



**Investor Presentation** 

**Charging Ahead At The Authier Lithium Project** 

#### **SYA Value Proposition**



Advanced, de-risked project - simple mining and well-tested metallurgy, and access to infrastructure



Executing a plan to get into production and generate cash flow



Low enterprise value compared to industry peers



Board and management team have track record of delivering projects



#### **Catalysts for Share Price Re-rating**



#### **Authier drilling**

- Potential to expand JORC Resources
- Upgrading resource categories
- Exploration potential



#### **Authier JORC Resource upgrade**



#### **Authier pre-feasibility study**

- Project economics
- Timeline to production
- Pathway to offtake and construction finance



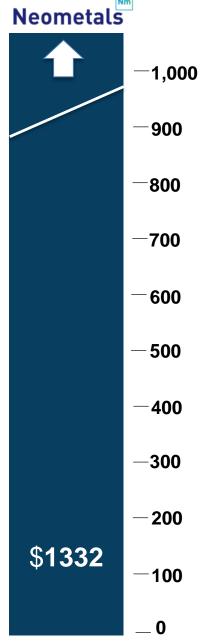
Western Australian lithium and graphite exploration



#### **Hard Rock Lithium Peer Universe**

- EV/Resource value is low compared to near-term developer peers
- EV is more indicative of lithium **explorers**







#### **Authier Value Up-lift Potential**





## Key drivers of the Green Energy Revolution





#### **Environmental**

Reducing reliance on fossil fuels



Traditional power generation networks costly and inefficient



#### **Self Sufficiency**

Improved economics of Li-ion batteries

## The way we Generate, Use, Distribute and Store energy changing



Creating demand for Lithium and Graphite for use in batteries

# The Company's strategy is to change the world and power the future by sourcing and developing the raw materials essential for lithium-ion battery production









## **Project Portfolio** Lithium Li BATTERY **Graphite Authier Lithium** East Kimberley Graphite Pilbara Lithium Lithium development Mt Edon Lithium

