Applying advanced technologies to create a sustainable industry



Adrian Griffin
Managing Director
ASX: LIT

Investor Presentation
121 Mining Investment
March 2017 – Hong Kong

Copyright © 2017, Lithium Australia NL

Lithium Australia enables progress that was previously unimaginable.



Photo courtesy of Solar Impulse

Copyright © 2017, Lithium Australia NL

Company snapshot

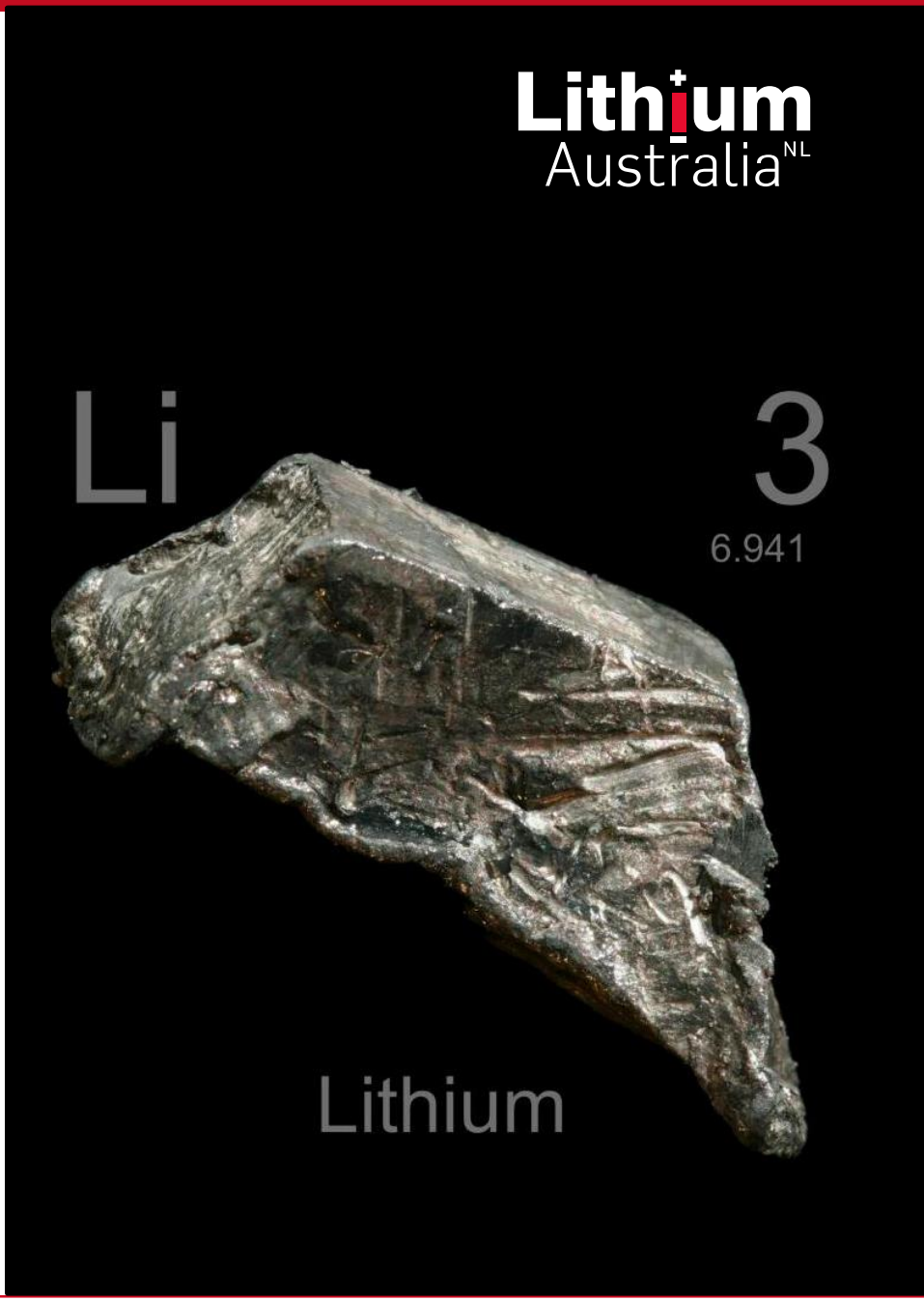
Lithium Australia is an ASX listed company (ASX:LIT) which develops and owns mineral processing technologies for lithium extraction.

Lithium Australia holds the key to a new future in energy management by supplying a low-cost, green alternative to conventional lithium production.

LIT is the only company worldwide with the ability to process all lithium silicates without roasting.

LIT has developed and owns 100% of Sileach™ and LieNa™ technologies.

The Company also has an extensive lithium mineral exploration portfolio with interests spanning Australia, Mexico, Canada, and Europe.



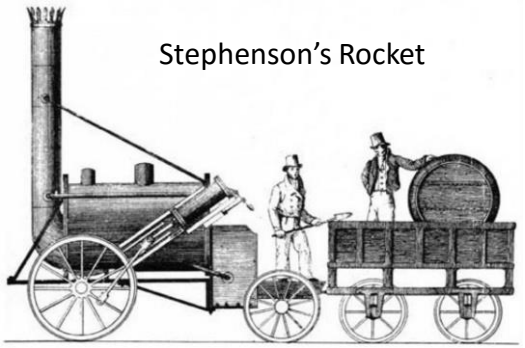
Copyright © 2017, Lithium Australia NL

Lithium – what's it all about?

