

ASX Announcement (ASX:**AXE**)

10 July 2018

Opportunity to toll process Archer graphite

Highlights

- Initial purification work by Urbix has shown that Archer's Campoona graphite is suitable for purification to HF-equivalent purification grades of +98% using non-HF purification processes.
- Potential capital cost savings for Archer of approximately \$14M over the life of the Campoona Graphite Project could result if toll processing in North America is pursued.
- Archer's Campoona graphite maintained its hallmark, structural nearperfection down to the atomic scale after purification processing, retaining its potential for commercial applications.
- The preliminary results provide encouragement for the continuing joint development of additional purification process optimisation, technology licensing, and toll processing services for the Campoona Graphite Project with Urbix.

Archer Exploration Limited (ASX:AXE, Archer, Company) is pleased to provide the following update on the Company's MOU with Urbix Resources LLC (Urbix) investigating alternative methods for graphite refinement that seek to reduce Archer's future capital costs and provide efficient, high-volume processing of the Campoona Graphite Deposit, whilst still maintaining the quality required for downstream material feedstocks in battery componentry and graphene production.

Urbix have been successful in purifying Campoona graphite from a total carbon content (TCC) grade of 93-94% to a minimum TCC of +98%. These initial and final values of grade are in-line with values obtained from HF leaching methods conducted by Archer on Campoona graphite reported in previous metallurgical testing results. These positive preliminary results provide encouragement for the continuing joint development of further advanced stages of purification processing of Campoona graphite by Urbix to battery-specific grades and morphologies.





With further successful testing, the Urbix technology provides Archer with an opportunity to toll process Campoona graphite in North America reducing the capital cost for the Sugarloaf Graphite Processing Facility and reducing Archer's environmental footprint on the Eyre Peninsula. The potential capital cost benefits of producing high-purity graphite concentrate through Urbix's proprietary processing method are estimated at approximately \$14M over the life of the Campoona Graphite Project.

Critically, the high structural and physical integrity of the Campoona graphite was maintained after the purification process performed by Urbix, with its potential for commercial applications retained. This was verified by Archer using nano-scale and atomic-scale analysis of representative, processed samples, at the world-class Australian Centre for Microscopy & Microanalysis at The University of Sydney, and the Mark Wainwright Analytical Centre at The University of New South Wales.

Archer Chief Executive Officer, Dr Mohammad Choucair, commented "We are excited by these initial results from Urbix because they provide Archer with cost-effective options for the processing of the Campoona graphite. We look forward to continuing to explore pragmatic solutions with Urbix that will allow us to advance the development of our Campoona Graphite Project and unlock value for Archer's products downstream where graphite is a critical feedstock material".

About Urbix:

Urbix is a private company founded in 2014 and based in Phoenix, Arizona, USA, which specialises in all aspects of the graphite value chain, and have developed proprietary methods for the purification of various graphite and graphene products using low-temperature, non-oxidative techniques.

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Shareholders

For more information visit our website https://archerx.com.au/investors/