SAYONA

Lithium exploration

Graphite exploration



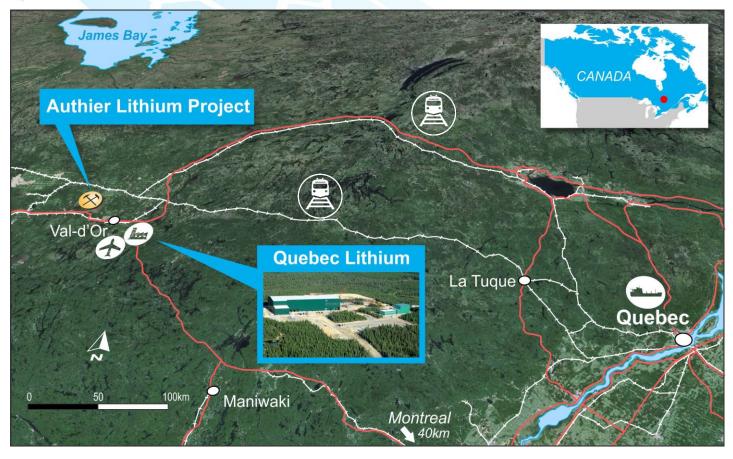
#### Quebec, Canada

## A globally significant region for lithium deposits but development infrastructure a major constraint



#### **Authier Infrastructure**

#### Well established development infrastructure



## **Excellent Infrastructure**

Low cost hydro power

Road and rail access

Experienced local
mining workforce

653 ha tenement package

Located in a major mining district

50km by road to the Quebec Lithium Plant

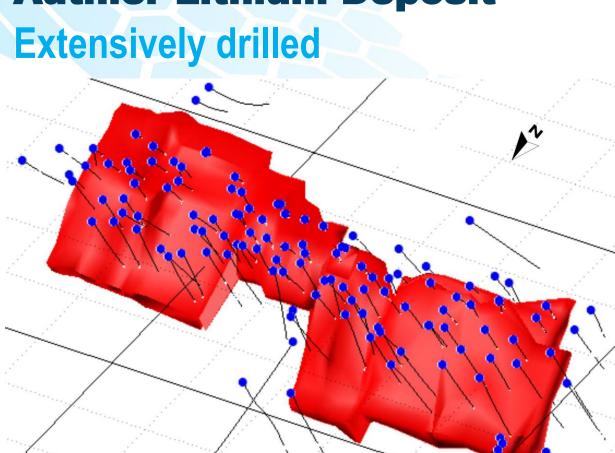








#### **Authier Lithium Deposit**





**15,000**m drilled

SAYONA

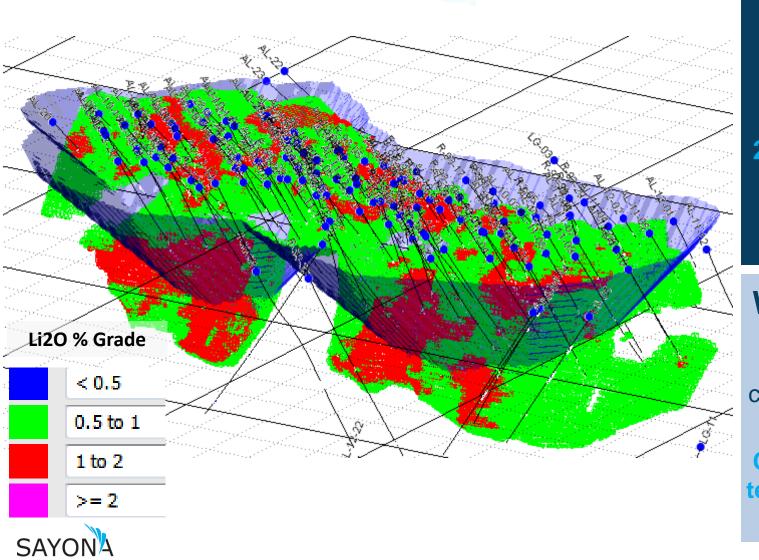
123 holes

2,143
lithium assays



#### **Authier Lithium Deposit Pit Contour**

#### Simple deposit geometry



## **Authier Deposit**

825m long25m average width

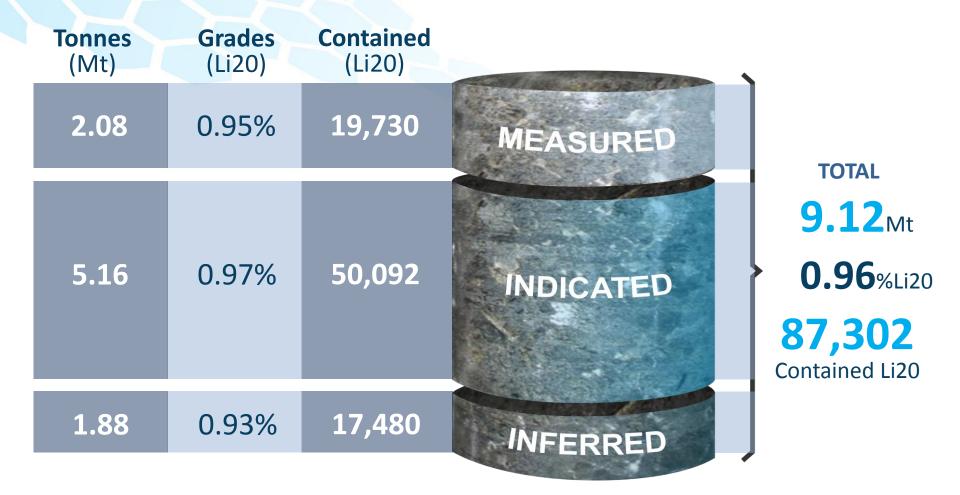
