



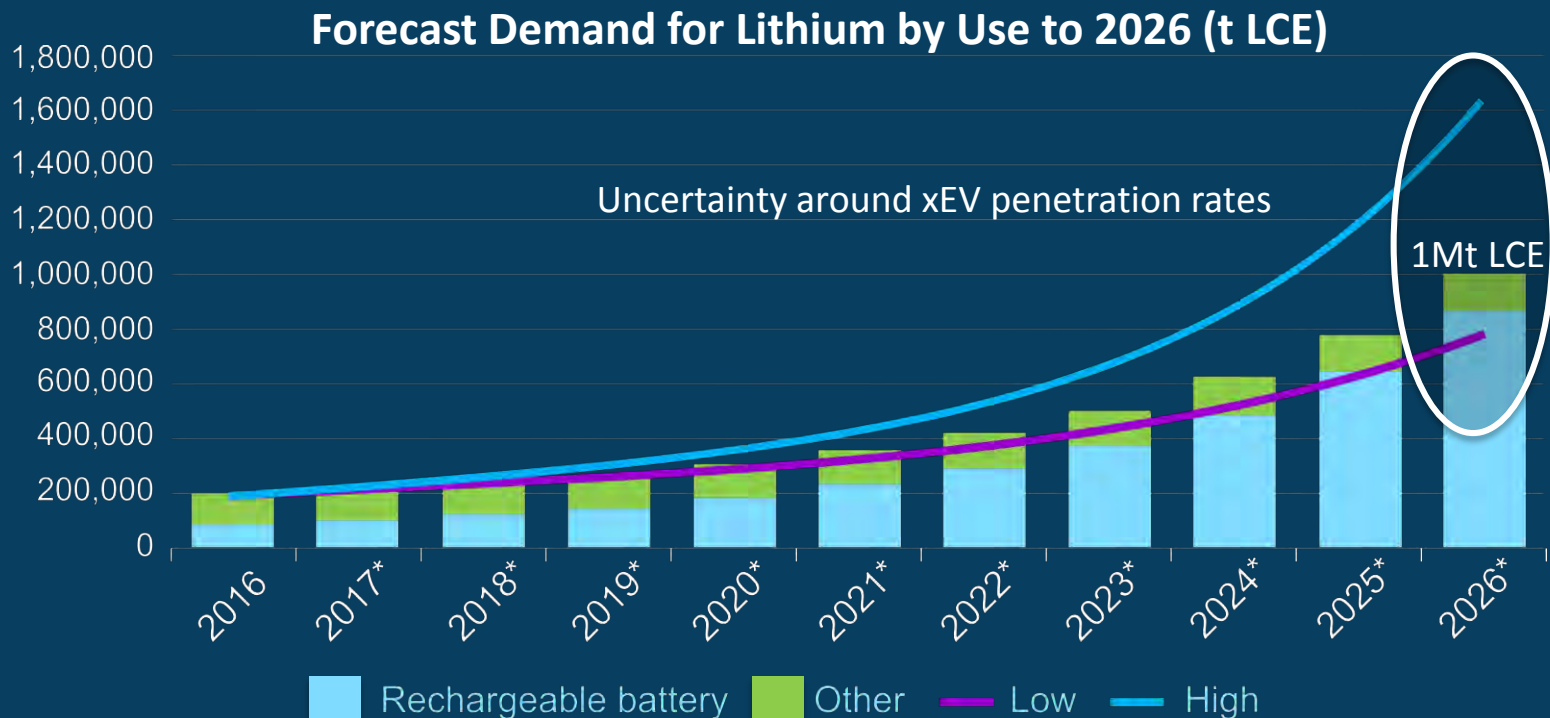
*Sourcing the  
raw materials  
of the future*

