

February 2018  
ASX: **SYA**

# Authier Lithium Project Fast Tracking Towards Production and Cashflow

## Forward Looking Statements

This presentation may contain certain forward looking statements. Such statements are only predictions, based on certain assumptions and involve known and unknown risks, uncertainties and other factors, many of which are beyond Sayona Limited's control. Actual events or results may differ materially from the events or results expected or implied in any forward looking statement. The inclusion of such statements should not be regarded as a representation, warranty or prediction with respect to the accuracy of the underlying assumptions or that any forward looking statements will be or are likely to be fulfilled. Sayona Limited undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date of this presentation (subject to securities exchange disclosure requirements). The information in this presentation does not take into account the objectives, financial situation or particular needs of any person. Nothing contained in this presentation constitutes investment, legal, tax or other advice.

## Reference To Previous ASX Releases

This presentation refers to the following previous ASX releases:

- Authier JORC Resource Expanded , 11 December 2017
- Authier Maiden JORC Ore Reserve, 11 December 2017
- Authier PFS, 11 December 2017
- Authier Downstream Concept Study Demonstrates Positive Economics, 30 August 2017

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and all material assumptions and technical parameters continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

## Downstream Concept Study

The Concept Study referred to in this announcement has been undertaken to determine the potential viability of downstream processing Authier concentrates into lithium carbonate and/or hydroxide. It is based on a low level technical and economic assessment and was based on the AACE International Recommended Practice No. 18R-97, as a Class 4 estimate. The study has not been used as the basis for the estimation of Ore Reserves. Further technical and economic assessment including, metallurgical testing, Feasibility Study and permitting will be required to provide any assurance or certainty of an economic development case.

The Concept Study is based on the mine and concentrator assumptions (includes Ore Reserves) outlined in the February 2017 Authier Pre-Feasibility Study, Authier Updated JORC Resource report (14 June 2017), a report prepared by Wave International on the downstream capital and operating costs, Appendix – Project Design Criteria, and other material assumptions outlined elsewhere in this document. Whilst the Company considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the outcomes indicated in the Concept Study will be achieved.

To achieve the potential downstream process plant development outcomes indicated in this Concept Study, additional funding will be required. Funding will be required to complete metallurgical testing (\$100,000), feasibility studies and permitting (approximately \$1,000,000) and development (approximately \$223 to \$240 million depending on whether it is a lithium carbonate or lithium hydroxide plant). Investors should note that there is no certainty that the Company will be able to raise the funding when needed. It is also possible that such funding may only be available at terms that may be too dilutive to or otherwise affect the value of Sayona shares. It is also possible that Sayona could pursue other 'value realisation strategies such as sale, partial sale or joint venture of the project. If it does, this could materially reduce Sayona's proportionate ownership of the project. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Concept Study.

The Company has concluded it has reasonable basis for providing forward looking statements included in this announcement and believes that it has a reasonable basis to expect it will be able to continue funding the feasibility activities for the project.

The Lithium-ion battery is changing the way we generate, use, distribute and store energy



**Renewable**  
grid storage

>30%\*



**Transportation**  
electric and  
hybrid vehicles

25-30%\*



Consumer  
**electronics**

8-10%\*

**Battery and energy storage**  
for high technology industries



**driving unprecedented  
demand**



\* Projected compound annual growth rate until 2025



- **Slow ramp-up** of new projects
- **Funding constraints** – capex typically higher than market cap **for most new entrants**
- **Environmental & permitting constraints**
- New technology – **longer-lead times and higher capex** than PFS studies forecast. **High-risk, difficult to fund**