200m deep and still open

#### Well studied

NI43-101 completed in 2013

Commercial and technical viability confirmed

#### **Authier JORC Mineral Resource**

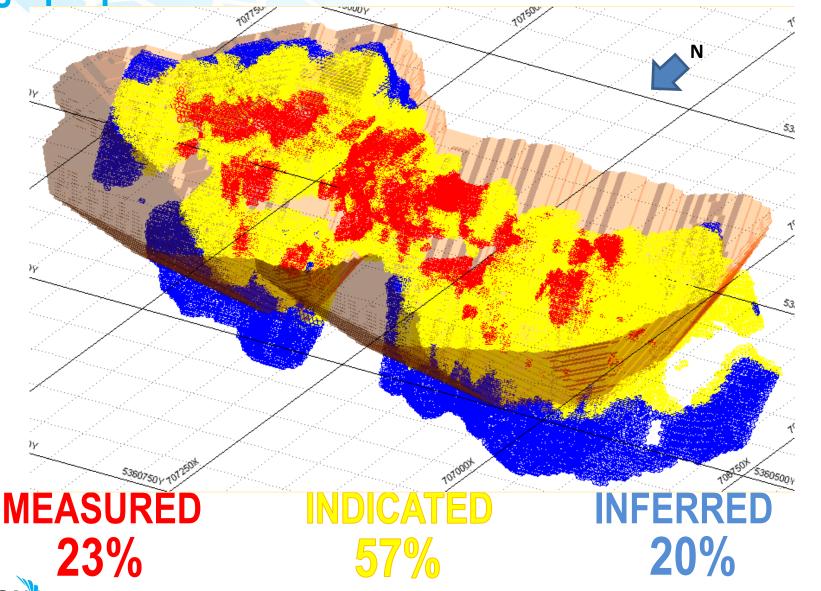


- 0.5% Li<sub>2</sub>0 cut-off grade\*
- Cautionary Note Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources estimated will be converted into Mineral Reserves estimate
- The resource has been estimated and reported in accordance with the guidelines of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012).



#### **Authier Deposit Resource Distribution**

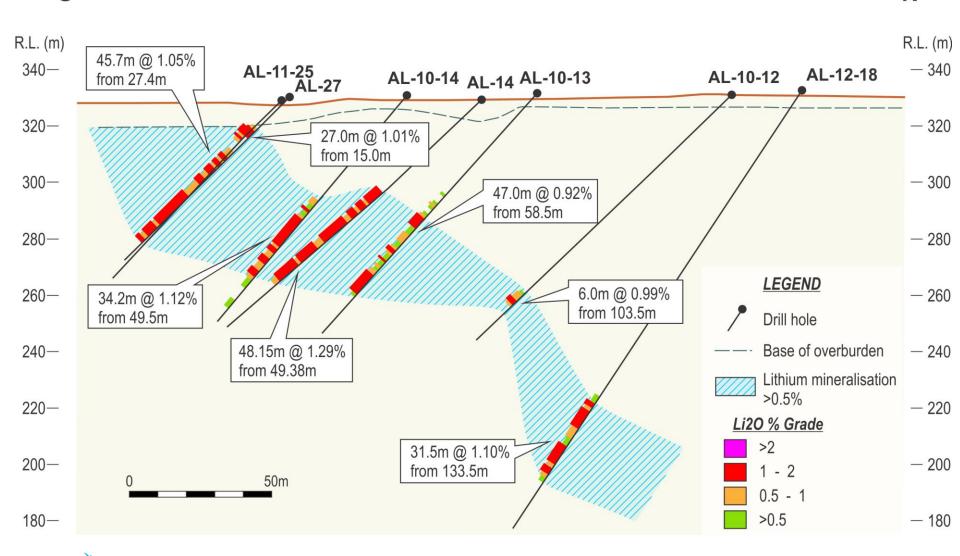
High proportion of measured and indicated resources



#### **Authier Lithium Deposit Cross Section**

Amenable to low-cost, open-cut mining techniques

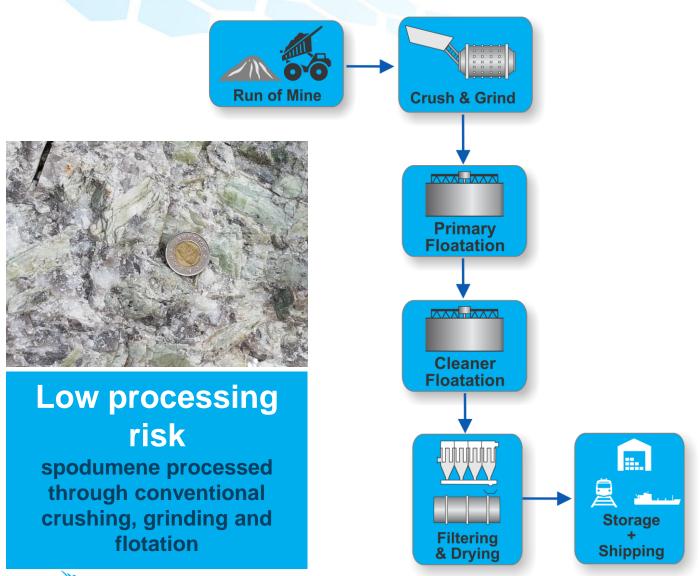
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#### **Authier Metallurgy**