# Investor Presentation

**Developing a low-cost, advanced lithium  
project in Quebec, Canada**

JULY 2017  
ASX: SYA

# Major New Investment Required in Lithium

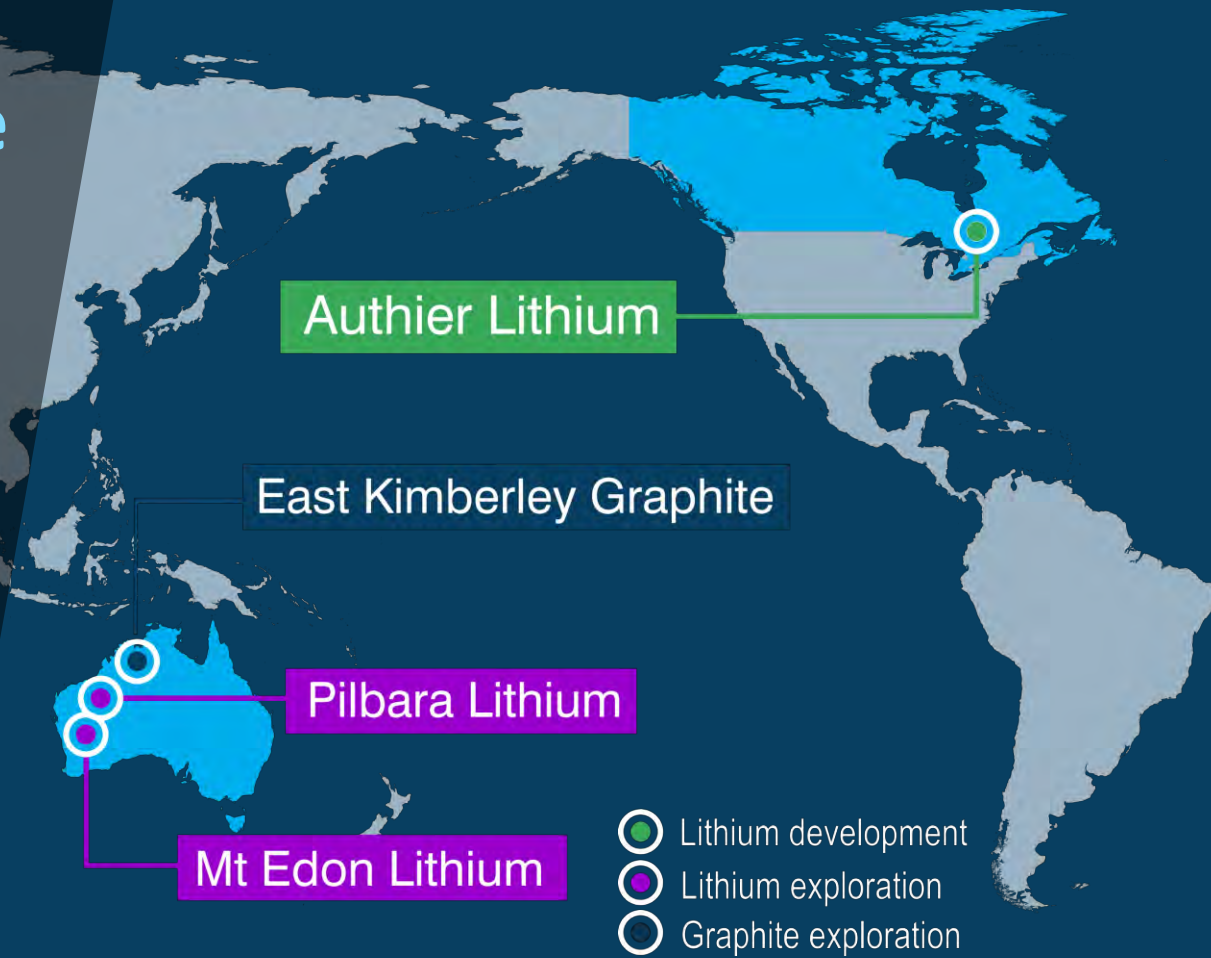


**“The impact of automotive electrification on lithium:  
1TWh and 1Mt LCE in 10 years”**

Sayona Mining's  
strategy is to  
**power the future**

by sourcing and  
developing the  
raw materials  
essential for

**lithium-ion  
battery  
production**







# **Authier Lithium Project Strategy**

“With their Authier project, Sayona has a quality, low cost and near term development opportunity in a world-class mining destination, and is in an ideal position to take advantage of the growing demand for lithium due largely to the burgeoning battery sector”

Mark Gordon, Senior Analyst, IIR, July 2017



# Pre-feasibility Study JORC Mineral Resource

	Tonnes (Mt)	Grades (Li <sub>2</sub> O)	Contained (Li <sub>2</sub> O)
	4.72	1.03%	48,519
	7.13	1.10%	78,280
	1.90	1.05%	19,901
TOTAL	13.74	1.07%	146,700

MEASURED

INDICATED

INFERRED

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) at a 0.5% Li<sub>2</sub>O cut-off grade.