Supply of Lithium is under pressure to keep up with robust demand

Funding constraints

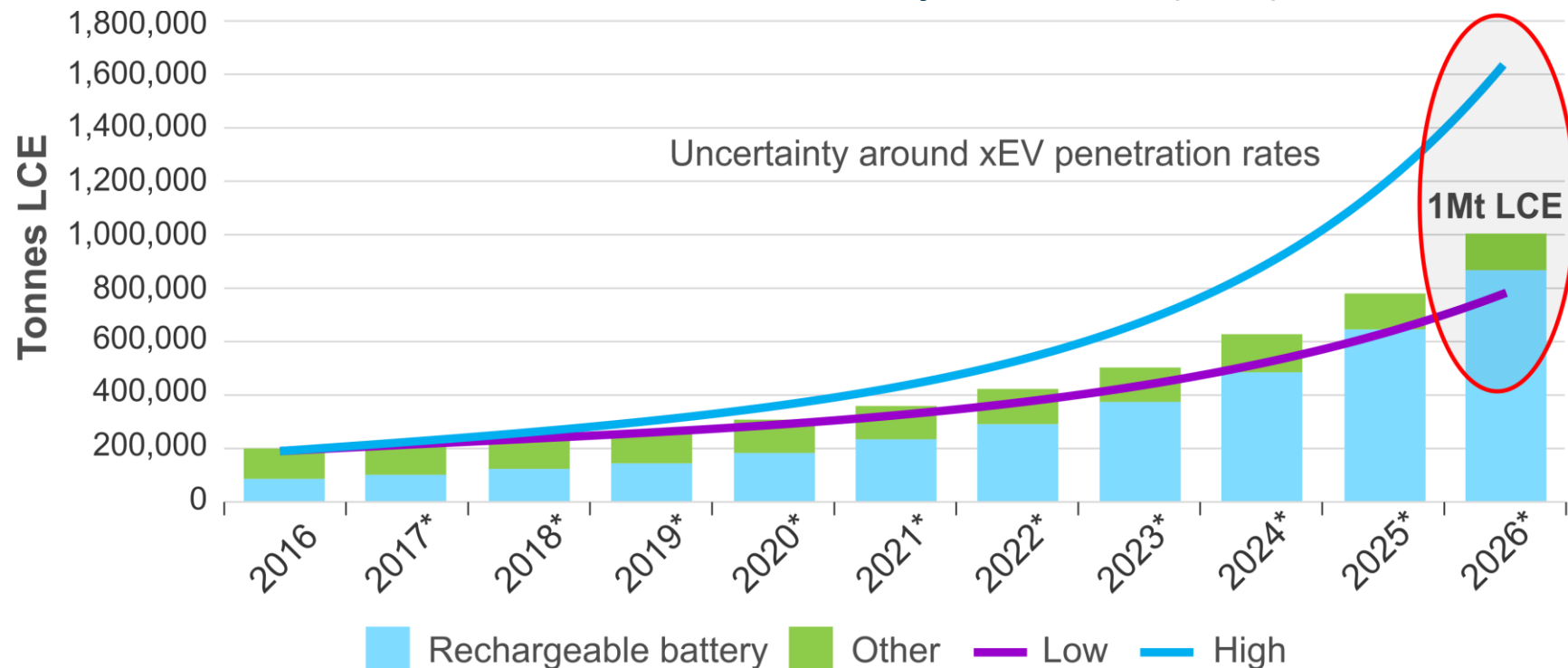
Technical expertise

Long lead times

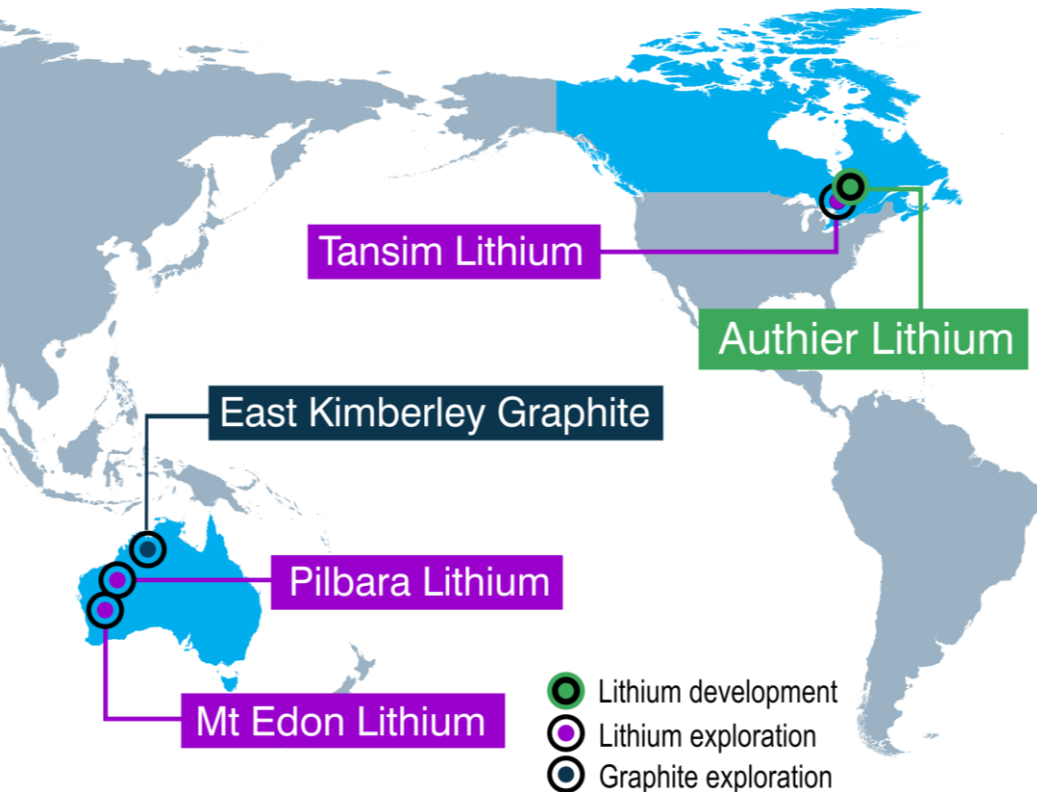
Environmental

# Significant Supply Side Investment Needed

## Forecast Demand for Lithium by Use to 2026 (t LCE)



**“The impact of automotive electrification on lithium:  
1TWh and 1Mt LCE in 10 years”**



- Australian-based, ASX listed lithium exploration and development company
- Primary objective is to fast-track development of the advanced Authier Lithium Project
- Targeting first production at Authier in late 2019 / early 2020
- Significant portfolio of lithium exploration properties in Australia and Canada