Lithium Australia NL

It's about the biggest change in energy management since the industrial revolution

- Portable power in the palm of your hand
- Green power wherever it is required


Stephenson's Rocket

It's about batteries

- Revolution in transport
- Renewable power 24 hours a day
- The common man a power trader

33rd most common element

- Crustal abundance about 20ppm
- Elevated levels in pegmatites, clays and brines

More lithium is rejected as waste than enters the lithium supply chain

- Lithium Australia is focused on commercial treatment of the "too-hard-basket"

The recycling imperative

- Current estimate 100t LCE out of 180,000t consumption
- Unsustainable use of Conflict Metals

Copyright © 2017, Lithium Australia NL

Feed is dominated by two countries

Lithium Australia NL

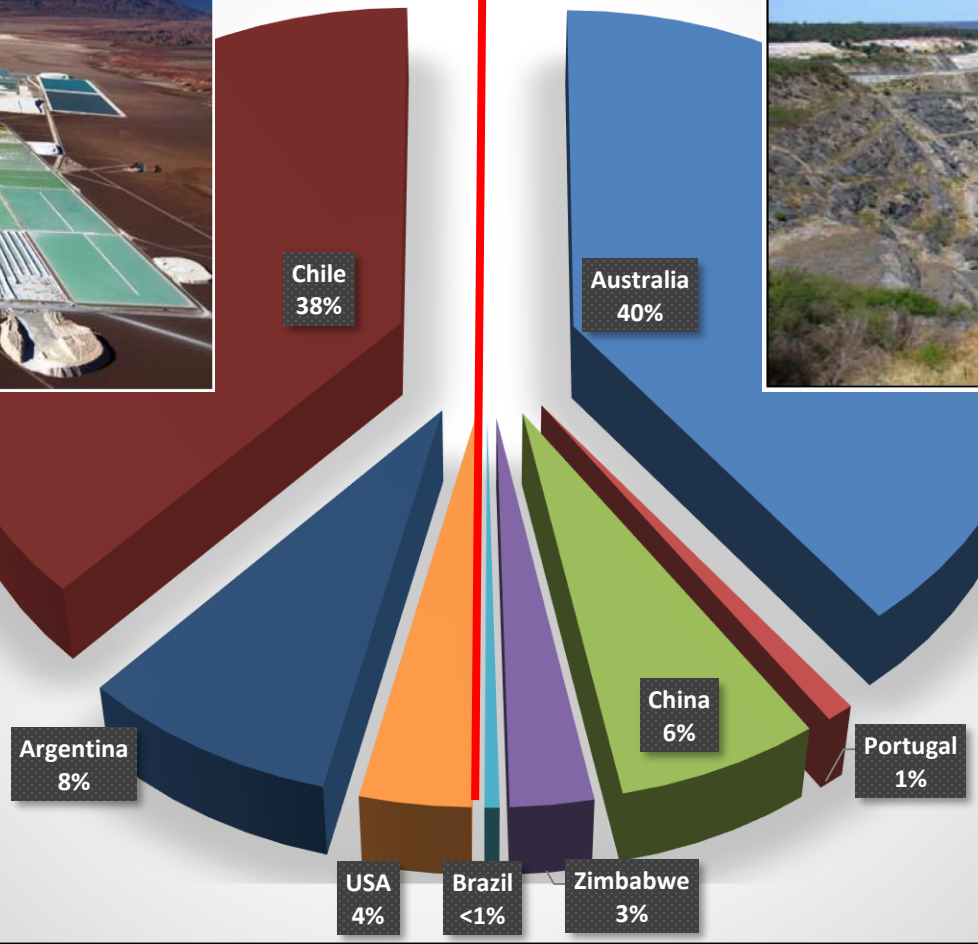
2015 global lithium production 33,860 tpa



BRINES



HARD ROCK



Copyright © 2017, Lithium Australia NL

The drivers to change in the lithium industry

Lithium Australia's goal is to establish production hubs with:

- 100% ownership of Sileach™ and LieNa™ technologies*
- Low energy processes
- Low exposure to mining
- Strong by-product revenue credit

The Team

- Highly experienced Board
- Motivated professionals – project development, financing, IP
- Significant equity in the Company

Australian government support

- Grants from state and federal governments
- IP agreement and research partnership with ANSTO Minerals (a division of the Australian Nuclear Science and Technology Organisation)

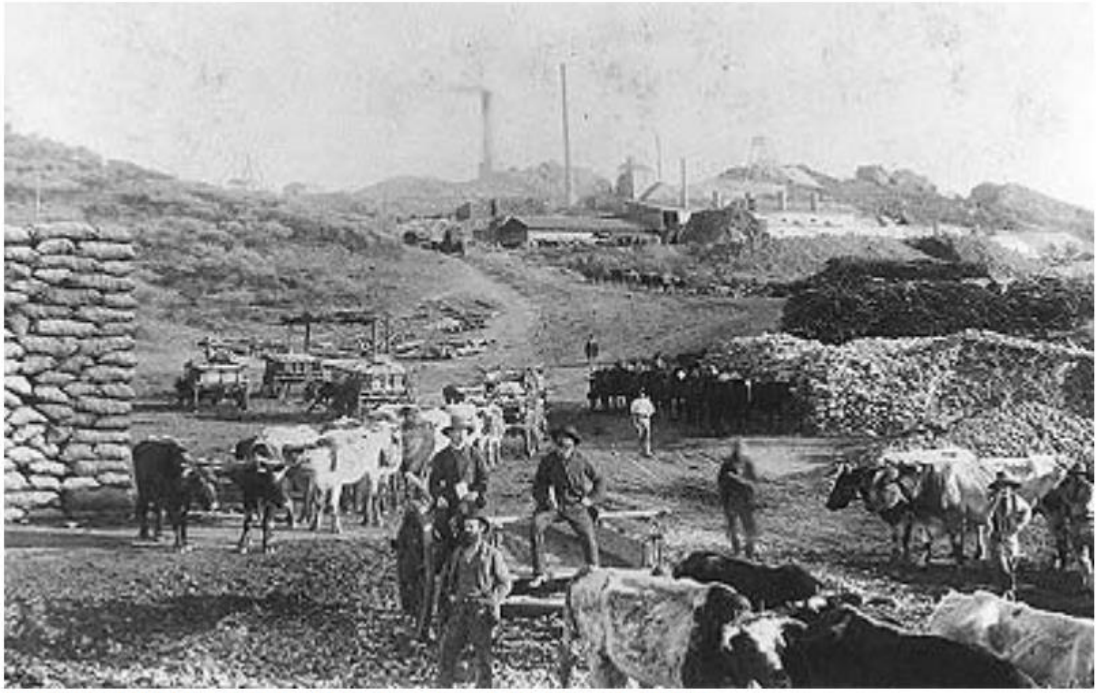
* Lithium Australia also holds exclusive licences for the LMax process (Lepidico Ltd owner and licensor). The licence agreement provides exclusive licensing rights in Western Australia and two other locations globally.