# Pre-Feasibility Study Outcomes



Start-up capex  
of C\$66 million  
and opex of  
US\$280/t\*

Pre-Tax NPV <sub>8</sub>	C\$140m
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Pre-Tax IRR	39%
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Capital Payback	2.2 years
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Ave Annual EBITDA	C\$31m
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Ave Operating margin*	US\$235/t
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Price forecast*	US\$515/t
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\* US\$/t per tonne of concentrate

# Maiden JORC Ore Reserve

	Tonnes (Mt)	Grades (Li2O)	Contained (Li2O)
	4.9	0.97%	47,821
	5.3	1.06%	55,904
TOTAL	10.2	1.02%	102,725



The Ore Reserve 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). 0.45% Li<sub>2</sub>O cut-off grade.



# PFS Pricing Conservative – US\$515/t conc.



## DEMAND



## SUPPLY



**Renewable**  
grid storage

**>30%**  
**CAGR**

**Transportation**  
electric and  
hybrid vehicles

**20-30%**  
**CAGR**

**Consumer**  
**electronics**

**8-10%**  
**CAGR**

- **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**

**Current pricing**  
**between US\$750-**  
**US\$905/t in 2017**  
**and US\$880/t for**  
**2018**



# Simple, Open-Cut Mining Operation



Simple Mining Method  
**Truck and shovel** operation

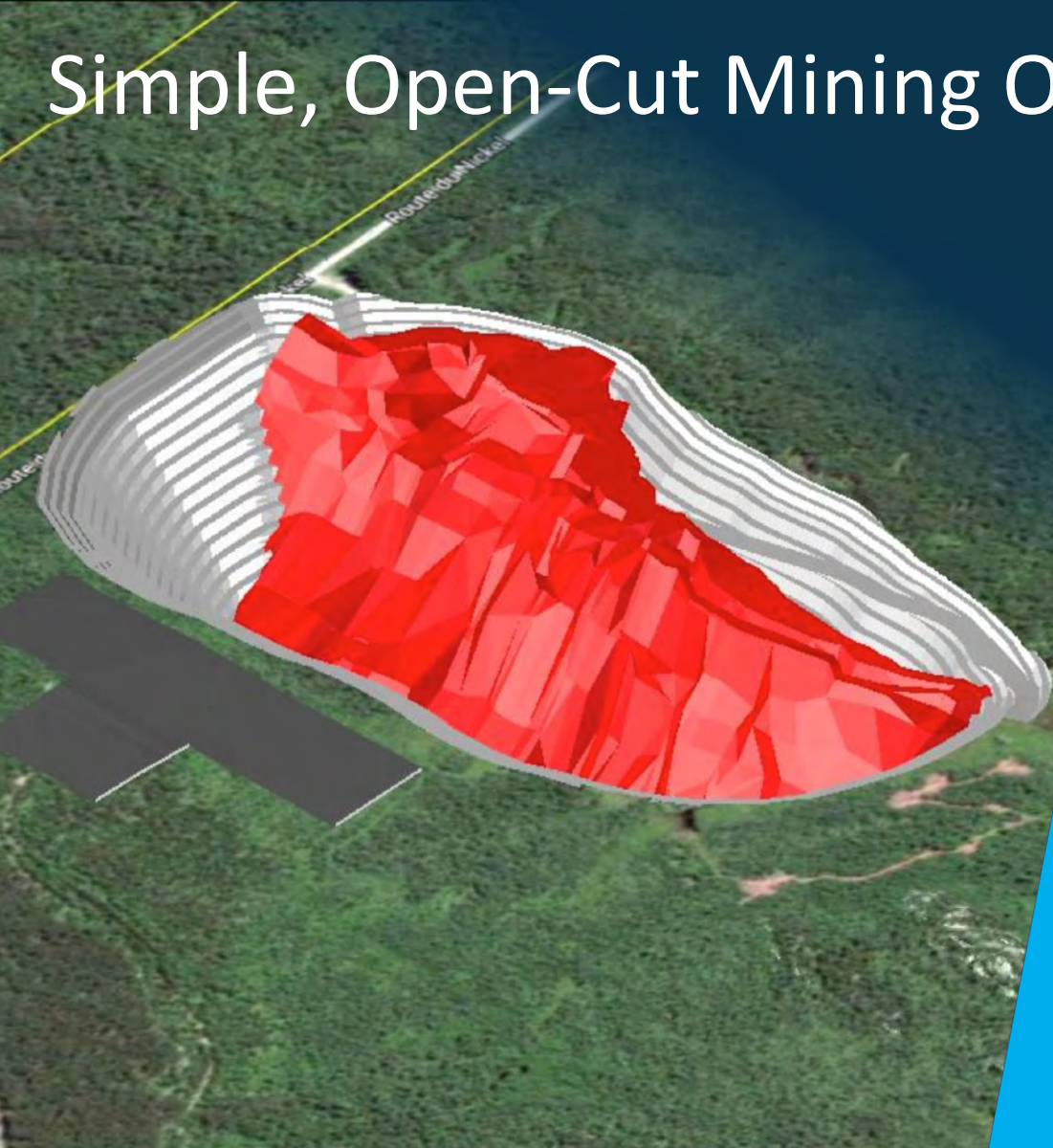
Competitive Mining Costs  
**\$2.90/tonne** average LOM