#### **Conventional processing route**



## Flowsheet Design

85% recovery

5-6% Li20 concentrate

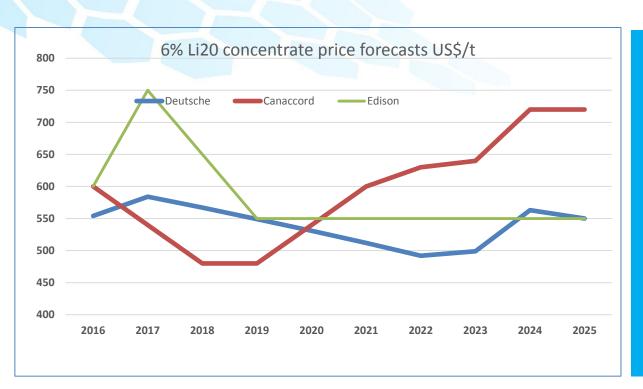
### Optimisation Options

Mica flotation

Downstream processing into intermediate products



#### **Authier Pre-Feasibility Study in Progress**



Galaxy currently selling concentrates at US\$600/t

Significantly higher prices than modelled in Authier 2013
NI-43101 PEA price of CAD\$525/t

Long term independent price forecasts reflect strong demand outlook for concentrates

#### **Authier deposit advantages**



Low Cost



Extensively Drilled



Well Studied



**Open Pit** 



Simple Process



Good Infrastructure

#### **Authier Next Steps**





Metallurgy program



Pre-Feasibility Study



Resource definition drilling



Resource upgrade



**Definitive Feasibility Study** 



Off-take and financing



Construction and operation





#### **Authier Drilling Program**



## DIAMOND DRILLING PROGRAM

6,000 metres in 2 phases

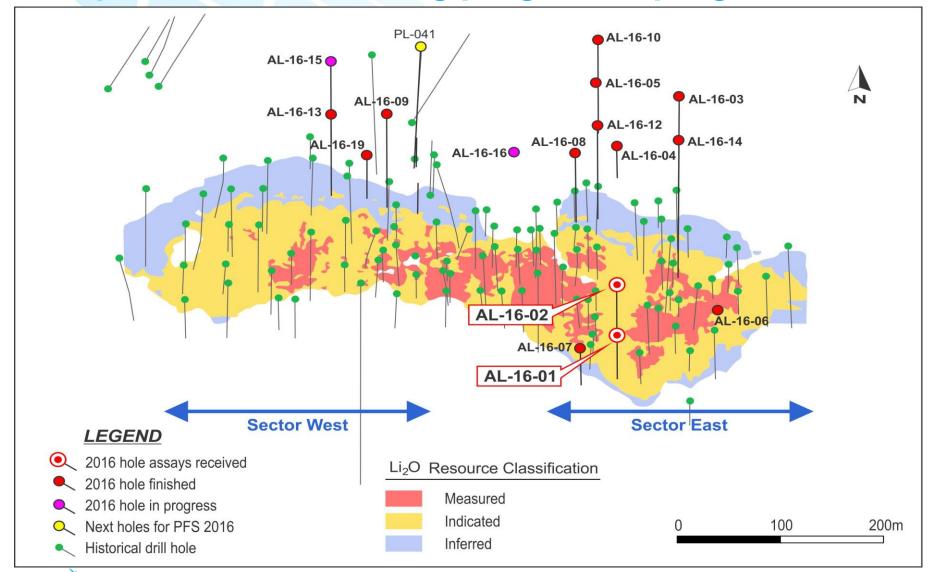
**Drilling Program Objectives** 

- Converting inferred mineral resources to measured and indicated
- Convert mineral resources to reserves
- Exploring for extensions to the mineralisation
- Collecting geotechnical data for Feasibility Studies



