

# A Globally Significant *Australian* Graphite Project

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**7th Graphite & Graphene Conference**

**Hilton London Bankside**  
London, United Kingdom  
6 - 7 September 2018



# Siviour Graphite Project

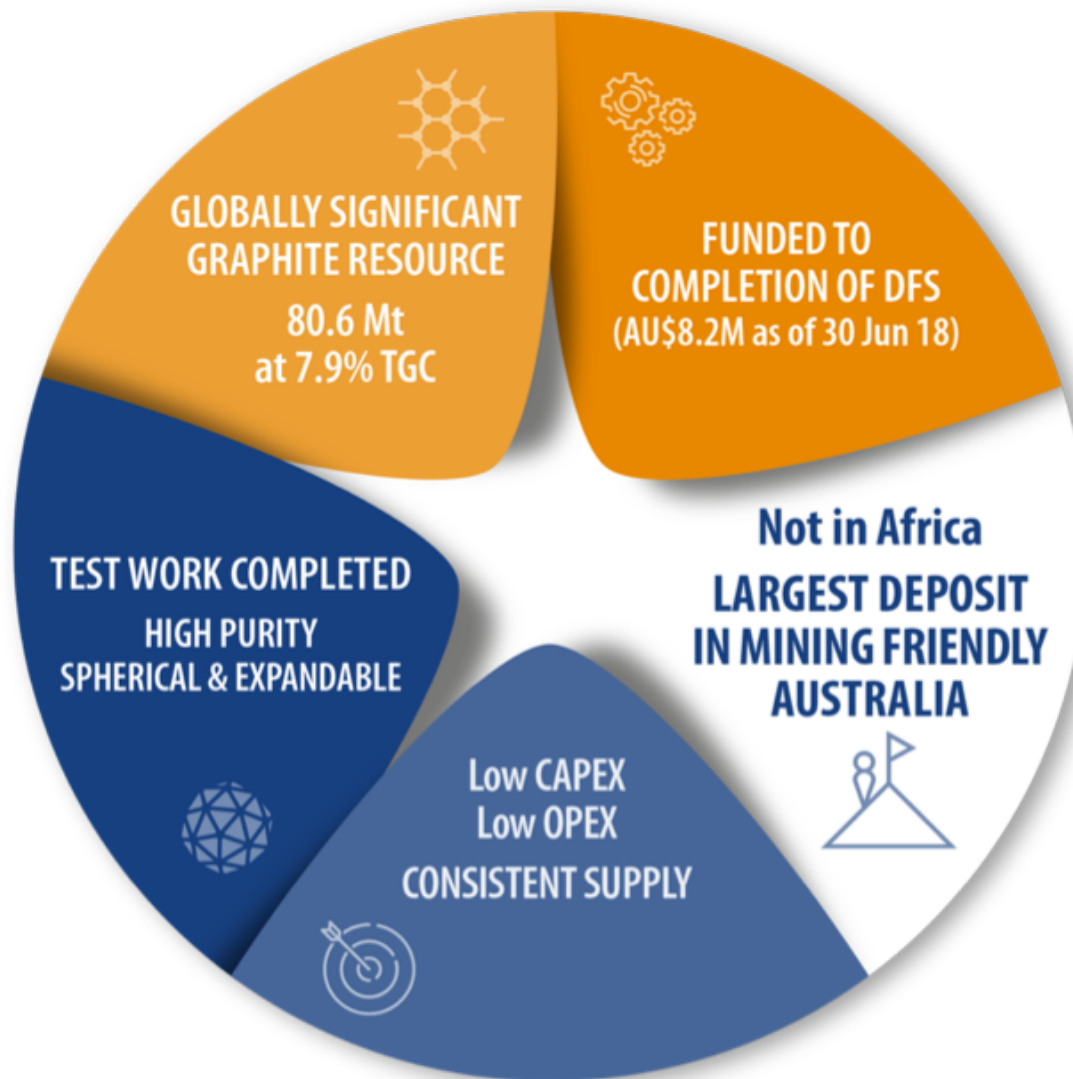
One of world's largest high-grade flake graphite deposits