## Share Structure

Trading Exchange	<b>ASX: SYA</b>
Shares	1,475,046,728
Shareholders	19% Directors 46% Top 20

## Capitalisation

Price <small>As at 13 Feb 2018</small>	<b>6.8¢</b>
Market cap	<b>AUD\$100m</b>
Cash <small>As at 31 Dec 2017</small>	<b>AUD\$3.5m</b>
Debt	<b>Nil</b>

## Research Coverage

**Beer & Co.**  
Equity Research



Dedicated to generating shareholder value by replicating past success

## James Brown

- 35 year's experience including, 22 years with New Hope Corporation. Extensive mine development & operational experience
- Managing Director of Altura Mining - >\$600m market cap

## Allan Buckler

- 40 year's experience building mining operations in Australia and Indonesia. Former Director and Chief Operations Officer for New Hope Corporation
- Director of Altura Mining

## Dan O'Neill

- Geologist with 35 year's experience in technical and corporate roles
- Founding director of Orocobre Ltd. Director of Altura Mining

## Paul Crawford

- CPA with 35 years public company experience
- Previously Company Secretary of companies including, Orocobre Ltd (founding director), Elementos and ActivEx

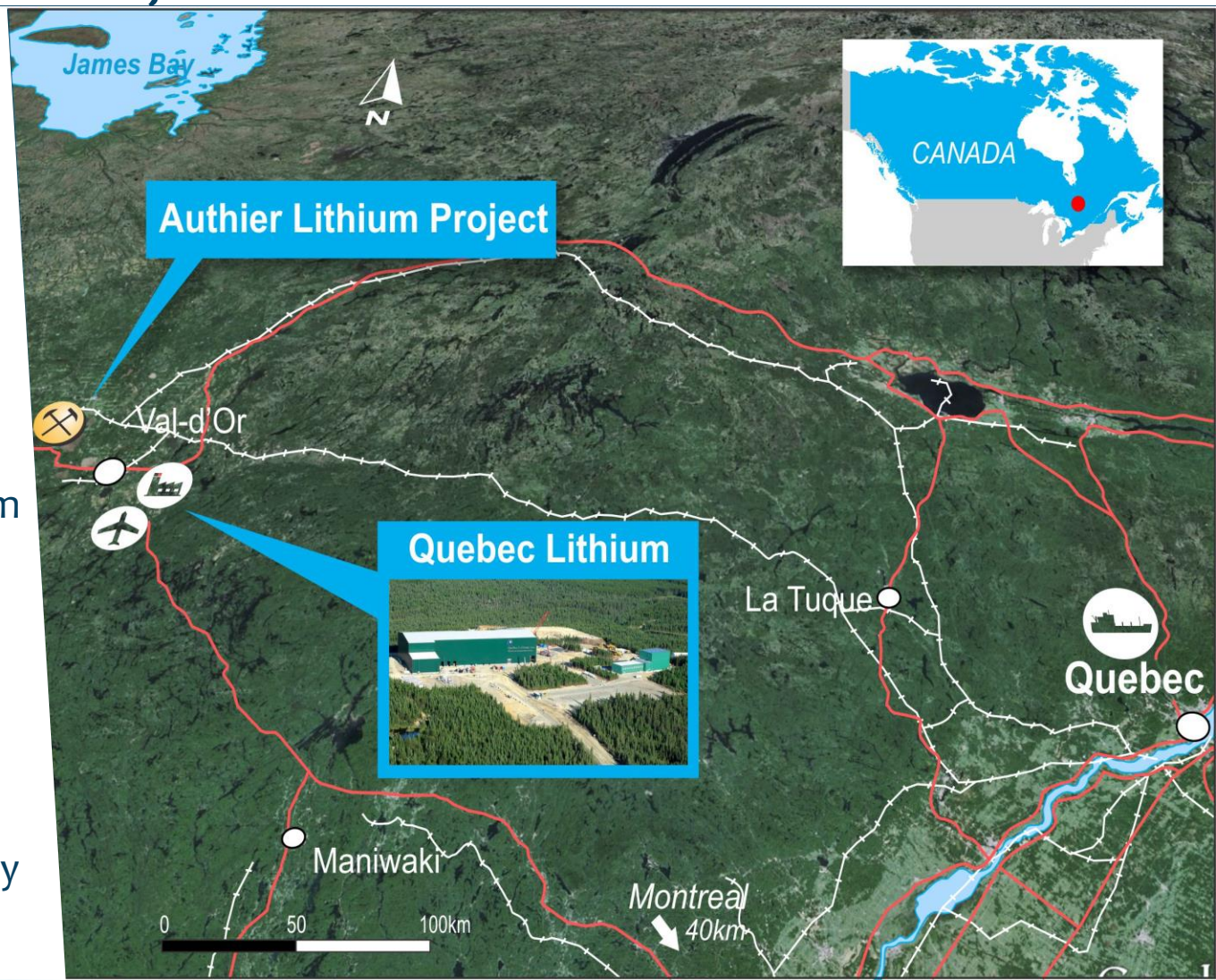








## Building in-house capability across all technical disciplines

<b>Corey Nolan</b> CEO	<ul style="list-style-type: none"><li>• 24 years experience in exploration, development, operations and corporate finance</li><li>• Started and managed a number of resource companies with projects in a range of commodities and countries</li></ul>
<b>Jonathon Gagne</b> Canada Manager	<ul style="list-style-type: none"><li>• Mining Engineer with MBA and more than 10 years experience in operations and mine planning</li><li>• Joined from Glencore Zinc's open-cut mine planning division</li></ul>
<b>Jarrett Quinn</b> Processing Engineer	<ul style="list-style-type: none"><li>• Mineral processing and hydrometallurgical specialist</li><li>• Experienced in lithium processing within Canada</li></ul>