#### **Authier Drilling Program**

#### First phase 4,000m drilling program in progress

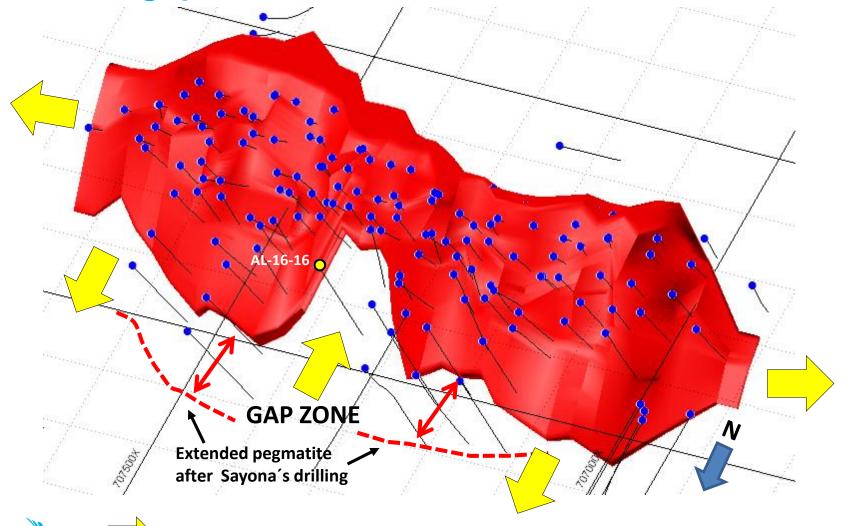




#### **Authier Lithium Deposit Expansion Potential**

Drill hole 16 intercepts 40 metres of mineralisation

within the gap zone

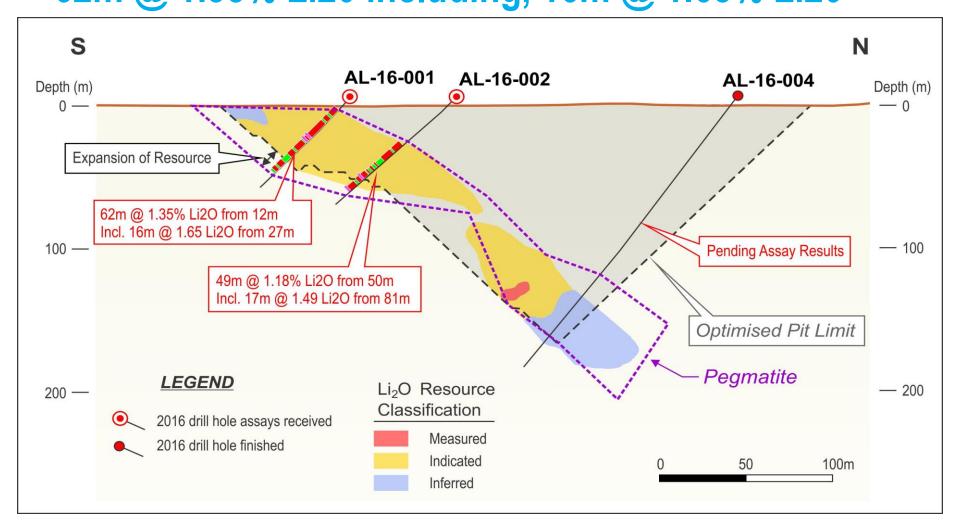






#### **Authier Drilling Program**

## First drill records longest intercept recorded at Authier – 62m @ 1.35% Li20 including, 16m @ 1.65% Li20

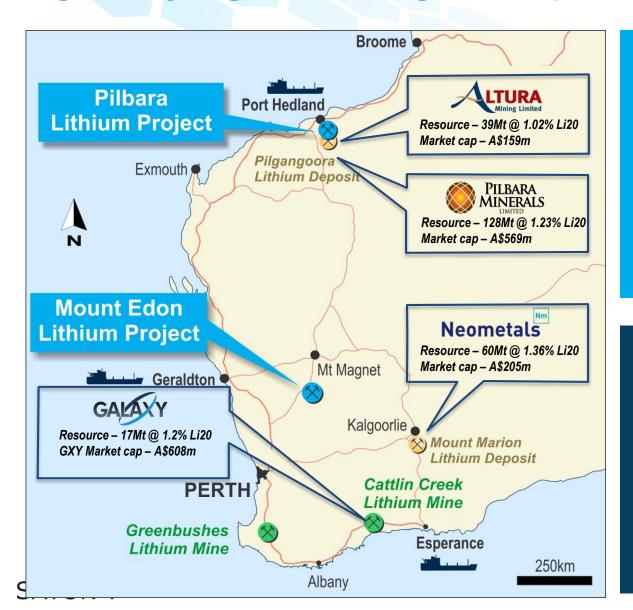






#### **Western Australia Lithium Portfolio**

#### A globally significant region for production of Lithium



Low-cost entry with

1,116 km<sup>2</sup>

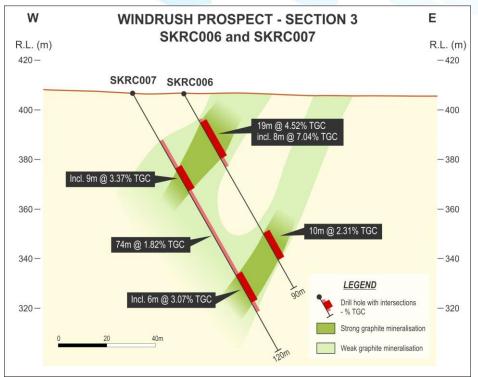
tenement holding, including granted tenure

#### Western Australia

a dominant global producer of Lithium from high-grade, hard-rock PEGMATITES

#### **East Kimberley Graphite Project**

#### Diamond drilling planned to test grades and quality



3,000 m drilling completed in Dec 2015

6 km of 20 km target zone drilled

Best assay 12%TGC

Best Intercepts: 16m @ 5%TGC 22m @ 3.4%TGC

Open at depth and along strike

Coarse graphite observed

278km<sup>2</sup>

tenement package

Proven graphite province

World-class
Infrastructure

for access to world markets