Copyright © 2017, Lithium Australia NL

Processing innovation creates a paradigm change

Lithium Australia NL

Froth flotation is widely considered to be the greatest invention to ever come out of the Antipodes. It took a brewer, a metallurgist, a mining engineer and others to turn the waste dumps of Broken Hill into ore and untold wealth.



Broken Hill Proprietary Company Ltd about 1888

"Broken Hill led the world in the profitable treatment of zinc-lead sulfides. At the turn of the 20th century, three out of every four tons that came out of the mine could not be treated. It was stacked in huge dumps along the line of lode; dumps that would mark the grave of Broken Hill unless silver, zinc and lead could be separated cheaply,

In 1902 D.G. Delprat, the general manager of Broken Hill Proprietary Company Limited, invented a process that promised to extract the treasure in the dump. He added oil, salt cake and other chemicals to a tank of pulped ore, and pumped air in through a blower at the bottom. He was delighted to observe that the particles of minerals clung to the rising air bubbles and overflowed the tank which the barren particles sank to the bottom. His company erected the first efficient flotation plant in the world."

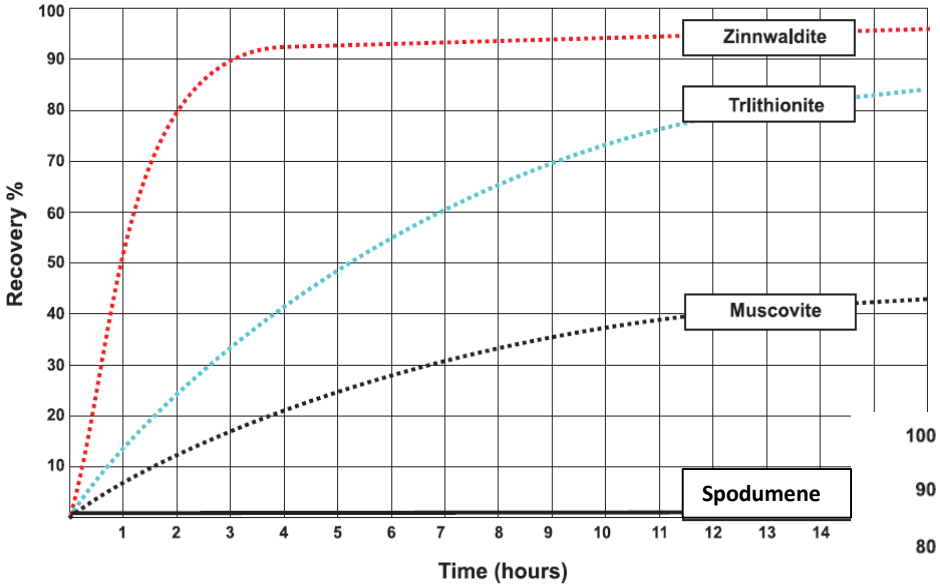
Taken from StumpJump Plough to Interscan, A. Walsh, Australian Academy of Science, 1977.

The Sileach™ process has the potential to transform the lithium industry…
…in the same way froth flotation did for the base metals industry.

Copyright © 2017, Lithium Australia NL

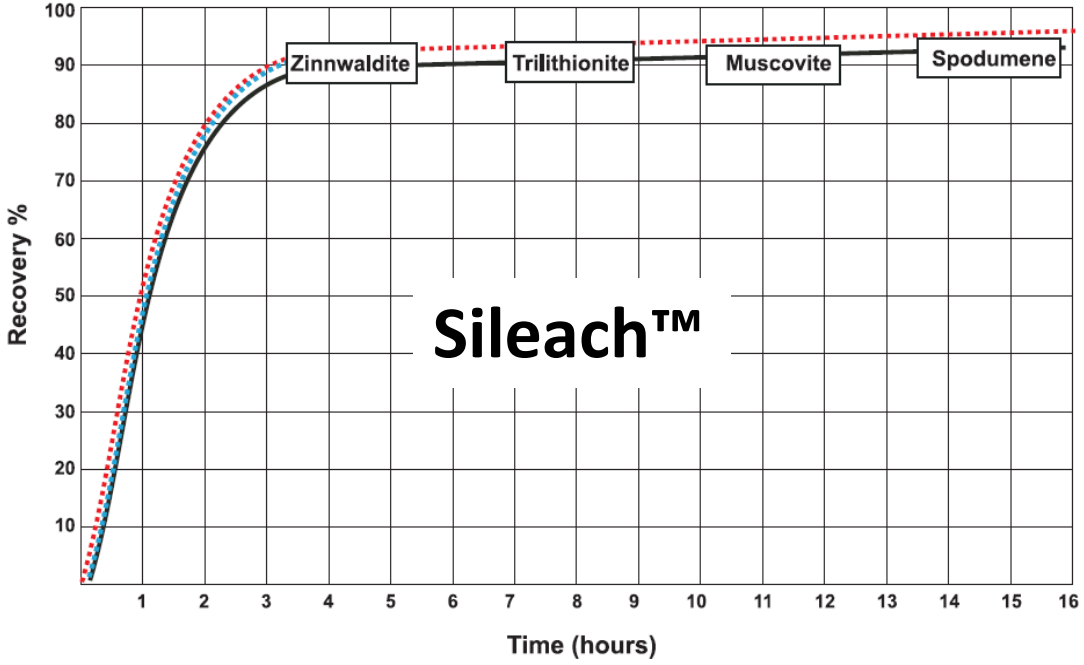
From Alpha-spodumene to Zinnwaldite, Sileach™ - the ultimate processing solution

Lithium Australia NL



Acid leach – variable leach time with the most commonly available lithium mineral, spodumene, unreactive.