- Mineral Resource: 80.6 Mt at 7.9% TGC for 6.4 Mt of contained graphite
- Ore Reserve: 45.2 Mt at 7.9% TGC for 3.6 Mt of contained graphite

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## Highlights



## Renascor Market Information

Key Statistics	
Ordinary Shares*	1,151M
Options on Issue (ex at 3c expire 31-Oct 2019)	115M
Unlisted Options (ex at 5c expire 05-Dec 2019)	15M
Performance Rights	18M
Share Price (28-Aug-2018)	AUD 0.019
Market Capitalisation (undiluted) *	AUD 21.9M
Shareholders	1,824
Cash (30-Jun-2018)	AUD 8.2M

% holding Substantial Shareholders	
Richard Keevers (Chairman)*	3.77%
Management (Including Mr Keevers)*	9.44%

Board of Directors	
Non-Executive Chairman	Richard Keevers
Managing Director	David Christensen
Executive Director	Geoffrey McConachy
Non Executive Director	Stephen Bizzell
Non Executive Director	Chris Anderson

\* Includes 189.6m shares to be issued to shareholders of Ausmin Development Pty Ltd pursuant to shareholder approval of 3 September 2018

# Sivour Project Summary

## New Discovery

Geophysics unlocks massive, near-surface ore body in historical graphite district.

## World-Class Project Credentials

- One of the world's largest graphite resources
- Flat-lying orientation underpins lowest quartile cost of production -- OPEX of US\$333/t\*
- Proximity to established infrastructure permits low start-up capital cost -- US\$29 million\*\*

## High Quality Graphite Product

Favourable flake size distribution and easily upgradable to high purity for lithium-ion battery and other high growth markets

## The Best Location

- Located in Australia, one of the world's most stable jurisdictions
- 7km from highway – simple transport to established port



***"Sivour is unique  
as a Tier-1 graphite  
development in  
Australia"***

\* OPEX at full production

\*\* CAPEX for start-up small-scale operation

## Resource Summary

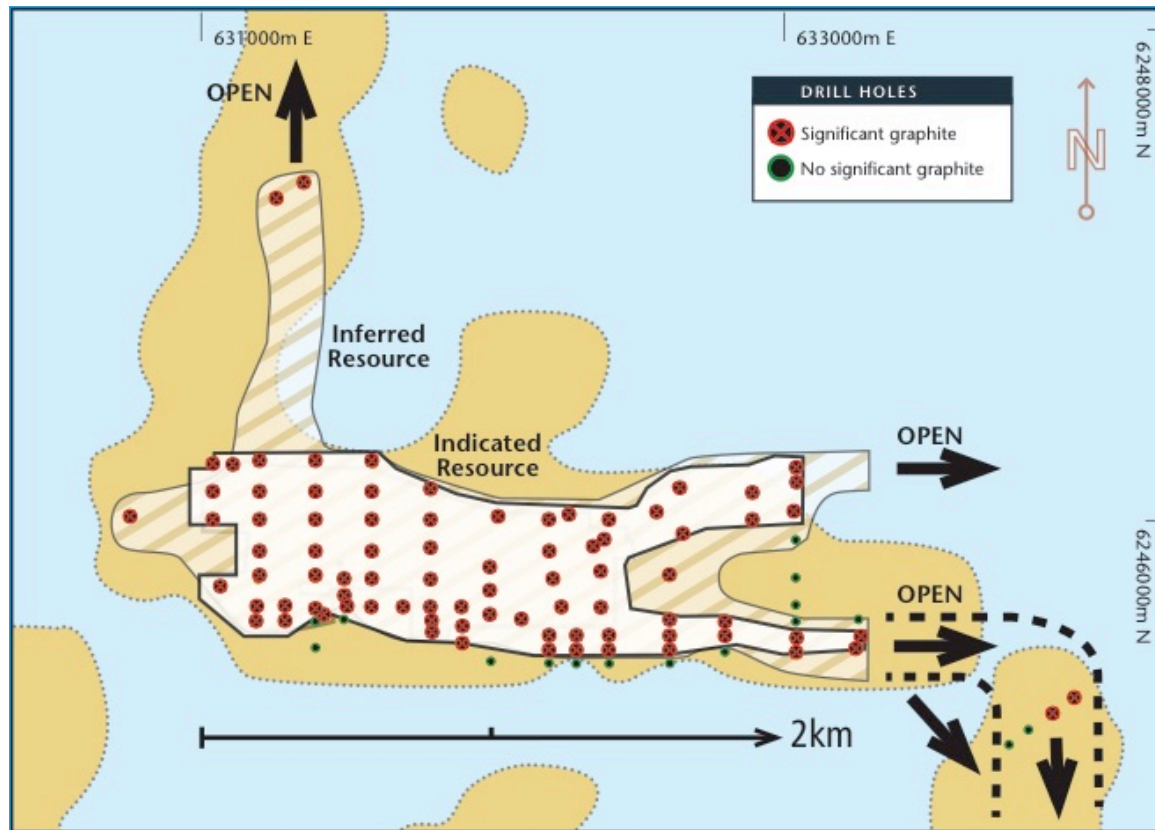
Siviour is the fifth largest reported graphite Reserve in the world