SAYONA \* See ASX Release, "Corkwood Drilling – Broad Zones of Mineralisation", 17 February 2016



#### **Corporate Summary**

TRADING EXCHANGE

**ASX: SYA/SYAO** 

SHARES/OPTIONS

**800** Million shares\*

235 Million options\*

**SHAREHOLDERS** 

30% DIRECTORS

**62%** TOP 20



#### **CAPITALISATION**

Price

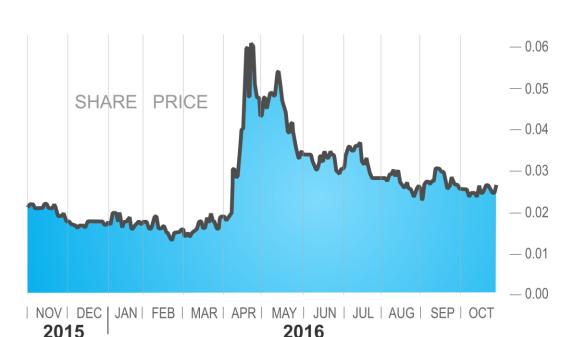
2.5¢

Market cap

\$19M

Cash
As at 24 Oct 2016

\$1.2M



#### **Strong Team With Track Record of Success**



Expertise and experience in exploration, development and mining



Strong skill set in Lithium exploration and development

#### **Executive Team**

Corey Nolan Chief Executive Officer Simon Atwell Exploration Manager

#### **Directors**

Dan O'Neill
Paul Crawford
Allan Buckler
James Brown

#### **Consultants**









## Lithium Industry Overview





## Lithium ... Critical in the Energy Revolution

Goldman Sachs

What if
I Told You....
Lithium is the
New Gasoline
Dec 2015

Lithium is now considered a key, strategic energy metal in the clean technology economy that is being fuelled by advances in electric vehicles, energy storage and electronics





Energy Storage -

The economic value of energy storage over a 10-year period in the US could reach \$228 billion, 21% of the \$1 trillion global economic benefit