<b>Jean-Pierre Landry</b> Authier Project Manager	<ul style="list-style-type: none"><li>• More than 25 years experience in the construction industry, including 17 years in the mining industry</li><li>• Extensive experience in feasibility studies and construction</li></ul>

# Authier Lithium Project

- Located 45km from Val d'Or in Quebec, Montreal (500km SE)
- Located in established mining district
- 100% owned
- Simple deposit - 26,000m of drilling
- Environmental studies completed. Permitting advanced
- Well studied – PEA 2012, PFS 2017 – DFS underway



-  **Simple, low-cost, truck and shovel, open-cut mining operation**
-  **Conventional concentrator** producing 96kt/yr of 6% Li<sub>2</sub>O concentrate
-  **Definitive Feasibility Study commenced.** Targeting completion Q2 2018
-  **Permitting and environmental** to be completed early 2018
-  Base case mine life **17-years**
-  **Low capital hurdle and competitive operating cost**

1 **First Phase Development based on a Fast Track Permitting Regime**

Start-up capex of  
**AUD\$65** million  
and  
and opex of  
**US\$327/t**

Pre-Tax NPV (8% real)	AUD\$227m
Pre-Tax IRR	56%
Capital Payback	2.5 years
Ave Annual EBITDA	AUD\$38m
Ave Operating Margin	US\$287/t
Price Forecast	US\$614/t

# Authier JORC Ore Reserve & Resource

**Deposit well understood** – more than 20,000 metres of drilling in 150 holes

Majority of **Ore Reserve** hosted in **one large pegmatite** – 1.1km long, 200m deep and 35m wide – outcropping from surface

Lithium mineralisation **spodumene**

Base case mine Life – **17 years**

Deposit remains open in all **directions**

## JORC Ore Reserve (0.45% cut-off)

Tonnes (Mt)	Grades (Li2O)	Contained (Li2O)
-------------	---------------	------------------

4.9

0.97%

47,821

5.3

1.06%

55,904

**11.6**

**1.02%**

**102,725**



## JORC Mineral Resource (0.45% cut-off)

Tonnes (Mt)	Grades (Li2O)	Contained (Li2O)
-------------	---------------	------------------