Resource category	Mineralisation (Mt)	TGC	Contained graphite (Mt)
Indicated	51.8	8.1%	4.2
Inferred	21.8	7.6%	2.2
Total	80.6	7.9%	6.4

Reserve category	Ore (Mt)	TGC	Contained graphite (Mt)
Proven	--	--	--
Probable	45.2	7.9%	3.6
Total	45.2	7.9%	3.6

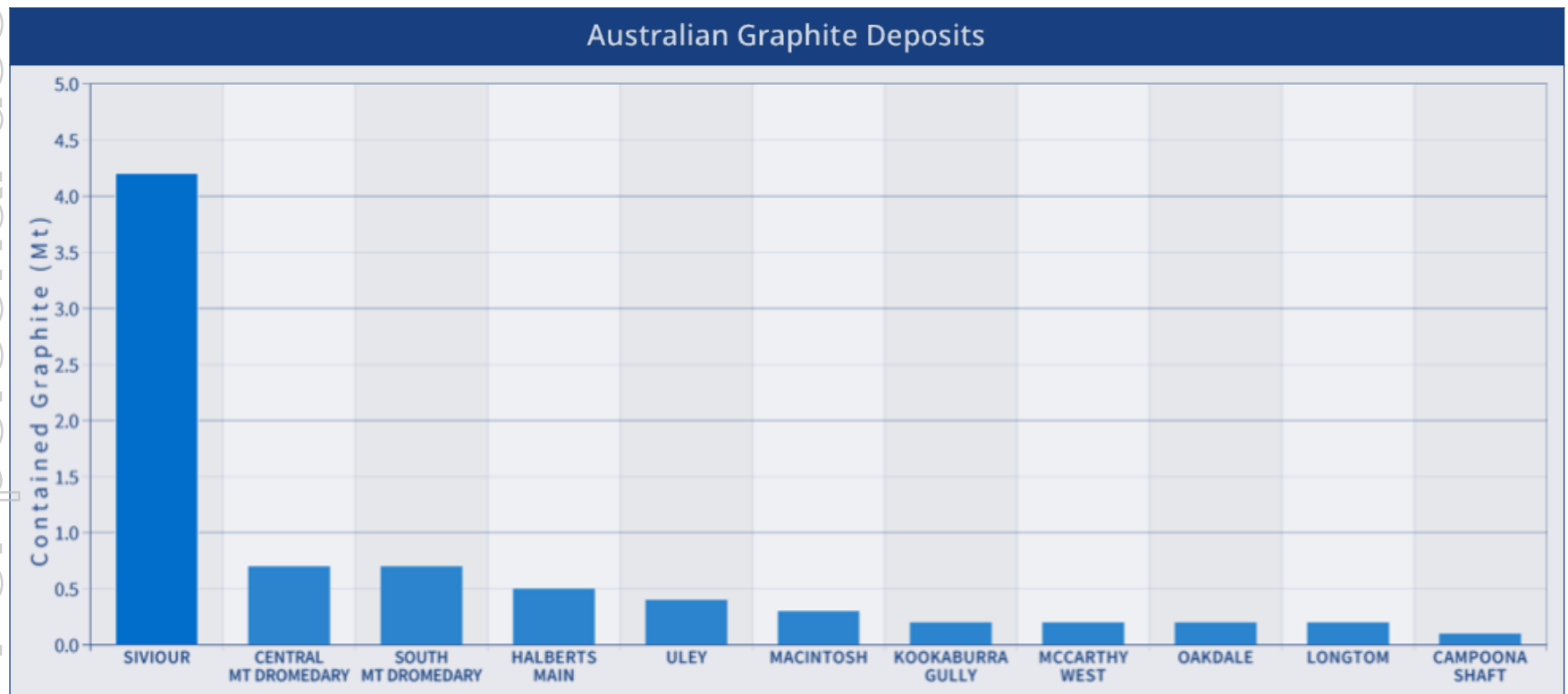
## Siviour Resource

Siviour is one massive ore body, offering consistent supply of high-quality graphite



# Australian Graphite Resources

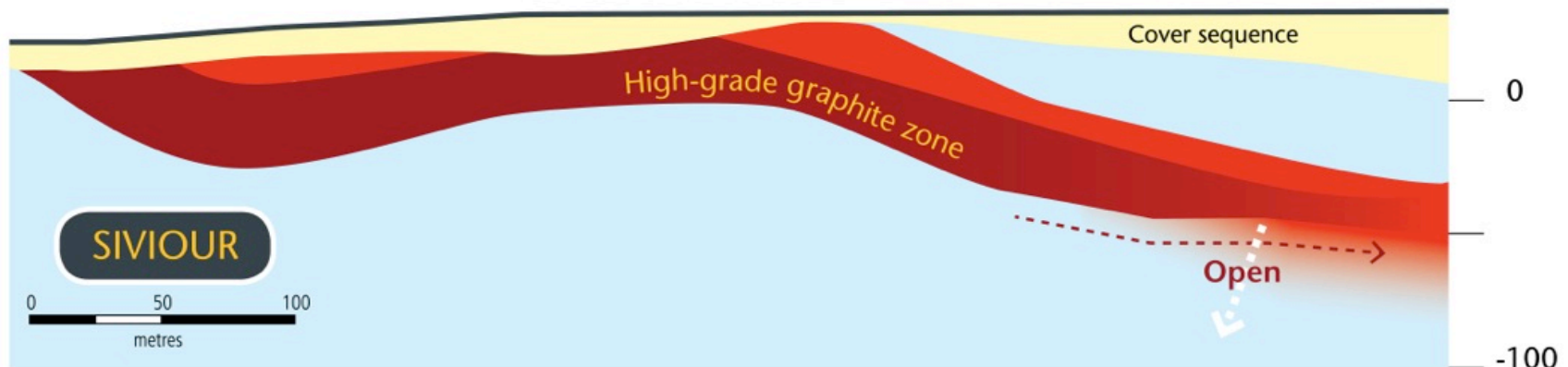
The scale of the Siviour graphite resource is unique in Australia



