demonstrating commercial performance compared to industry standards through a pilot line with in-house testing capabilities; and continuing to bolster IP portfolio
- Expansion of Professor Obrovac's team at Dalhousie University to focus on other continued technology programs (silicon, lithium-metal / solid state and beyond lithium-ion)
- Expect to leverage Canadian government (state and local) support in these R&D funding initiatives

### C. International Growth Opportunities & Corporate Costs

- Working capital associated with further growth initiatives
- Pursue global growth initiatives including expansion, partnerships and licensing
- Transaction costs linked to the offer

(1) Excludes funds raised through the non-underwritten SPP and Conditional Placements. Funds raised via the SPP and Conditional Placements will further strengthen R&D investment and the ability to pursue international growth opportunities.

# Prof. Jeff Dahn Appointed Chief Scientific Advisor(1)



## Professor Jeff Dahn Overview

- Leading researcher in the field of lithium-ion batteries and materials
- Currently holds the title of NSERC/Tesla Canada Industrial Research Chair with Dalhousie University
- Long career across both industry and academia, and has spent the last 25 years as a professor at Dalhousie University, with support from 3M Company and most recently, from Tesla
- Co-authored 730 papers and has 73 inventions with patents issued or filed, including some of the early patents related to $Li[NiMnCo]O_2$ (NMC) cathode material in 2001

(1) Appointment effective July 1, 2021

# NOVONIX Sponsors Mark Obrovac's Battery Research Group at Dalhousie University

## Professor Mark Obrovac Overview

- Leading researcher in the field of lithium-ion batteries and materials with strong background in new material synthesis
- Completed PhD under Dr. Jeff Dahn's supervision in 2001
- Career across both industry and academia, 8 years at 3M Company working on silicon anode materials and nickel-based cathode materials
- Professor at Dalhousie University since 2010 beginning partnership with Novonix in 2018 as the NSERC/NOVONIX Industrial Research Chair
- New sponsorship under NSERC Alliance Grant for 5-years
- Co-authored 90 papers and has 27 inventions with patents issued or filed spanning anodes, cathodes, electrolytes and binder materials for lithium-ion batteries

- **Mark Obrovac is a multiple winner of The 3M Company's highest award given for technical achievement, the Circle of Technical Excellence**
- **Research sponsorship program recently extended through 2026**
- **Team responsible for recent DPMG patent**

# Awarded US$5.57M from DOE for New Furnace Technology Development

## DOE Project Team and Goals

**PHILLIPS 66**

World Leader in Petroleum Coke Production

- Houston, TX
- Multiple US and Global Production Sites

+

**Harper International**

World-wide Leader in High Temperature Furnaces

- Buffalo, NY
- Expertise in High Temperature Furnace Technology
- Strategic Alliance Between NOVONIX and Harper

+

**NOVONIX Anode Materials**

State of the Art Anode Materials Processing

- Chattanooga, TN
- First Qualified US Supplier of Synthetic Graphite to Tier 1 Cell Manufacturer

=

First-in-the-world production scale graphitization furnace technology

- Developing valuable IP
- Highly scalable manufacturing process
- USA-made premium synthetic graphite for lithium-ion batteries

- **NOVONIX will contribute US$5.92M over the project duration**
- **First "Generation 3" furnace system will be deployed at NOVONIX in 2021**

# Cathode Product Development Update

## Cathode Opportunity Overview

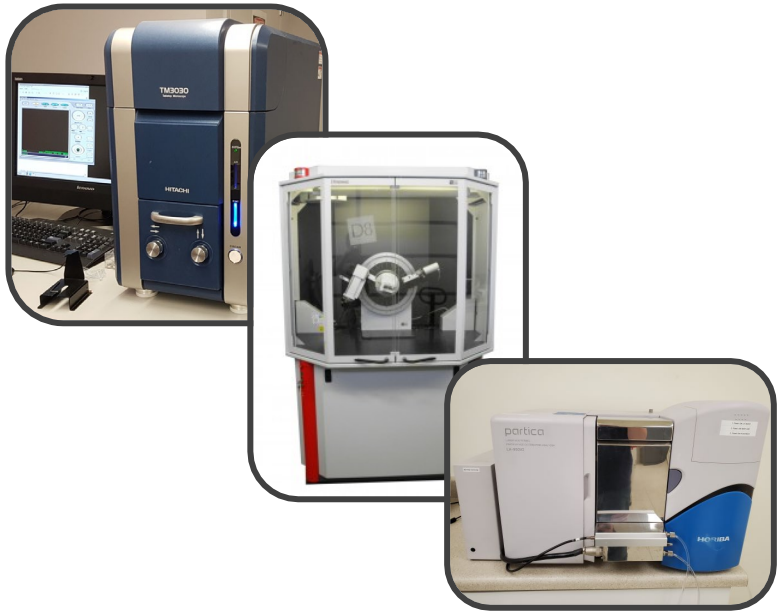
**Opportunity Overview:**

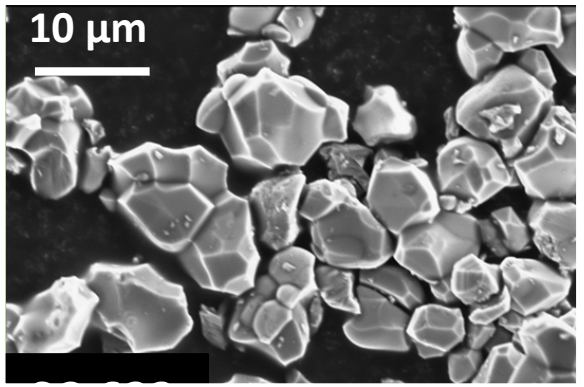
- Cathode materials represent about 30% of the cost of a battery cell
- Current precursor synthesis (CSTR) is complex, wasteful and costly
- Novel “Dry Particle Microgranulation” (DPMG) process performs dry synthesis of high nickel materials with lower cost