5.86

1.01%

59,186

10.19

1.03%

104,957

2.20

0.99%

22,796

**18.1**

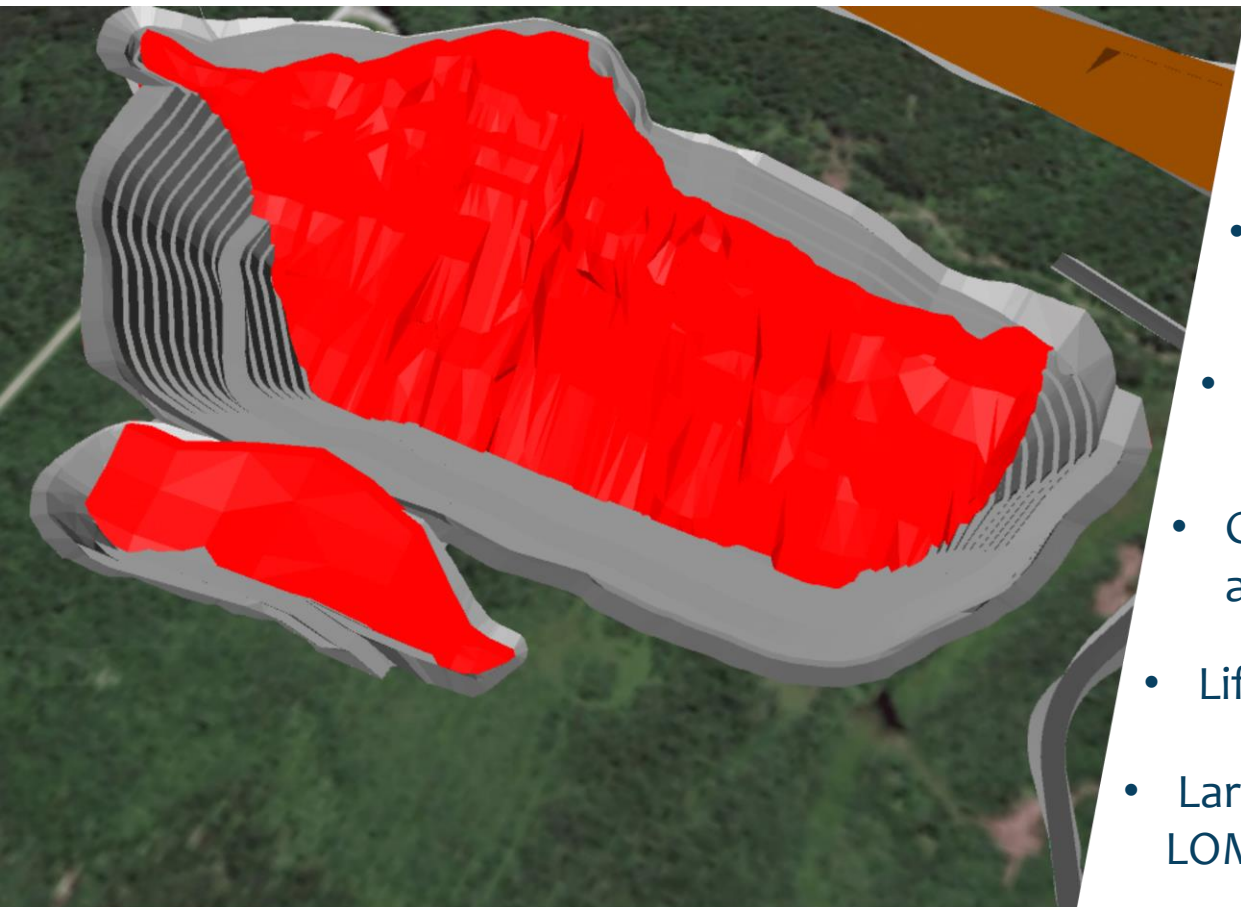
**1.02%**

**186,939**

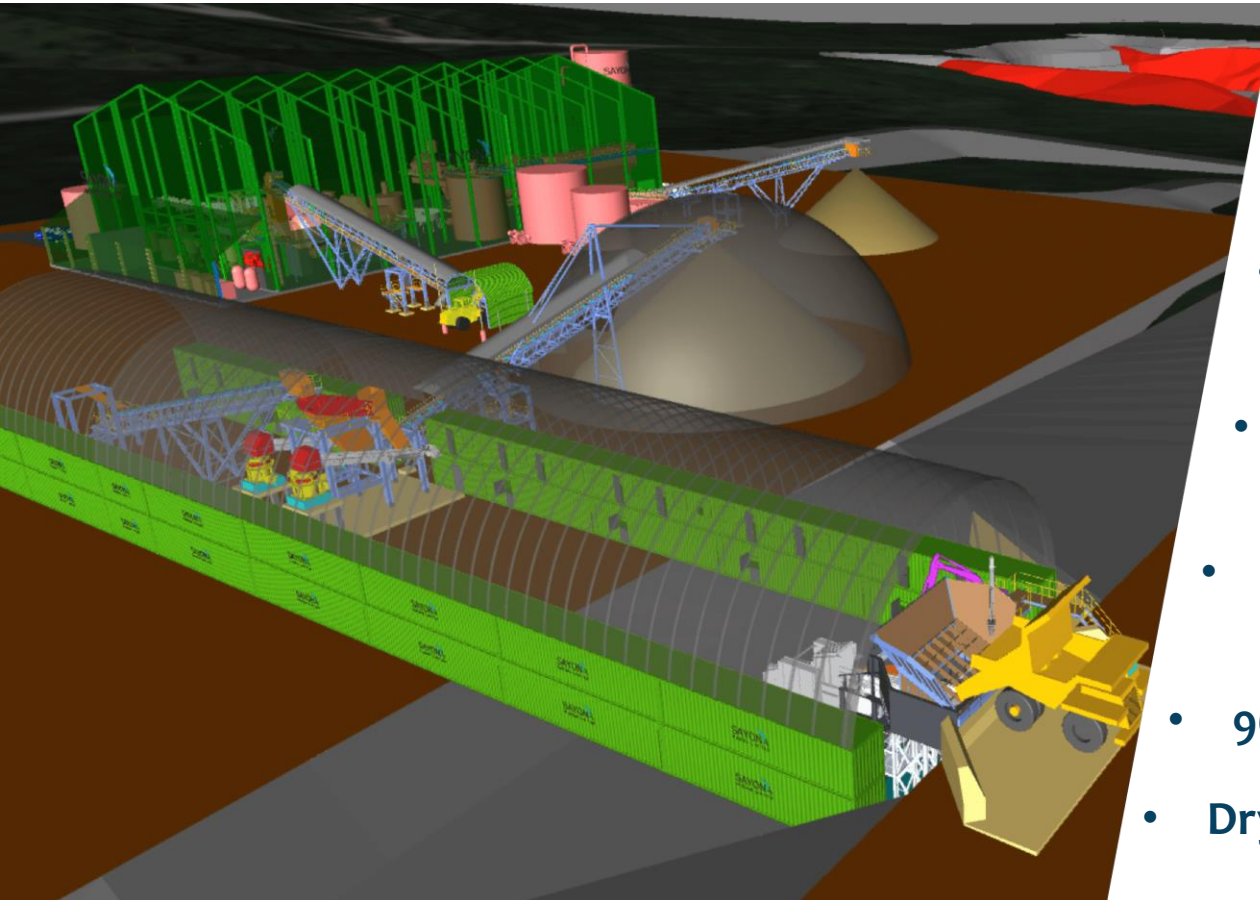




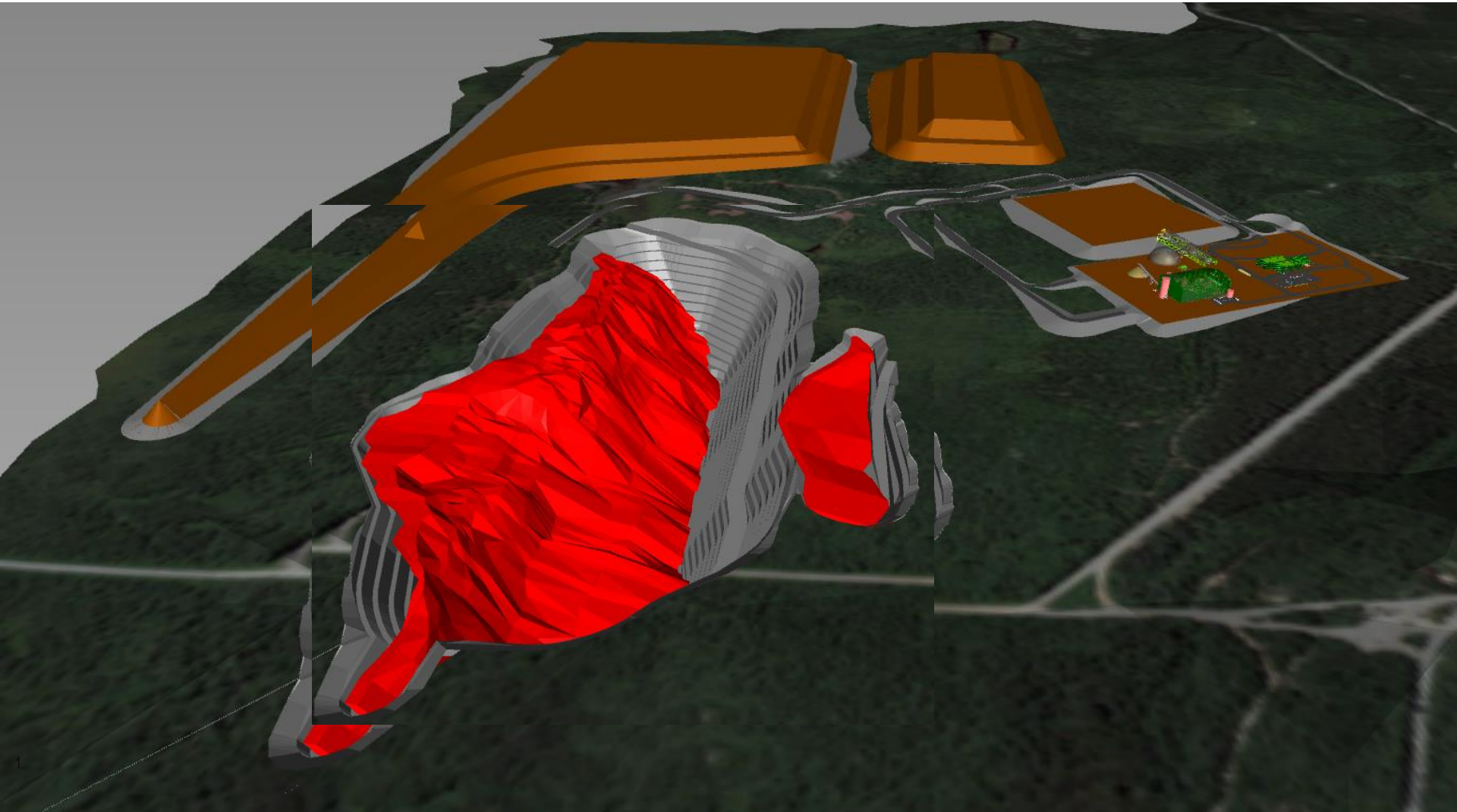
# Simple, Open-Cut Mining Operation



- Simple Mining Method  
**Truck and shovel** operation
- Competitive Mining Costs  
**A\$3.23/tonne** average LOM
- Low Capex  
Mining Fleet **Leased**
- Conservative geotechnical assumptions – **55°** pit slope
- Life-of-Mine - **17** years
- Large, thick tabular body  
LOM waste to ore ratio **6.95:1**



- Conventional process flow-sheet - **crush, grind and flotation**
- Cash Operating Costs **A\$19.40/t ore life-of-mine**
- **82%** recovery to a **6.00%** Li<sub>2</sub>O concentrate
- **700,000 tpa** processing capacity
- **96 Kt/yr** Li<sub>2</sub>O concentrate
- **Dry Tailings** simplifies approvals