Low Capex  
Mining Fleet **Leased**

Conservative geotechnical  
assumptions –  
**45°** hanging wall pit slope

Life-of-Mine  
**15** years

Large, thick tabular body  
LOM waste to ore ratio **6:1**



# Conventional Process Flow-Sheet



Conventional process  
flow-sheet

**Crush, grind and flotation**

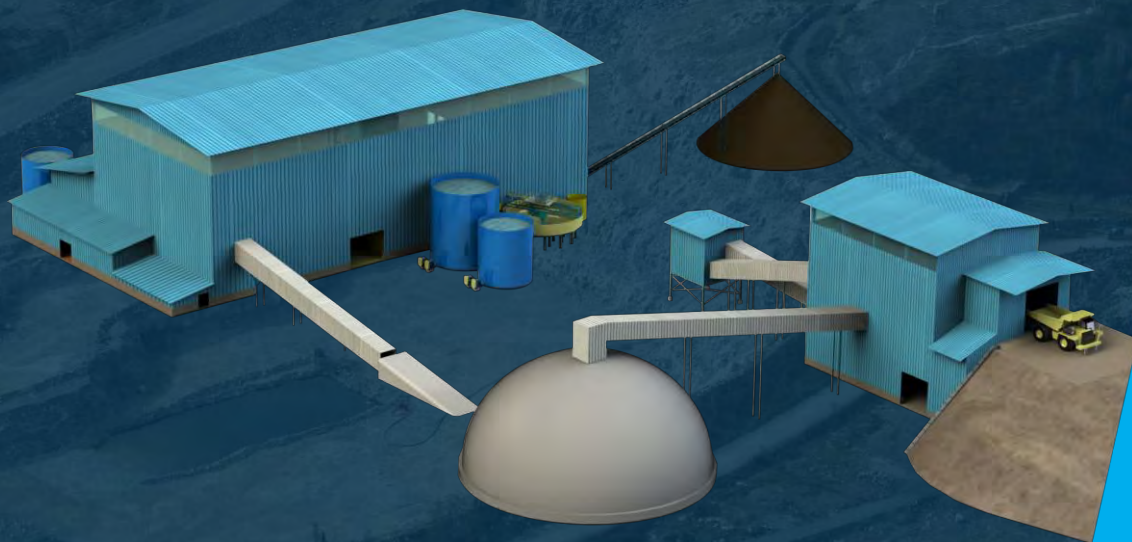
Cash Operating Costs  
**\$20 / tonne life-of-mine**

80% recovery to a  
5.75% Li<sub>2</sub>O concentrate

**700,000 tpa** processing capacity  
to produce

**98 Kt/yr** Li<sub>2</sub>O concentrate

**Dry Tailings** simplifies approvals





# World-Class Infrastructure



**5km**

Low cost **hydro power**  
and **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**

Gas < **\$3 /GJ**

# Post-PFS JORC Mineral Resource Upgrade

	Tonnes (Mt)	Grades (Li2O)	Contained (Li2O)
	5.62	1.01%	56,762
	9.57	1.03%	98,571
	2.21	0.99%	21,879
TOTAL	17.4	1.02%	177,212



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) at a 0.45% Li<sub>2</sub>O cut-off grade.



