

#### **ASX ANNOUNCEMENT**

31 January 2018

## **QUARTERLY ACTIVITIES REPORT – DECEMBER 2017**



## **HIGHLIGHTS**

- PUREgraphite pilot plant installed in Tennessee, USA
- Strong international sales of NOVONIX battery testing equipment and services
- Future appointment of Andrew N. Liveris A.O. to the Board announced
- \$1 million investment/placement to Mr Liveris and Admiral Natter
- \$4 million investment/placement to institutional and sophisticated investors
- 100% early conversion of convertible notes by investors

**NOVONIX Limited (ASX: NVX)** ("NOVONIX" or "the Company") is pleased to provide the following Quarterly Activities Report for the December 2017 Quarter.



## Background

PUREgraphite is an exclusive joint venture between NOVONIX and COULOMETRICS formed in April 2017 to commercialize high-performance anode materials for lithium-ion batteries based on intellectual property developed by Dr Edward Buiel (founder of COULOMETRICS).



## The December 2017 Quarter

This quarter was focused on continued refinement of product and production process, design, procurement and installation of a pilot processing facility in Tennessee, and preparation for higher commercial tonnage trials.

The product development work verified and expanded on the intellectual property acquired from Coulometrics and provides PUREgraphite with compelling hard performance data when engaging the market.

PUREgraphite is manufacturing anode materials that demonstrate extremely high levels of electrochemical efficiency, consistently above "best in class" reference EV cells commercially available in the market today and in line with our expectations.

Our PUREgraphite team based in Chattanooga Tennessee USA currently includes our CEO, Dr Edward Buiel, five engineers, five technicians, and part-time support staff.

During the December Quarter, our facility in Chattanooga was upgraded to accommodate the pilot plant including a significant electrical upgrade to run furnaces and milling equipment, along with a security upgrade to better protect the facility and our intellectual property.

Pre-shipment inspection and testing was undertaken on critical pilot plant equipment with manufacturers to ensure it met our requirements before dispatch to Tennessee.

The pilot plant equipment was shipped, received and installed during the quarter.

The pilot plant enables the business to manufacture its anode material products (including all process steps under one roof) in sufficient quantities to support comprehensive customer qualification programs going forward. End-to-end capability at Tennessee now includes capability to crush, mill, shape and blend precursor materials, perform thermal purification, undertake multiple particle coatings and heat treatments, manufacture high quality electrodes and battery cells and perform comprehensive battery cell testing and benchmarking.

Our pilot plant will be used to manufacture and customize product samples for customer qualification programs (up to 50 kg per day) while also accelerating our internal product development programs.

Testing of suppliers and service providers was another active work stream during the quarter and this continues through the next two quarters.



We maintain our target of establishing a 1,000 tpa production capability by 30 June 2018 that will incorporate a combination of internal production and some outsourced components.

We are also making good progress in assessing options, developing plans, assessing sites and service providers to rapidly scale the business up to 100 ktpa of anode material production.

## Funding the PUREgraphite Joint Venture

In satisfaction of the terms of the PUREgraphite Joint Venture Agreement, funding of USD\$2m has been invested in the PUREgraphite Joint Venture in January 2018. This adds to the existing Joint Venture cash balance which currently stands at US\$3.7m after this funding. This payment is included in the Quarterly Cashflow Report (Appendix 5B) as an 'Other' estimated cash outflow for the March 2018 quarter.



**Battery Testing Services Inc.** 

### Background

The NOVONIX Battery Testing Services business (BTS) was acquired in June 2017. This business makes the most accurate lithium-ion battery testing equipment in the world now used by leading global battery makers, auto-makers, equipment manufacturers and battery research organizations.

NOVONIX is both leveraging this technology internally for materials development and commercializing the technology through equipment sales and associated analytical services.

### The December 2017 Quarter

BTS has had one of its strongest sales quarters since formation of the business. Strong sales growth was experienced from both existing customers and many new customers, including a number of leading global brand names.



Demand for our newly-released larger testing system is strong. The first two units were shipped to two very large global battery-makers in Asia, with both companies now seeking to buy more units based on the performance of the systems received.

During the quarter BTS relocated to expanded premises approximately five times larger, to accommodate planned growth and diversification of this business.