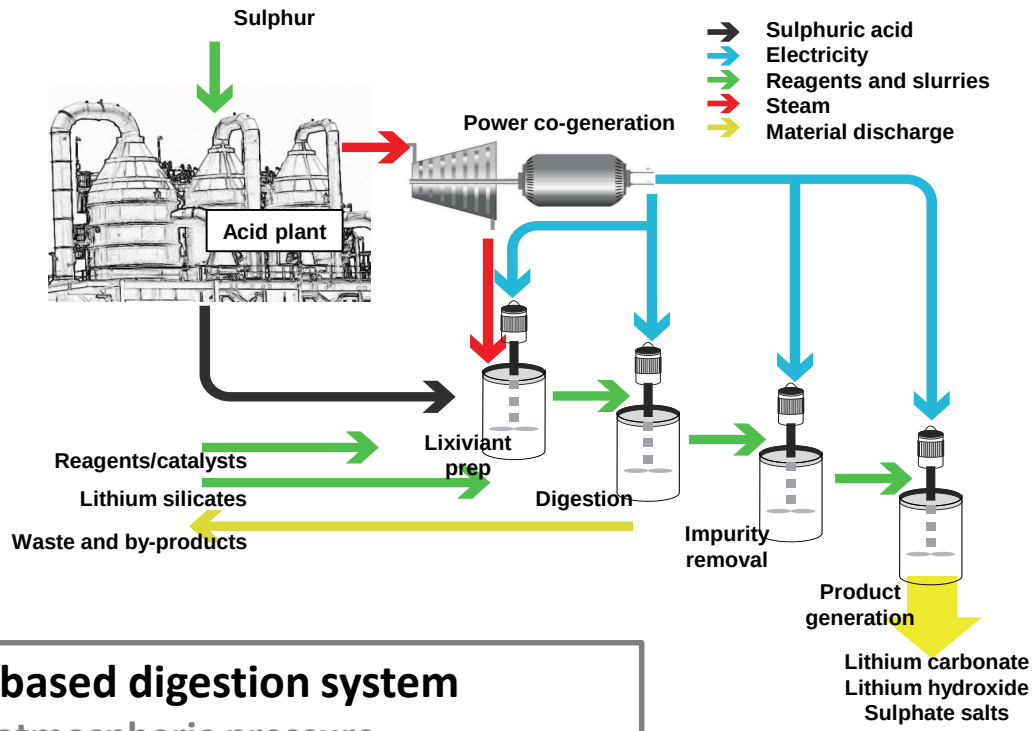
Sileach™ reduces most minerals to a common extraction curve



Copyright © 2017, Lithium Australia NL

Controlling processing technology – Sileach™

Sileach™ designed to rapidly digest any silicate mineral



Sileach™ is a halogen based digestion system

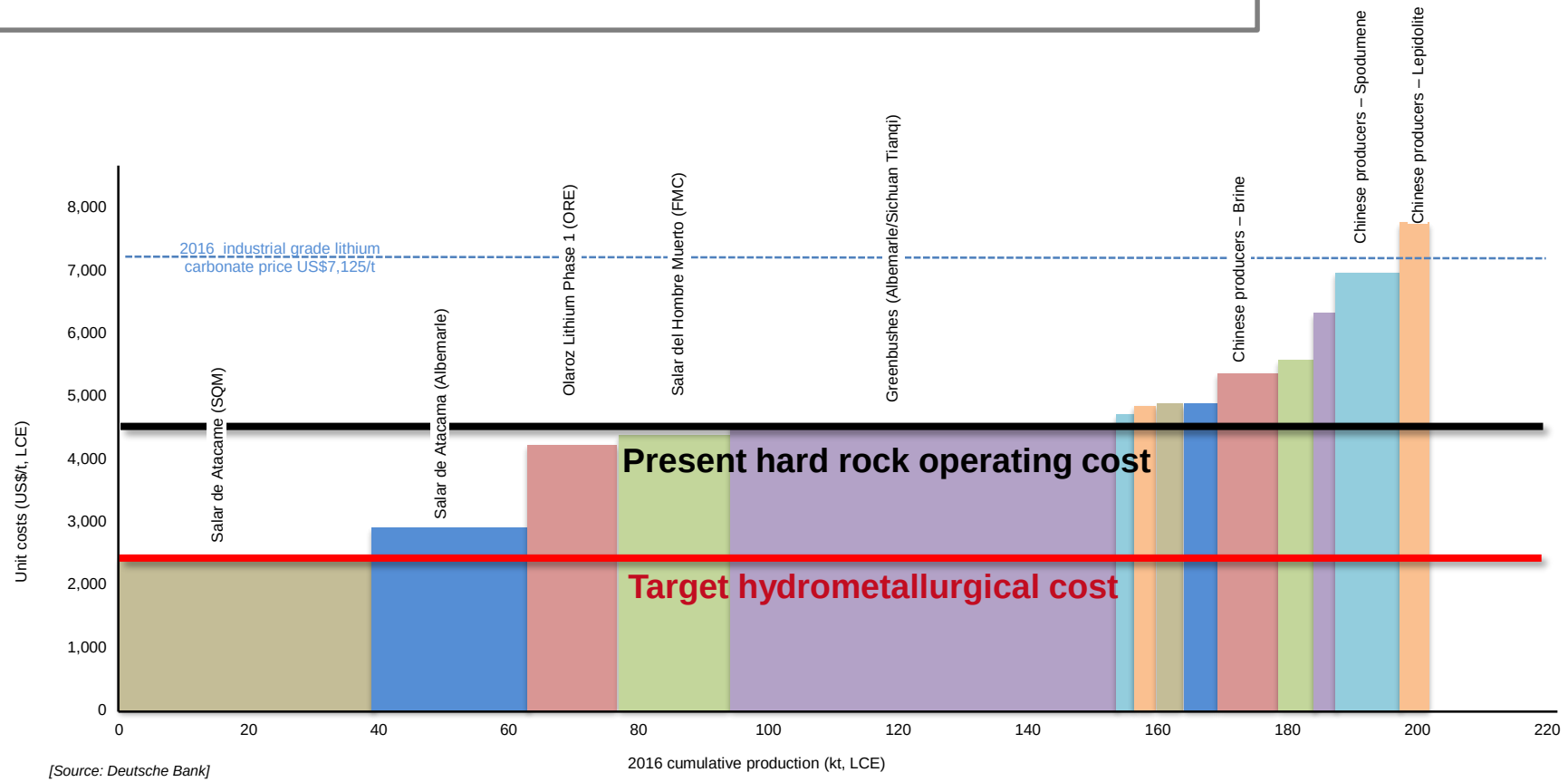
- processing occurs at atmospheric pressure
- energy requirement is low
- the carbon footprint is small
- recovery from most lithium minerals is high, and
- extensive by-product credits are possible