**Commercial Progress:**

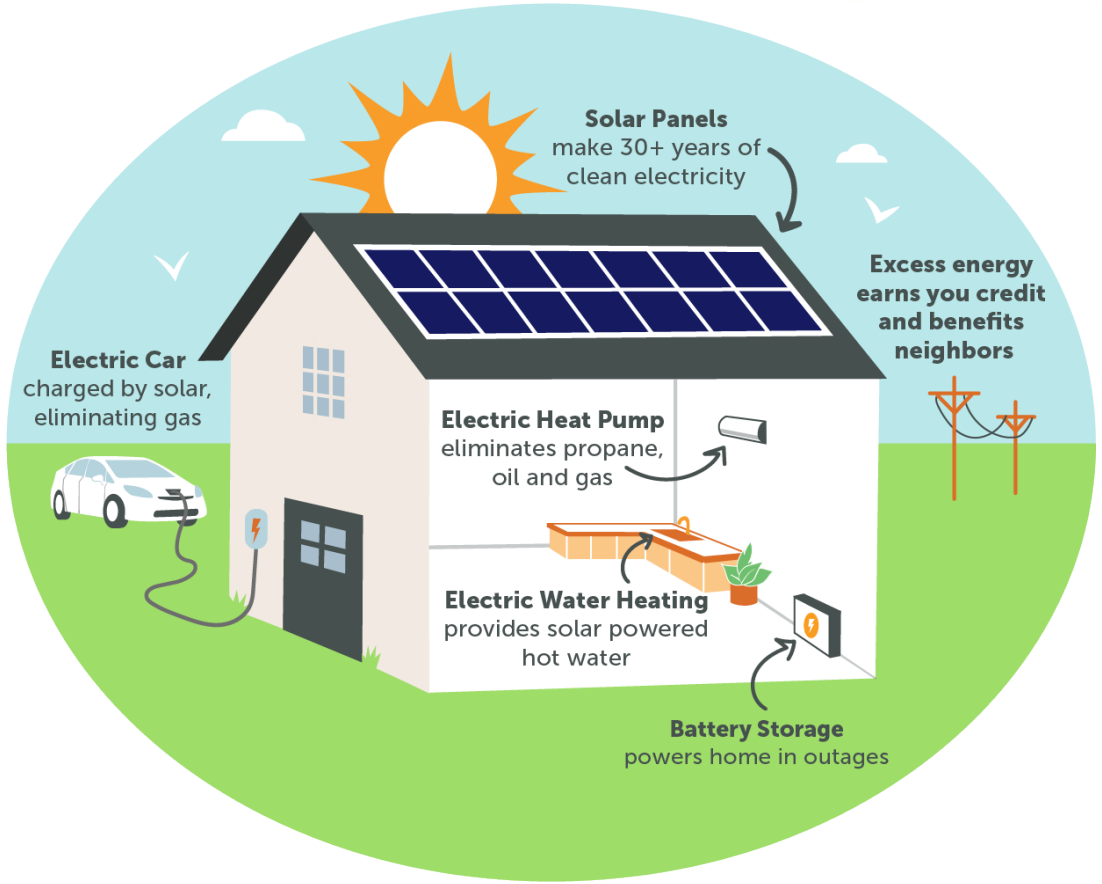
- First phase pilot line running in February
- Expanding staff and scope including optimization of different key materials (NMC, NCA, and Cobalt-Free Nickel-based cathodes)
- Beginning expansion plans for next phase of pilot synthesis capability for larger volumes
- Continue electrochemical testing at NOVONIX BTS’s battery pilot line and cell testing facility

## Analytical Equipment and SEM





# NOVONIX partners with Emera Technologies




- Developing state of the art residential energy storage systems for community microgrids to be deployed under the BLOCKENERGY brand
- Focused on deployment in North American residential market for improved grid reliability
- Emera Technologies is a subsidiary of Emera Inc. (TSE: EMA), a multinational energy holding company based in Nova Scotia with more than CA$32 billion in assets in 2019

# Contact Information



## CORPORATE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  **Suzanne Yeates**
  Email: suzie@novonixgroup.com
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  **Nick Liveris**
  Email: nick@novonixgroup.com


**Send all investor queries to: IR@novonixgroup.com**

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

## OPERATIONS

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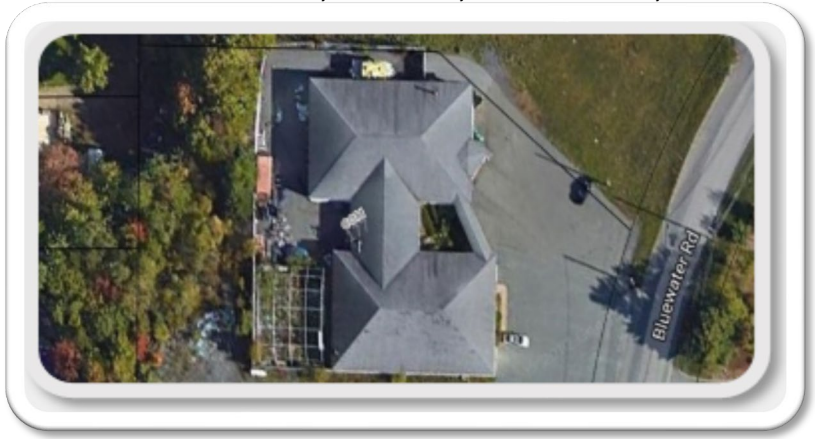


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