Disruptive Innovations II, 2014

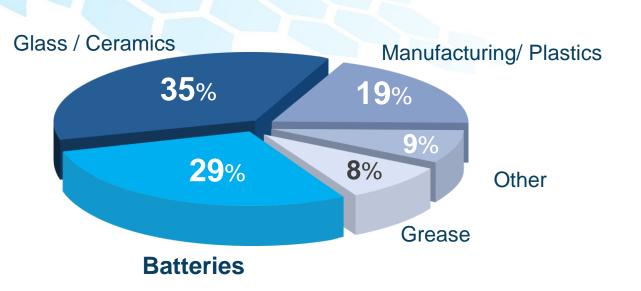
The Economist

An Increasingly Precious Metal

Jan 2016



#### **Lithium Consumption – The Future is Electric**





#### Lithium-ion is the battery of choice







Longer life-cycle and more efficient



More environmentally friendly



Source: Stormcrow, 2013 data

#### **Key Demand drivers through to 2025**



Renewable grid storage

>**30**% CAGR



Transportation – electric and hybrid vehicles

**20-30**% CAGR



Consumer **electronics** 

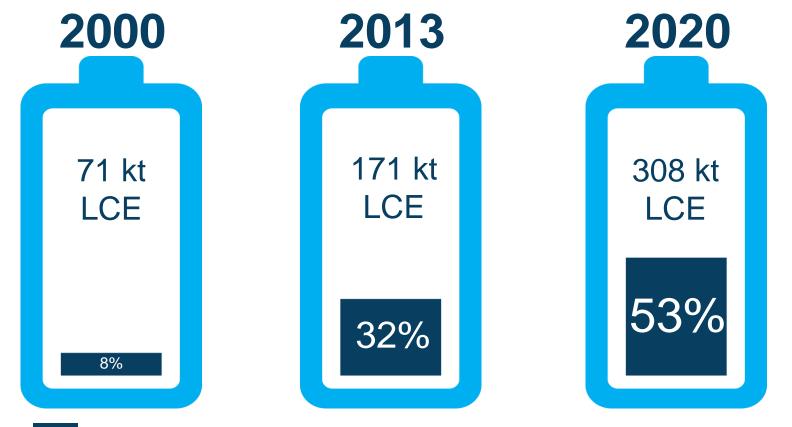
**8-10%** CAGR



#### **Batteries are the fastest growing segment**

The problem with existing lead-acid batteries is that they suck ""

Elon Musk







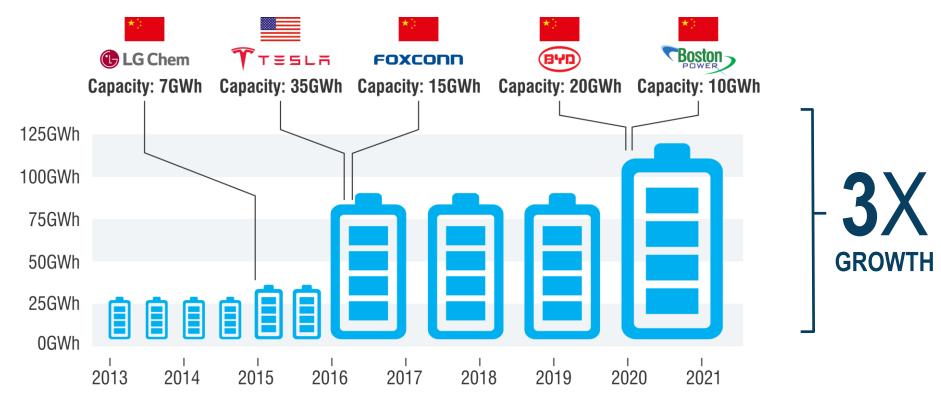
#### **The Megafactories are Coming**

Solar power [with] batteries will be the primary means of sustainable energy production ""



Tesla's Nevada site







#### **Dawn of a New Auto Era**

Car design will change more in the next 15 years than it has in the past 100 — electrification will kick start the biggest change in automotive design in history