Copyright © 2017, Lithium Australia NL

Aspirational statement

The performance of the Sileach™ process

- Low energy consumption
- 100% owned by Lithium Australia
- Capable of generating by-product credits (e.g. K) - like the brine producers



[Source: Deutsche Bank]

Copyright © 2017, Lithium Australia NL

Sileach™ the path to commercial production



Process development

- IP development at ANSTO and Murdoch University
- Award of engineering contract for large scale pilot plant; design work has commenced

Commercialisation agreement with Pilbara Minerals (ASX:PLS)

- LIT and PLS agree to proceed to 50/50 JV on feasibility completion
- Key partnership to supply spodumene concentrates

Strategic Alliance with Alix Resources Corp (AIX TSX:V)

- Agua Fria is part of the Electra Project, Sonora, Mexico JV
- LIT is in the process of lifting its ownership of the project from 25% to 49%

Resource availability underpinned by a global evaluation program

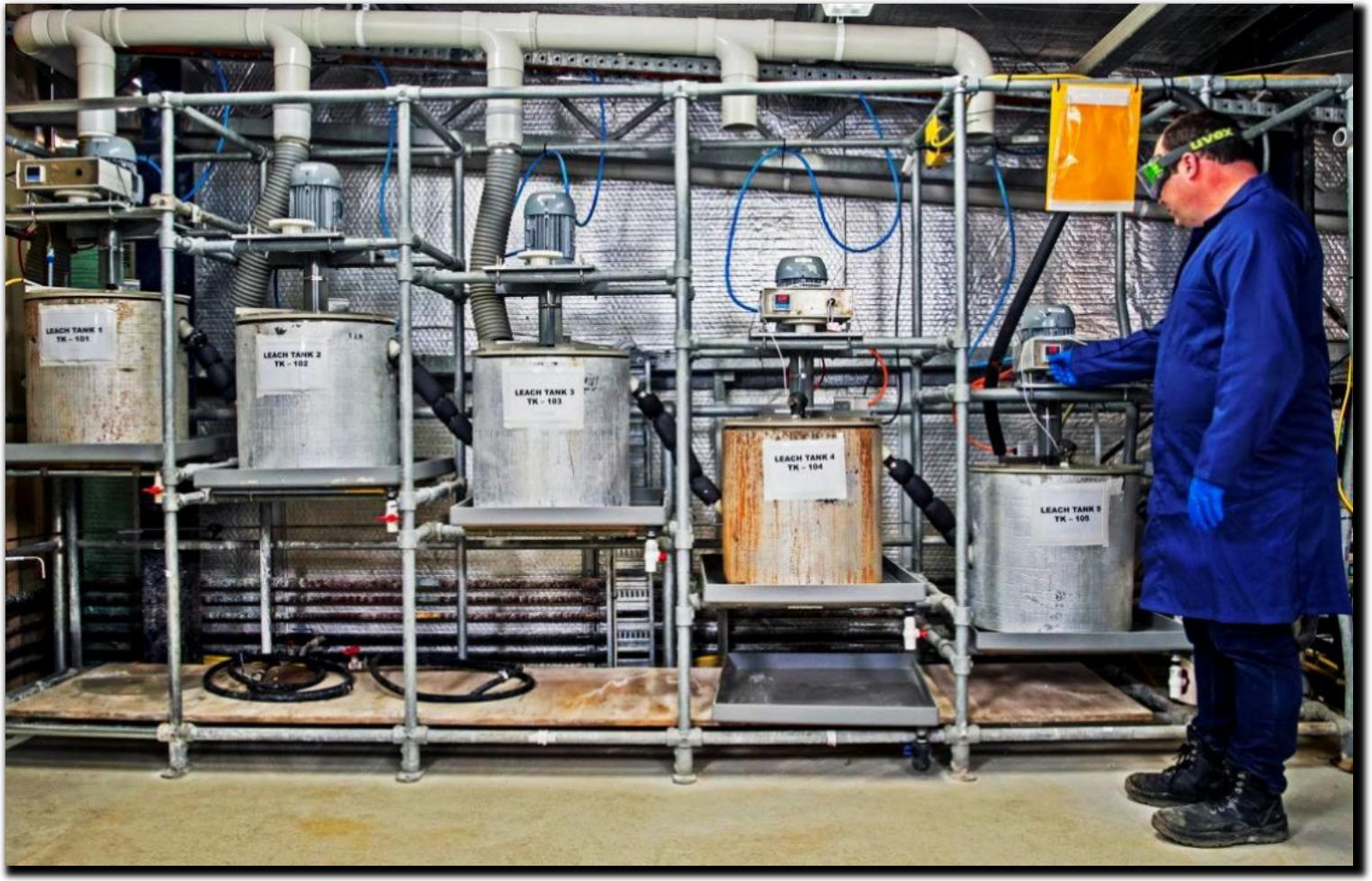
- Well advanced exploration programs & strategic partnerships
- Established in the world's major lithium provinces