Source: Company reports of Measured and Indicated Resources

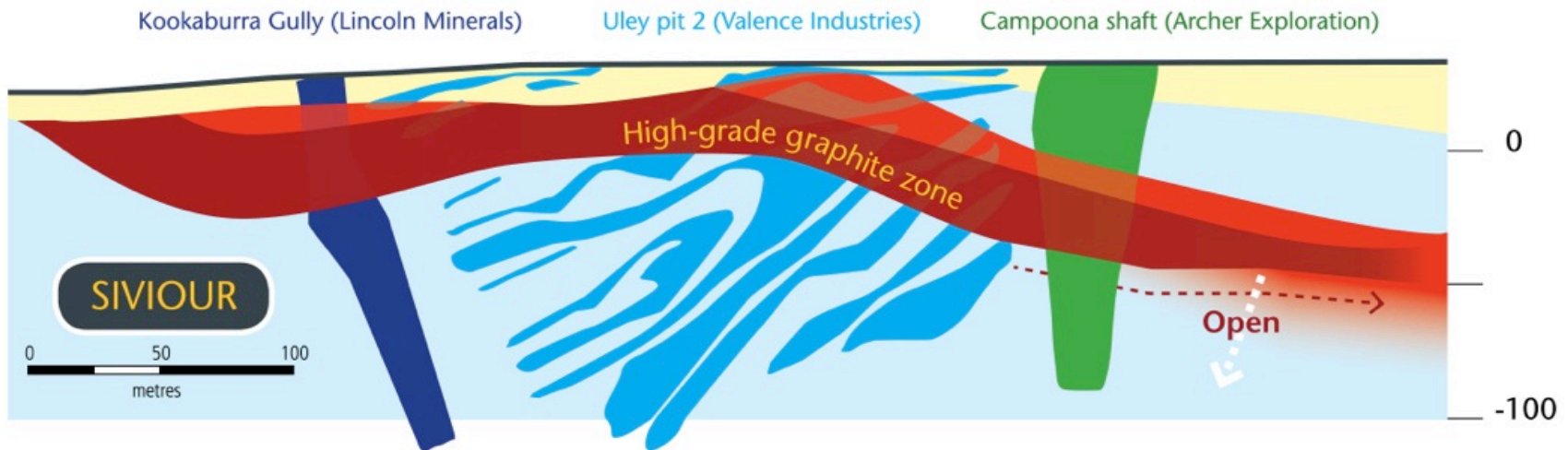
## Near-surface, Flat-lying Ore Body

Siviour's low OPEX is due in large part to shallow, horizontal