Ian Callum, head of design for Jaguar, April 2016



#### **Electric & Hybrid Vehicles**

## 20 MILLION EV & HYBRID CARS BY 2020

**20 MILLION** 



735,000



2010



2020

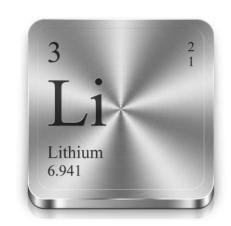
2004



#### **Lithium Sources**

#### **LITHIUM IS A SOFT SILVER-GREY METAL:**

- ✓ Low density and atomic mass
- ✓ High electrochemical potential
- ✓ High specific heat capacity



MAJOR SOURCES OF LITHIUM

Salt Lake (brine)



Hard rock pegmatite







CONVERTS TO
LITHIUM-HYDROXIDE
FOR USE IN
LITHIUM-ION
BATTERIES



Spodumene extracted from pegmatites:



#### Few New Lithium SUPPLY Options Available

5 COMPANIES 90% OF WORLD PRODUCE SUPPLY



END USERS SEEKING
NEW SUPPLY OPTIONS

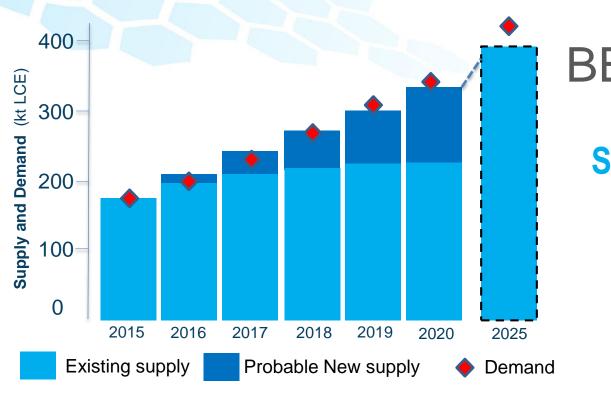








#### Supply & Demand - A Perfect Storm



#### **BEYOND 2020**

**GAP BETWEEN SUPPLY & DEMAND EMERGES** 



**Existing Producers** at Capacity

No New Projects in **Construction Phase** 

#### **DEMAND**

**Growing Demand** 

**New Applications Creating Demand Pressures** 

#### **HIGHER PRICES**

Pricing for Lithium Carbonate has Tripled Since 2003

Trading at RMB112,000/t\* in China = US\$16,538/t



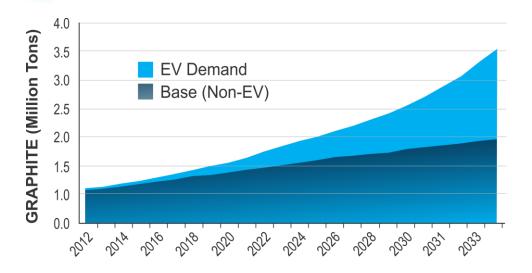
SAYON Source: Citi and Company estimates \* Asian Metal

#### Why the Graphite Exposure?

## \$12 BILLION GROWING MARKET

FORECAST DEMAND FOR GRAPHITE IN ELECTRIC VEHICLES TO INCREASE OVER 10 YEARS

80%







Source: seekingalpha.com

#### **Disclaimer**

#### **COMPETENT PERSON STATEMENTS**

Gustavo Delendatti for Authier - The information in this report that relates to Exploration Results is based on information compiled by Dr Gustavo Delendatti, a member of the Australian Institute of Geoscientists. Dr Delendatti is an independent consultant, and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which it is undertaking to qualify as a Competent Person as defined in the JORC Code (2012 Edition) of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves." Dr Delendatti was responsible for the design and conduct of this exploration drilling campaign, supervised the preparation of the technical information in this release and has relevant experience and competence of the subject matter. Dr Delendatti, as competent person for this announcement, has consented to the inclusion of the information in the form and context in which it appears herein.

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#### **Reference to Previous ASX Releases**

This presentation refers to the following previous ASX releases:

- Authier JORC Resource, 7 July 2016
- Corkwood Drilling Broad Zones of Mineralisation, 17 February 2016
- High grade lithium intersected over wide widths at Authier, 24 Oct, 2016
- · Drilling intersects thick zone of mineralisation in the gap zone, 25 Oct 2016

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