Copyright © 2017, Lithium Australia NL

Sileach™ achieves a world first

Lithium Australia NL

ANSTO Minerals successfully pilot test the Sileach™ process



Copyright © 2017, Lithium Australia NL

Strategic positions in the global hot spots

Lithium Australia NL

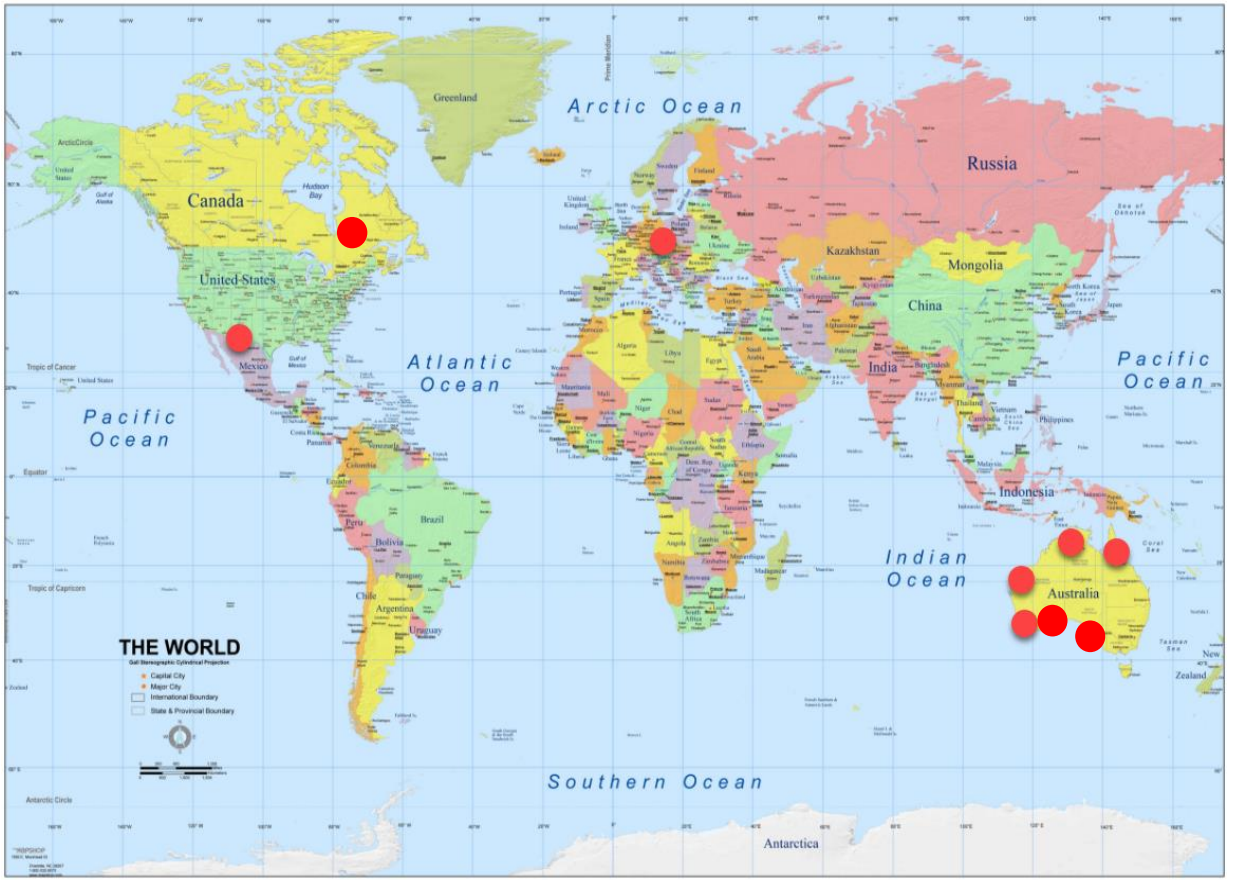
Lithium Australia – working towards resource security and combining technology with a global resource portfolio

Global alliances

- Australia
- Canada
- Mexico
- Europe

Lithium Australia 100%

- Greenbushes (WA)
- Ravensthorpe (WA)
- Lake Johnston (WA)
- Gascoyne (WA)
- Bynoe (NT)
- Kangaroo Island (SA)
- Cape York (Qld)



Copyright © 2017, Lithium Australia NL

Takeover of Lepidico Ltd
- to create a global force in the lithium landscape

Lithium Australia NL

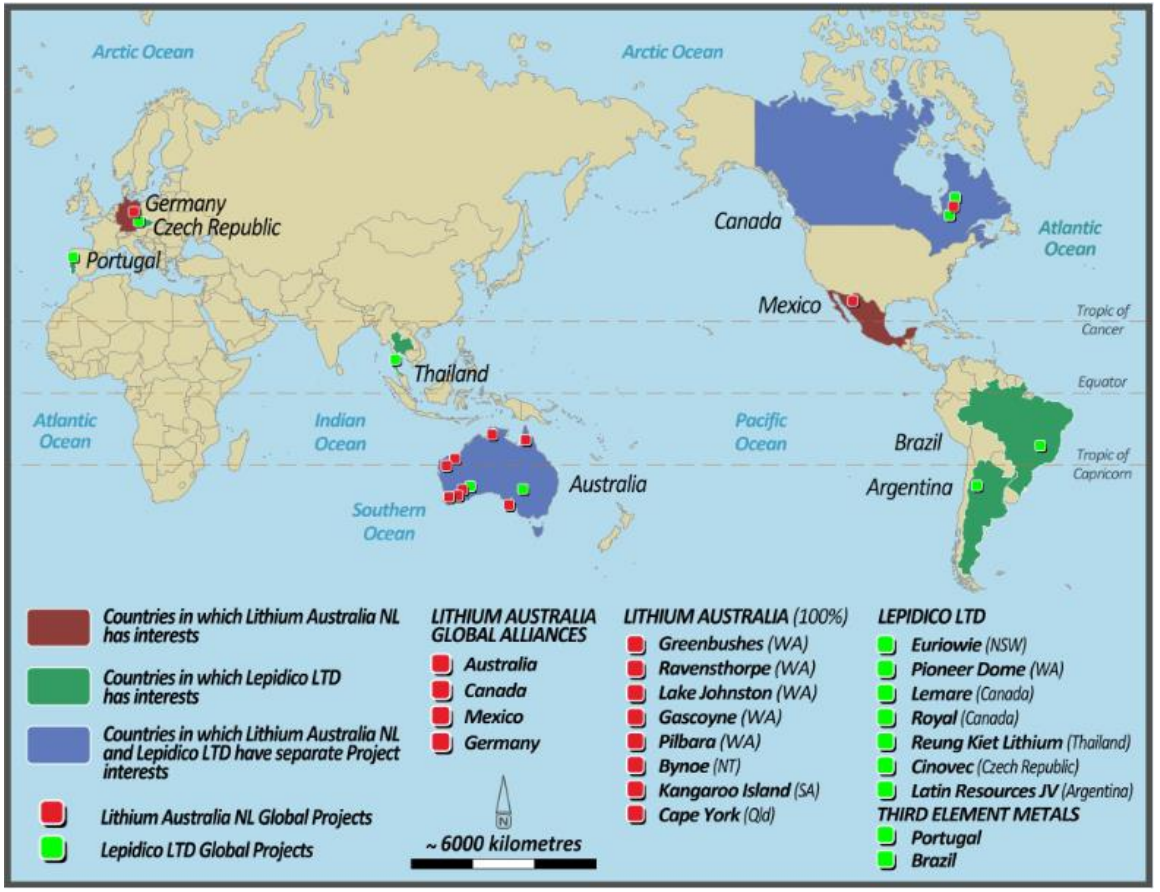
Lithium Australia – post Lepidico takeover strategic positions