orientation of a single massive ore body that offers comparatively low mining costs



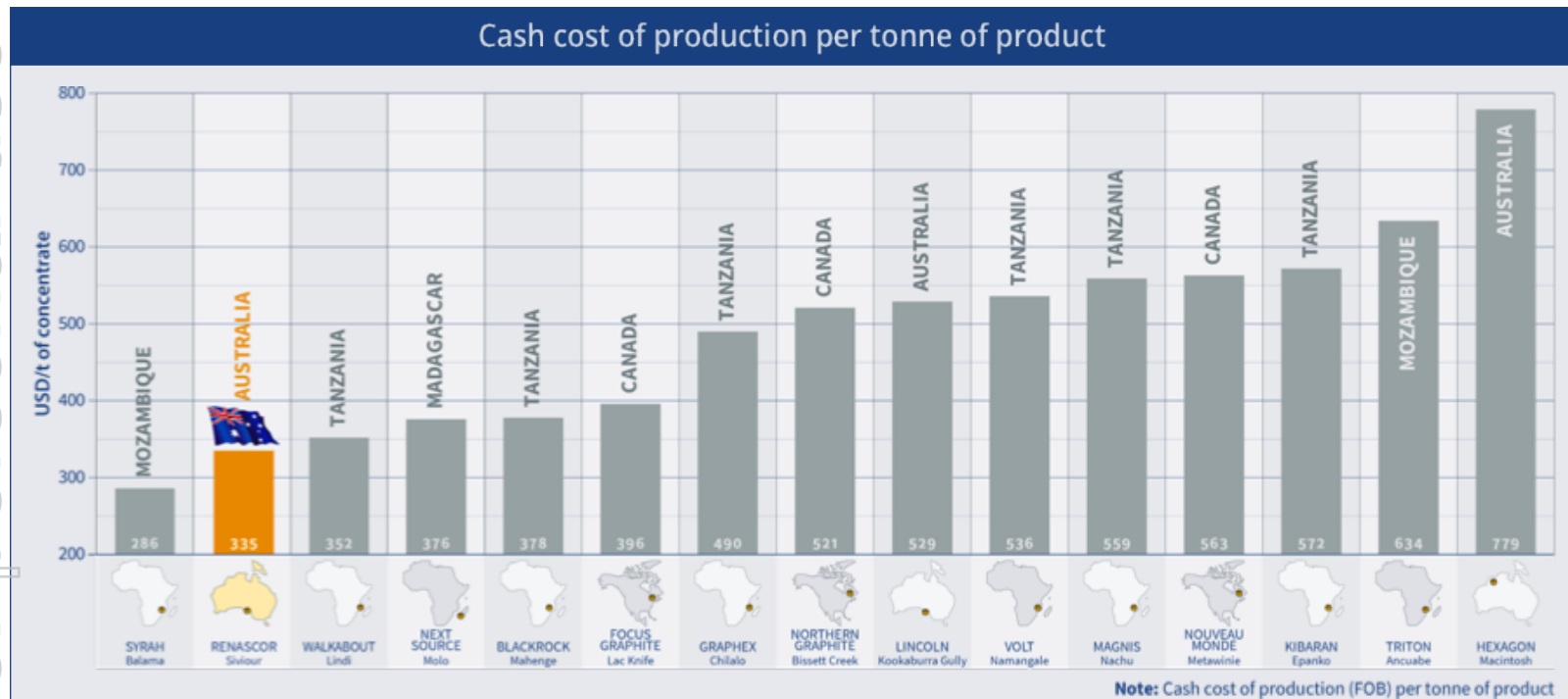
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## Low Cost with Safe Supply