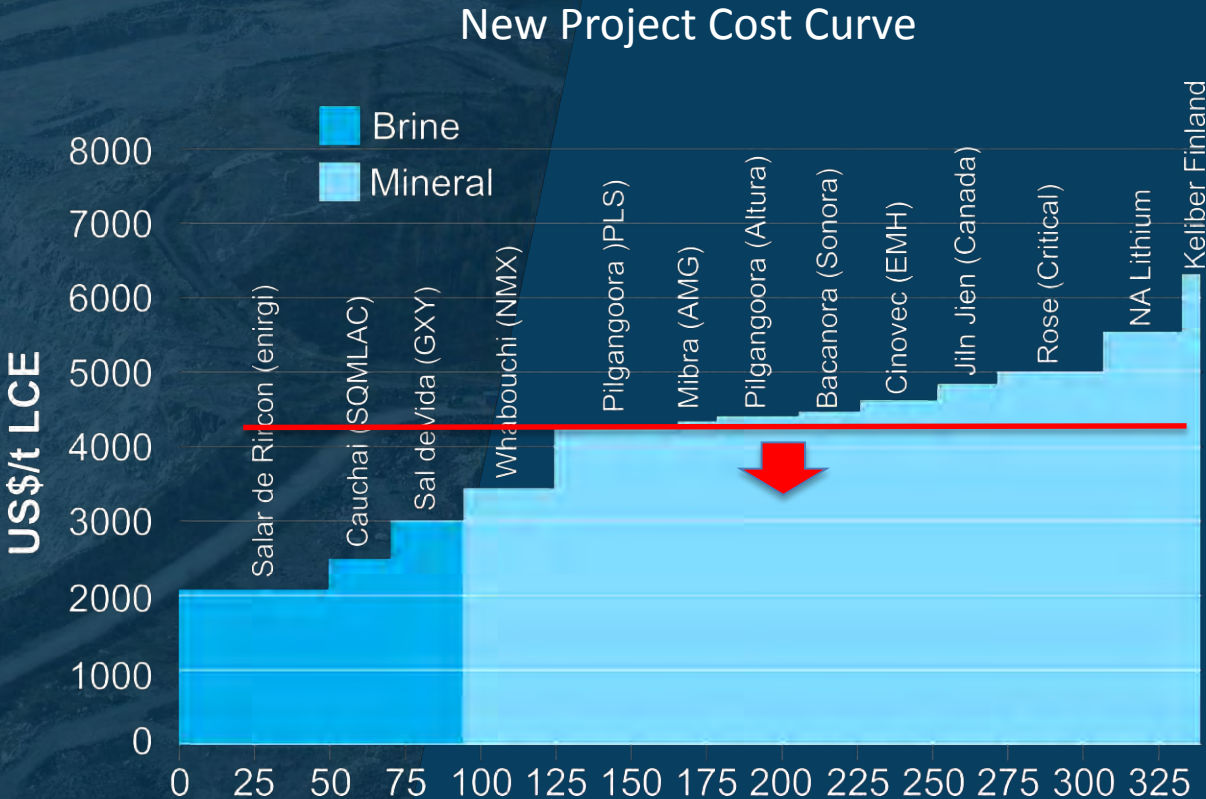
# Post PFS Value Enhancement Programs



Increased Ore Reserve  
following Mineral  
Resource upgrade

Metallurgical  
optimisation

Improved  
geotechnical  
outcomes



Source: Citibank. For Authier, assumes US\$2500/t for conversion of concentrate to LCE