5km

Low cost **hydro power & gas**

5km

**Sealed road access**

20km

**Rail access to export port**

**Experienced local mining workforce**

**Major new hub of lithium carbonate production**

Electricity 5¢ kWh and Gas \$3 /GJ

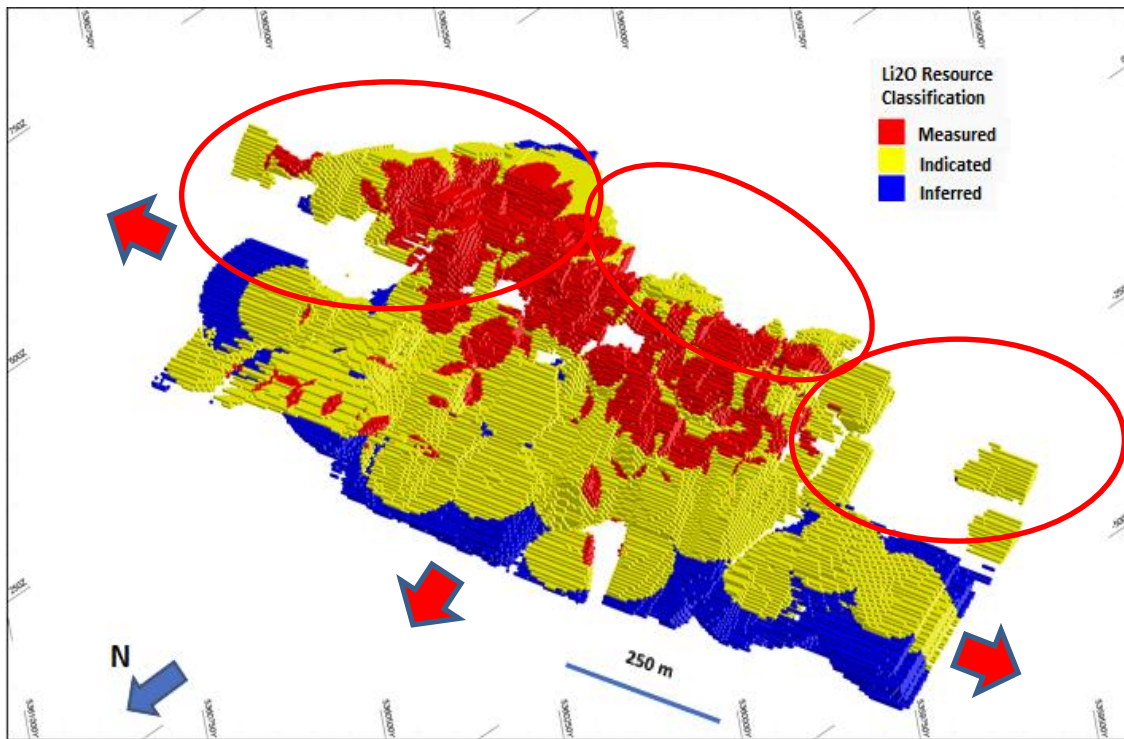
MOU signed with **Hunan Changyuan Lico Co Ltd** - a subsidiary of Fortune 500 company, Minmetals Group – a battery materials manufacturer

Strategic alliance to explore **marketing, technical, and financial development** options for the Authier lithium project

MOU contemplates Hunan Changyuan purchasing all the Authier concentrates and assessing potential for downstream processing







**3,000 – 4,000 metres**

## Drilling Program Objectives

- ✓ Upgrading the Mineral Resources categories
- ✓ Expand the Northern pegmatite
- ✓ Converting mineral resources to reserves
- ✓ Exploring for extensions to the mineralisation
- ✓ Collecting geotechnical data for Definitive Feasibility Study
- ✓ Metallurgical testing

## 1. Increase Production Capacity &/or Resource Size

- Increase plant capacity to sell more concentrates and shorten mine-life to maximise NPV
- Further drilling to expand resource base (Phase 3 underway)

## 2. Integrated Refinery Model

- Convert concentrates into lithium hydroxide or carbonate
- Scoping study completed – attractive economics – Pre-Tax NPV \$795m
- Leverages world-class infrastructure and low energy costs in Quebec
- PFS and metallurgical test work to commence next quarter
- Project site selection underway

**Growth Options Funded from Phase 1 Concentrate Sales**

# Integrated Refinery Model

Authier Downstream Processing Financial Highlights\*  
(Approximate Values Derived from the Scoping Study)

Description	Unit	Lithium Carbonate	Lithium Hydroxide
Annual Production Capacity	Tonnes	13,000	14,000
Ave Cash operating Costs*	C\$ per tonne	6,331	6,032
Ave Cash Operating Costs*	US\$ per tonne	4,812	4,585
Price forecast	US\$ per tonne	10,200	12,000
Initial Capital#	C\$ million	223	240
Total Capital#	C\$ million	284	301
Pre-tax NPV @ 9%DR	C\$ million	426	794
Pre-Tax IRR	%	31	44
Exchange rate	CAD\$:US\$	0.76	0.76

\* Cash Operating Costs includes mining, processing, administration, royalties, transport, and downstream processing

# Capital expenditure includes all mine, concentrator and downstream process plant

\* Please see Scoping Study disclaimer on page 2 and ASX release, "Downstream Study Demonstrates Positive Economics", 30 August 2017