The staffing for the BTS business has also been increased to facilitate higher production levels to meet higher customer demand. The business also recruited its first full time sales and marketing representative who commenced in January.

Work continues to refine new battery cell testing technologies. The first prototype for our non-destructive chemical analysis equipment has performed well and we have commenced design and build of a second prototype. This prototyping and development is ongoing, and we aim to finish development in 2018 for commercialization in 2019.

MOUNT DROMEDARY

# graphitePROJECT

## Background

With the PUREgraphite joint venture in the USA moving forward immediately with sourcing artificial and natural graphite concentrates from a range of international suppliers, the Company is not dependent on the Mount Dromedary Graphite Project for its anode materials program. The process of gaining the mining permits and final approvals to position the project in a development-ready state is continuing, to ensure that the Company can leverage the graphite mine both commercially and strategically at short notice.

NOVONIX is targeting the granting of Environmental Authority and Mining License for the Mount Dromedary Graphite Project in 2018, and there has been no change to tenement position during the Quarter.



## FUTURE APPOINTMENT OF ANDREW N. LIVERIS TO THE BOARD

On 3 October, NOVONIX announced the future appointment of Andrew N. Liveris A.O. to its Board of Directors as further step in the Company's downstream integration strategy. Mr Liveris is currently the Executive Chairman of DowDuPont and CEO and Chairman of The Dow Chemical Company, a global specialty chemical, advanced materials, agrosciences and plastics company.

The appointment will be made following Mr Liveris' transition from his roles with Dow and DowDuPont during 2018. Mr Liveris has overseen the recently completed merger between Dow and DuPont – a US\$130 billion transaction. He will be instrumental in assisting the Company with its strategic positioning, international marketing and scaling-up the NOVONIX business internationally.

### CORPORATE

The Company raised A\$5M during the period, including A\$1M via a placement to Andrew N. Liveris and Admiral Robert J. Natter, USN (Ret.) who recently joined the NOVONIX Board of Directors. The other A\$4M was raised via placement to institutional and sophisticated investors.

The proceeds of the placement will fund the commencement of an in-house electrolyte development program (a potential complementary new product line), pursuit of strategic opportunities including the investigation of possibilities related to fast EV charging and working capital for existing and future growth opportunities.

Our balance sheet was also strengthened and simplified by the end of the Quarter with 100% of Convertible Notes issued in April 2017 having been converted early to Ordinary Shares.

The Company also held meetings with potential international customers, partners and key government agencies during the quarter in a number of countries.

As mentioned above under the PUREgraphite activities review, in satisfaction of the terms of the PUREgraphite Joint Venture Agreement, funding of USD\$2m has been invested in the PUREgraphite Joint Venture in January 2018. This adds to the existing Joint Venture cash balance which currently stands at US\$3.7m after this funding. This payment is included in the Quarterly Cashflow Report (Appendix 5B) as an 'Other' estimated cash outflow for the March 2018 quarter.



## SIGNIFICANT ASX ANNOUNCEMENTS

The following significant announcements were lodged with ASX during the Quarter:

- Pilot processing plant ready for operation | 28 December 2017
- Change of Auditor | 6 December 2017
- Shareholder Communication Recent Share Trading | 5 December 2017
- Chairman and MD Address to the AGM | 21 November 2017
- AGM Presentation | 21 November 2017
- Results of Annual General Meeting | 21 November 2017
- Quarterly Cash Flow Report | 31 October 2017
- Quarterly Activities Report | 31 October 2017
- Notice of Annual General Meeting | 20 October 2017
- Australian Microcaps Investment Conference | 18 October 2017
- Andrew N. Liveris to join the Board of Novonix | 3 October 2017

### ABOUT NOVONIX

**NOVONIX LIMITED** (ASX: NVX) is an integrated developer and supplier of high performance materials, equipment and services for the global lithium-ion battery industry with operations in the USA and Canada and sales in over a dozen countries. The Company also owns a world-class, large and high-grade natural graphite deposit in an established mining province in Australia.

NOVONIX's mission is to accelerate the global development and adoption of Lithium Ion Battery technologies for a cleaner energy future.

## FOR FURTHER INFORMATION

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