# Downstream Concept Study Underway



## Current Strategy



Sell **lower-value concentrates** to battery converters in Canada or China

Concentrate sell at **>US\$750/t**

## Value-Added Strategy



Sell **value-added lithium** products to battery manufacturers across the world

**Lithium hydroxide sells for >US\$20,000/t**

## Why go downstream?

**Reduces transport costs**

**Hydroxide key feed-stock to new revolution lithium-ion batteries**

**Low processing technology risk**

**Significant price premium paid for value-added products**

## Quebec location advantages

**Low-cost energy**

**Skilled low-cost, workforce**

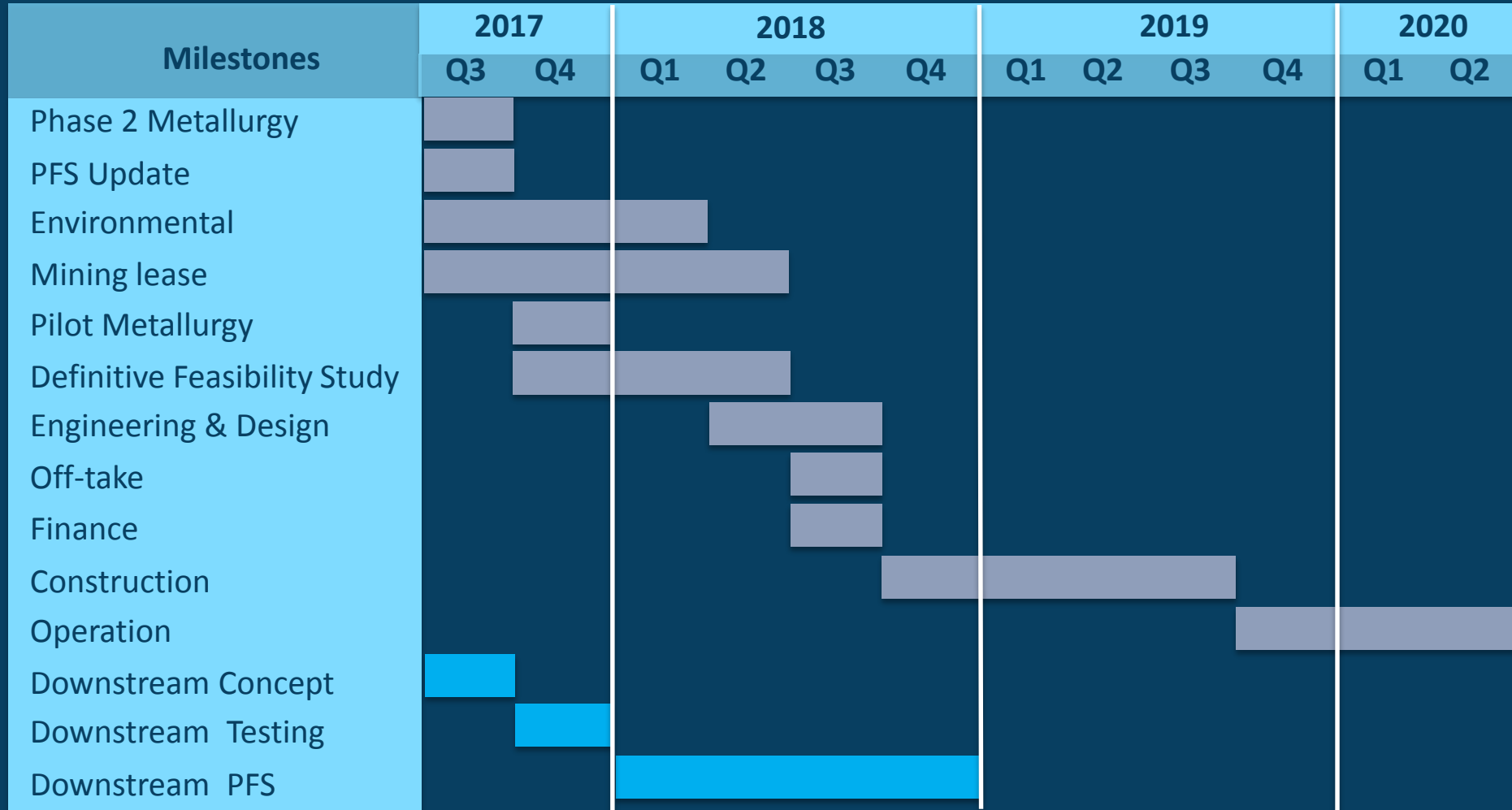