# Authier Development Timetable

Milestones	2017		2018				2019				2020	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
PFS Update												
Environmental												
Mining Lease												
Pilot Metallurgy												
Definitive Feasibility Study												
Engineering & Design												
Off-take												
Finance												
Construction												
Commission & Operation												
Downstream Concept study												
Downstream Testing												
Downstream Studies												

## Environment



No toxic chemicals

No tailings dam

Water contained on site

Small project footprint

## First Nations



First Nations policy developed – engages & supports the First Nations community

## Community



Local community engagement, consultation and support  
**Job** creation

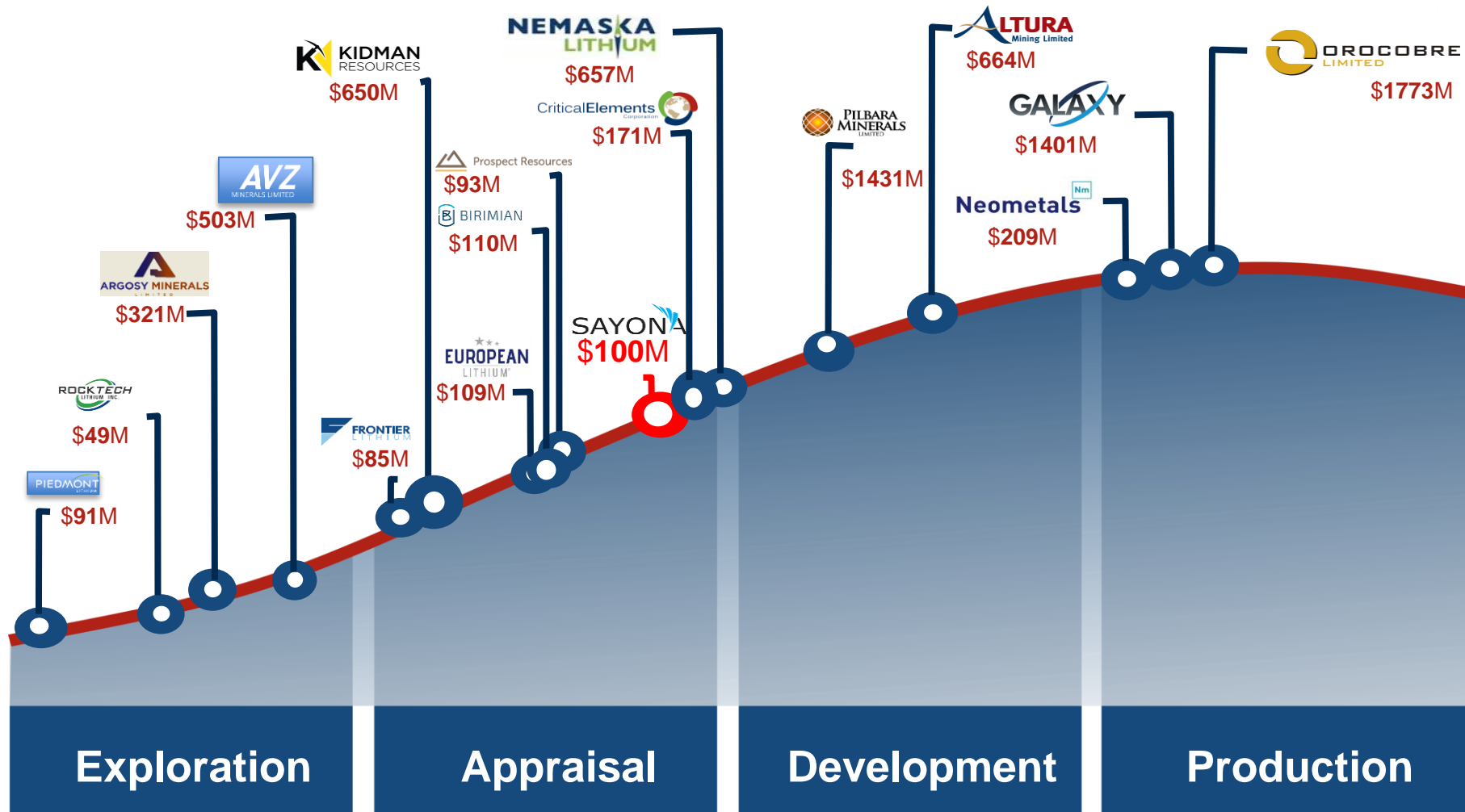
## Innovation



**Exploring** innovative mining, processing and exploration solutions  
**Sustainable** development  
**Downstream** value-adding



# Attractively Valued vs Peers





**Authier is an advanced, de-risked project.** DFS underway



Executing a plan to get into **production and generate cash flow** – low capital hurdle & competitive operating costs



Located in a **first world country** with **access to world-class, low-cost infrastructure**



**Base case pre-tax NPV of A\$227 million** and **low enterprise value per tonne of resources** compared to industry peers



Opportunity to **value-add Authier concentrates** and create **significant shareholder value** - \$794m pre-tax NPV



Board and management team have **track record of delivering projects**



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