The amalgamation of the two companies will control the emerging technology market

- Sileach™
- LieNA™
- L-Max®

The combined entity will:

- Provide greater liquidity
- Increase market capitalisation
- Improve access to funds
- Eliminate competition
- Improve capital efficiency
- Fast-track commercialisation



Copyright © 2017, Lithium Australia NL

What else is happening?

Progress update

- Sileach™ large scale pilot plant engineering study in progress – due April 2017
- Acquisition of 100% of Greenbushes project completed
- Drilling at Electra (Sonora County, Mexico) March 2017
- Proposed float of graphite assets and priority entitlement – BlackEarth Minerals – mid 2017
- Recycling initiative
    - lithium currently a disposable metal – not sustainable
    - cobalt a conflict metal

Engineering study in progress to build large scale pilot plant

- Aim to commit to construction, and complete, in CY 2017
- As a prelude to a commercial scale processing hub in Australia in CY 2018
- In tandem with other Sileach™ processing hubs in Europe / other locations

Copyright © 2017, Lithium Australia NL

Lithium Australia – key to sustainability

Lithium Australia – developing a sustainable lithium future

- Low-energy footprint
- Low emissions
- High by-product credits

Potential to capitalise on low-cost feed

- Potential to process off-spec mineral concentrates
- Plan to harness the value of waste streams
- Focus on tailings, low-grade concentrates and unconventional lithium minerals
- Potential to clean-up and reprocess tailings into more environmentally sustainable forms – stripped of their valuable metals, including lithium.

Bridging the recycling gap

- Evaluating and capturing the enormous potential of recycling
- Easing the pressure on conflict metals

Lithium Australia holds the key to a new future in energy management by supplying a low-cost, green alternative to conventional lithium production

Copyright © 2017, Lithium Australia NL

Why invest in Lithium Australia?

- ✓ **World-first, 100% owned technology – Sileach™**
- ✓ **Positioning at low end of cost curve; accessing higher up the value chain**
- ✓ **Developing and contributing to a sustainable lithium future**
- ✓ **Well advanced down the commercialisation path**
- ✓ **Strategic partnerships & alliances in the world's major lithium provinces**
- ✓ **Experienced Management**

Copyright © 2017, Lithium Australia NL

Management & Board Members

Lithium Australia NL

LIT has an experienced management team & board with a proven track record:

Adrian Griffin – *Managing Director*

Having spent some 40 years in mining, Mr Griffin's expertise ranges from project identification, development and financing to overseeing the operation of integrated mining and processing facilities. His substantial international experience includes diamond exploration and production and being a founder and technical director of Ferrum Crescent, an iron-ore developer in South Africa. Mr Griffin was also a founding director of Northern Minerals and Parkway Minerals (developer of the KMax process to recover potassium and other metals from glauconite) and is a non-executive director of Reedy Lagoon Corporation. Recently, he was instrumental in identifying the global opportunity to establish lithium micas as a source feed for the lithium chemical industry.

George Bauk – *Non-executive Chairman*

Mr Bauk's 25+ years of mining industry experience includes particular expertise in critical metals. Skilled in strategic management, business planning, the establishment of high-performing teams and capital-raising, he has held senior operational and corporate positions with WMC Resources and Arafura Resources and was Managing Director of Indago Resources (formerly Western Metals). Since 2010 Mr Bauk has been managing director and CEO of Northern Minerals, overseeing that company's heavy rare earth project in northern Australia. This included organising a successful greenfields exploration programme, obtaining government approvals for production and co-existence agreements with traditional owners, initiating a definitive feasibility study and establishing off-take agreements with international suppliers, as well as substantial fund-raising, all of which has provided him with valuable exposure to critical metals markets – experience now directly applicable to advancing the activities of Lithium Australia.

Bryan Dixon – *Non-executive Director*

Mr Dixon boasts substantial experience in the mining sector and the management of public and listed companies. He previously held positions with KPMG, Resolute Samantha Limited, Société Générale and Archipelago Resources Plc. Mr Dixon is Managing Director of Blackham Resources Limited and also holds non-executive director roles with Hodges Resources Limited. A chartered accountant, his project development, project acquisition, financing and corporate skills further benefit the Company.

Barry Woodhouse – *Chief Financial Officer, Company Secretary*

Mr Woodhouse has been involved in the manufacturing, mining services, exploration, mining, production (gold, oil and gas, iron ore, bauxite, lithium, copper, uranium and manganese) and information technology industries as Chairman, Director, CFO, financial controller and / or company secretary with a number of listed and private entities for a period of over 25 years. He has had exposure to a number of jurisdictions including USA, Indonesia, China, Vietnam, Europe and India. Such involvement has occurred in periods where companies are establishing or re-defining their investment strategy.

Copyright © 2017, Lithium Australia NL

Disclaimer

This presentation is for information purposes only. Neither this presentation nor the information contained in it constitutes an offer, invitation, solicitation or recommendation in relation to the purchase or sale of shares in any jurisdiction.