**Close to the US battery markets**

**Favourable taxation regime**

**Acid for processing readily available**



# Development Timetable



# Corporate Summary

TRADING EXCHANGE

ASX: **SYA**

SHARES

**963** million shares

SHAREHOLDERS

**26%** Directors

**56%** Top 20

RESEARCH COVERAGE



CAPITALISATION

Price

As at 17 JULY 2017

**1.7¢**

Market cap

**\$16M**

Cash

As at 25 MAY 2017

**\$1.5M**



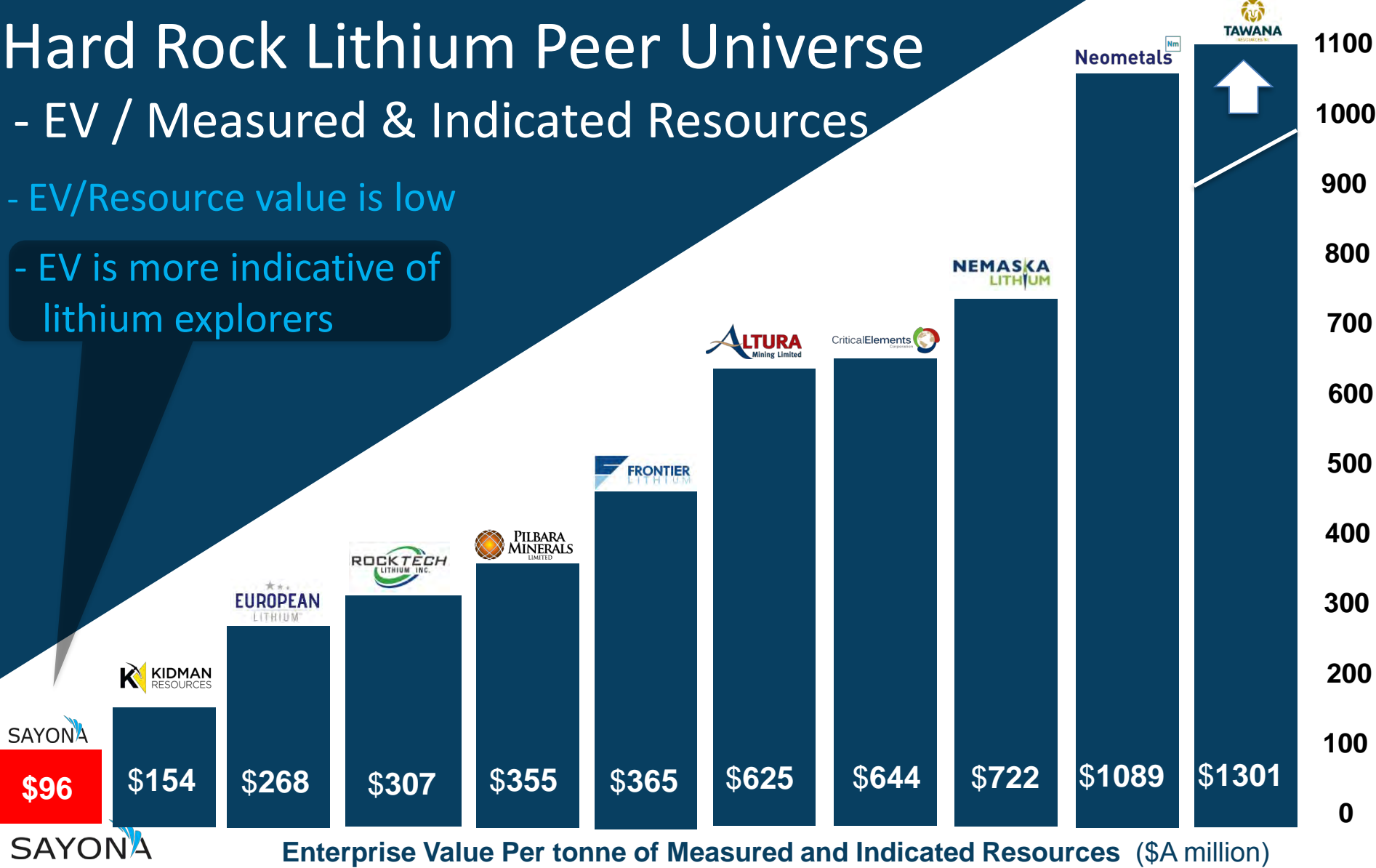


# Hard Rock Lithium Peer Universe

- EV / Measured & Indicated Resources

- EV/Resource value is low

- EV is more indicative of lithium explorers



# Hard Rock Lithium Peer Universe

- EV / Proven & Probable Ore Reserves
- Few hard-rock lithium projects in the world have defined Ore Reserves
- **Ore Reserves to be increased as part of the Updated Pre-Feasibility Study**