This presentation may not be distributed in any jurisdiction except in accordance with the legal requirements applicable in that jurisdiction. Recipients should inform themselves of the restrictions that apply in their own jurisdiction. A failure to do so may result in a violation of securities laws in that jurisdiction.

This presentation does not constitute financial product advice and has been prepared without taking into account the recipients' investment objectives, financial circumstances or particular needs, and the opinions and recommendations in this presentation are not intended to represent recommendations to particular persons. Recipients should seek professional advice when deciding if an investment is appropriate. All securities transactions involve risks, which include, among others, the risk of adverse or unanticipated market, financial or political developments.

Certain statements contained in this presentation, including information as to the future financial or operating performance of Lithium Australia NL ('LIT' or 'the Company') and its projects, are forward-looking statements. Such forward-looking statements are necessarily based on a number of estimates and assumptions that, while considered reasonable by LIT, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies, involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements, and may include, among other things, statements regarding targets, estimates and assumptions in respect of commodity prices, operating costs and results, capital expenditures, ore reserves and mineral resources and anticipated grades and recovery rates and are, or may be, based on assumptions and estimates related to future technical, economic, market, political, social and other conditions.

LIT disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise. The words 'believe', 'expect', 'anticipate', 'indicate', 'contemplate', 'target', 'plan', 'intends', 'continue', 'budget', 'estimate', 'may', 'will', 'schedule' and other, similar expressions identify forward-looking statements. All forward-looking statements made in this presentation are qualified by the foregoing cautionary statements. Investors are cautioned that forward-looking statements are not guarantees of future performance and, accordingly, investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein.

Many known and unknown factors could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements. Such factors include, but are not limited to: competition; mineral prices; ability to meet additional funding requirements; exploration, development and operating risks; uninsurable risks; uncertainties inherent in ore reserve and resource estimates; dependence on third-party smelting facilities; factors associated with foreign operations and related regulatory risks; environmental regulation and liability; currency risks; effects of inflation on results of operations; factors relating to title to properties; native title and Aboriginal heritage issues; dependence on key personnel, and share-price volatility. They also include unanticipated and unusual events, many of which it is beyond the Company's ability to control or predict.

Photographs in this presentation do not depict assets of the Company.

COMPETENT PERSON'S STATEMENT

The information in this report that relates to reporting of Exploration Results is based on and fairly represents information and supporting documentation prepared by Adrian Griffin, a member of the Australasian Institute of Mining and Metallurgy. Mr Griffin is a shareholder in, and managing director of, LIT and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration. He is qualified as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. *Mr Griffin consents to the inclusion in this report of the matters based on information in the form and context in which it appears.*

The reporting of mineral species is generic in nature, and the term 'lepidolite' – as it is applied to mineral species, and not necessarily locality names – includes mineral species widely considered to be part of the solid solution series of polylithionite/trilithionite, of which the Competent Person considers lepidolite to be approximately a median member. It is also acknowledged that material processed from Lepidolite Hill has bulk compositions tending towards trilithionite, although the rubidium concentration is outside the range generally expected in such minerals.

Similarly, the term 'zinnwaldite' has been applied to minerals approximating the accepted composition of zinnwaldite but with variations tending towards lepidolite. This terminology is considered acceptable by the Competent Person.

Copyright © 2017, Lithium Australia NL

Lithium Australia a glance

ASX listed: ticker LIT

Lithium Australia NL

BOARD OF DIRECTORS

George Bauk (non-executive chairman)

Expert in specialty metals, particularly rare earths – project management, marketing and financing.

Adrian Griffin (managing director)

Exploration, production, mine management.

Bryan Dixon (non-executive director)

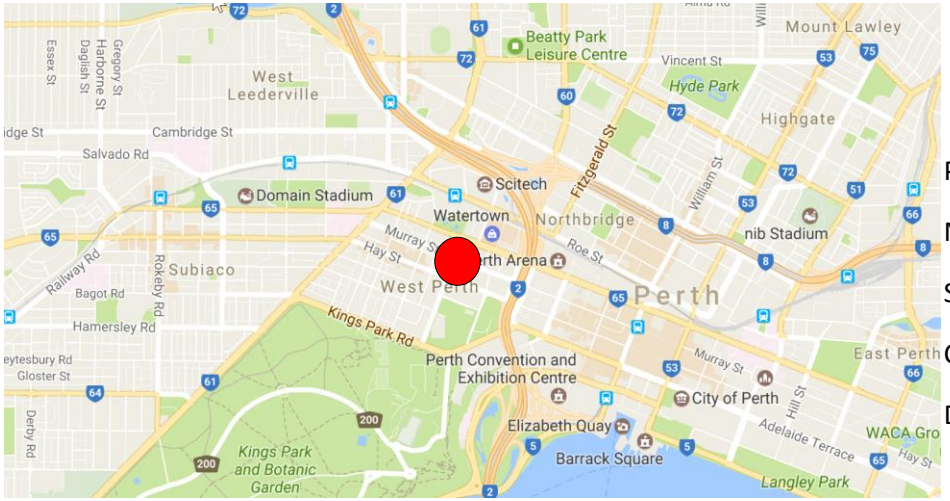
Corporate, finance, mine development.

Top 10 Holders	21.3%
Adrian Griffin	3.32
JP Morgan Nominees	3.18
Citicorp Nominees	3.63
P & M Bevilacqua	2.72
Buzz Monty Pty Ltd	1.93
Alan Jenks	1.45
ABM Amro Clearing	1.41
Apollinax Inc	1.27
HSBC Custody Nominees	1.22
Gasmere Pty Ltd	1.17

CONTACT INFO
Level 1, 675 Murray Street
West Perth 6005
Western Australia

PO Box 1088
West Perth 6872
Western Australia

Phone +61 (0) 8 6145 0288
Fax +61 (0) 8 9475 0847
info@lithium-au.com
www.lithium-au.com



Price (AU$) as of 28 Feb 2017	AU$ 0.165
Market Capitalisation 28/2(AU$M)	AU$ 43M
Shares Outstanding (fully diluted)	257,832,829
Cash position as at 28/2/17	AU$ 5.5M
Debt position as at 28/2/17	NIL

Copyright © 2017, Lithium Australia NL