SAYONA

**\$144**

PILBARA  
MINERALS  
LIMITED

**\$438**

EUROPEAN METALS

**\$478**

ALTURA  
Mining Limited

**\$635**

NEMASKA  
LITHIUM

**\$1091**

TAWANA

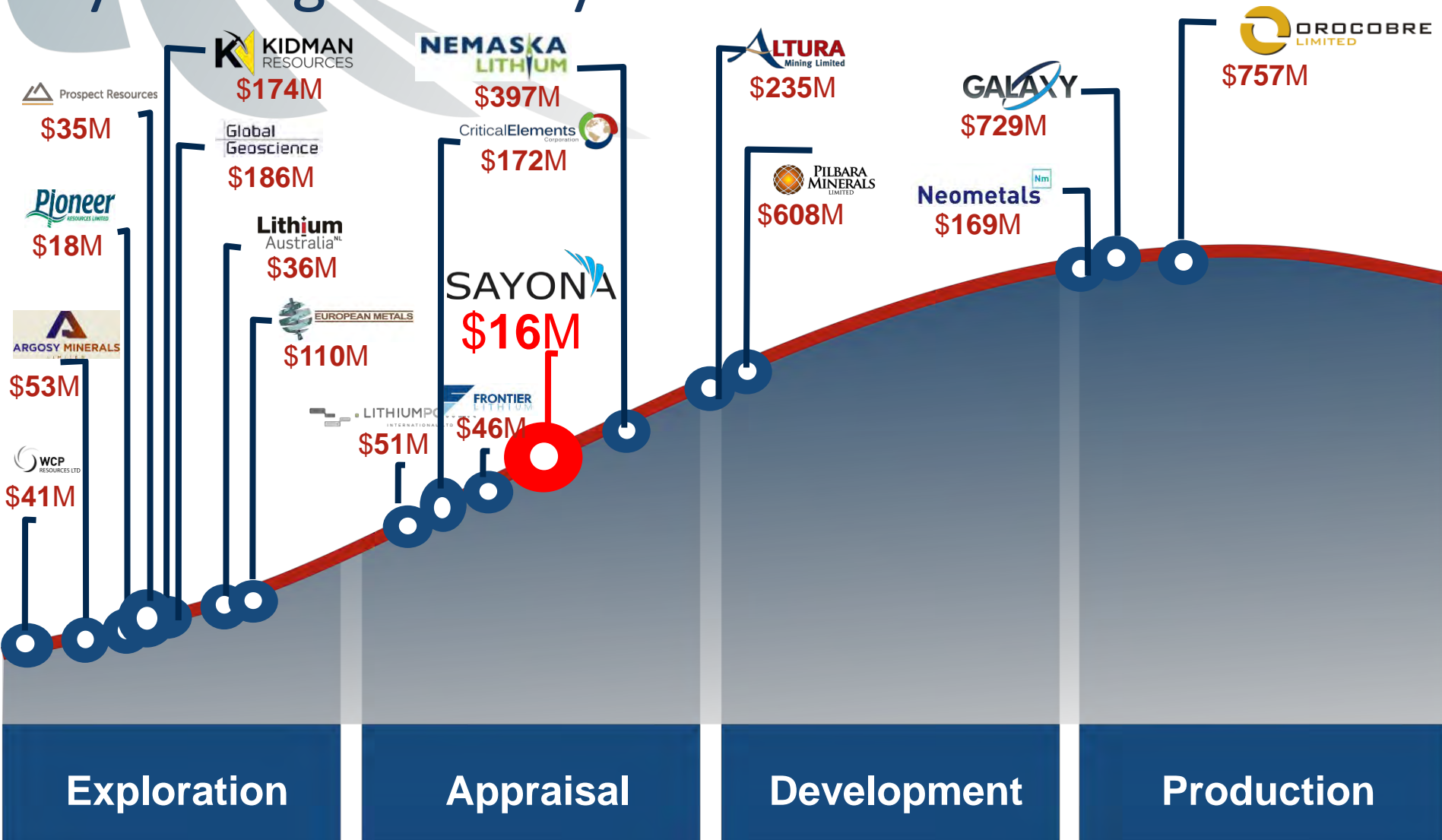
**\$1045**

Enterprise Value Per tonne of Ore Reserves (\$A million)

1300  
1200  
1100  
1000  
900  
800  
700  
600  
500  
400  
300  
200  
100  
0



# Sayona Significantly Undervalued



# Directors with Strong Track Record of Success



## Dan O'Neill

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

## Allan Buckler

- 40 years experience building mining operations in Australia and Indonesia. Former Director and Chief Operations Officer for New Hope Corporation
- 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

## James Brown

- 35 years experience including, 22 years with New Hope Corporation. Extensive mine development & operational experience
- Managing Director of Altura Mining - \$220m market cap.



# Experienced Executive Team



**Corey Nolan**

Chief Executive Officer

- 23 years experience in exploration, development, operations and corporate finance
- Started and managed a number of resource companies with projects in a range of commodities and countries



**Jonathan Gagne**

Canadian Country Manager

- Mining Engineer with MBA and more than 10 years experience in operations and mine planning
- Joined from Glencore Zinc's open-cut mine planning division



**Simon Atwell**

WA Exploration Manager

- Geologist with 29 years mineral exploration experience
- Director of Australian Tantalum, which owned the Pilgangoora leases and was subsequently acquired by Altura Mining

# Sayona Value Proposition



**Authier is an advanced, de-risked project.** Pre-Feasibility Study and Ore Reserve completed



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\$140 million** and **low enterprise value per tonne of resources** compared to industry peers



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



# The Final Word



“For investors who are just catching on to the lithium battery revolution, the best way to play the game is to look past the traditional lithium producers. In this boom scenario, investors will be looking at companies with the **lowest market caps, solid management and highly prospective deposits**”.

**USA Today – Buffet, Musk to spark lithium boom**

# Disclaimer



## **FORWARD LOOKING STATEMENTS**

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## **Reference to Previous ASX Releases**

This presentation refers to the following previous ASX releases:

- Authier JORC Resource Expanded , 23 November 2016
- Authier Maiden JORC Ore Reserve, 17 February 2017 and JORC Resource Update, 14 June 2017
- Authier PFS, 17 February 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.



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