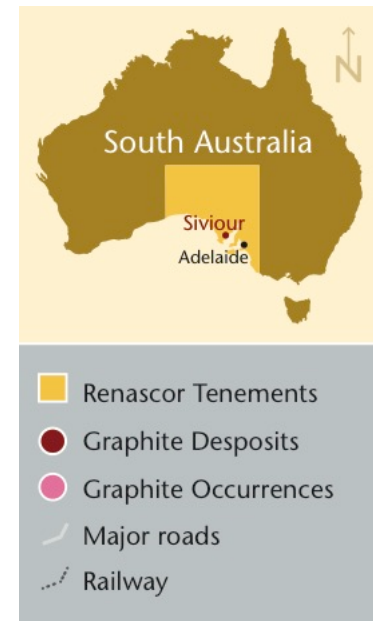
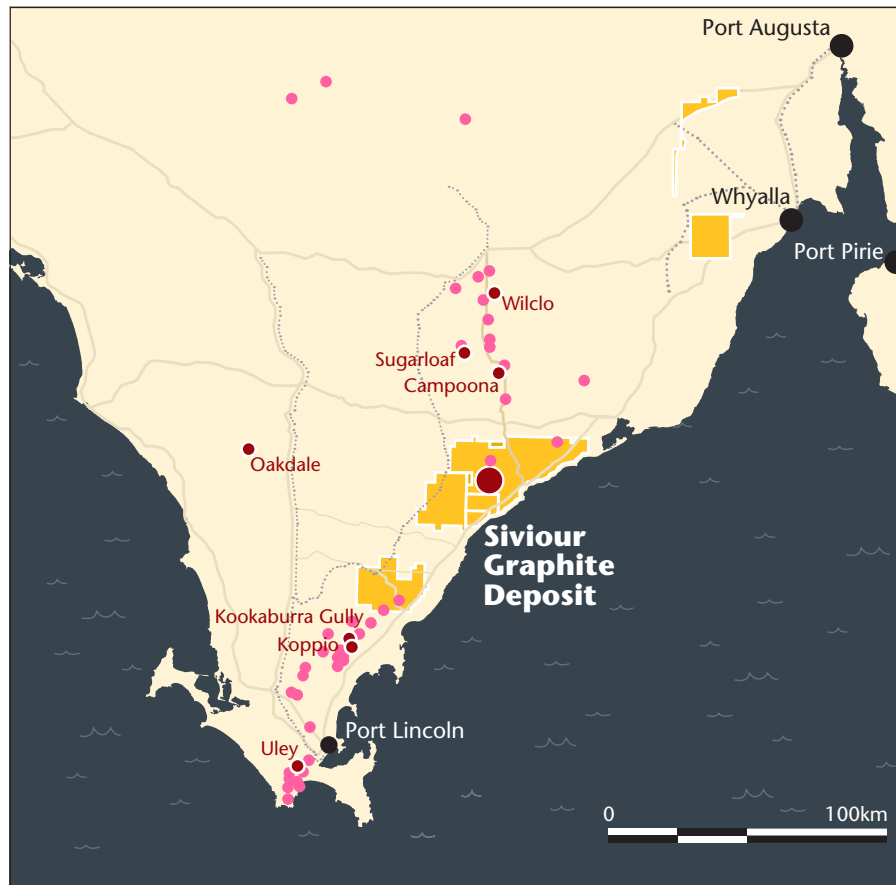
Lowest quartile operating costs globally in mining friendly Australia



Source: Company reports

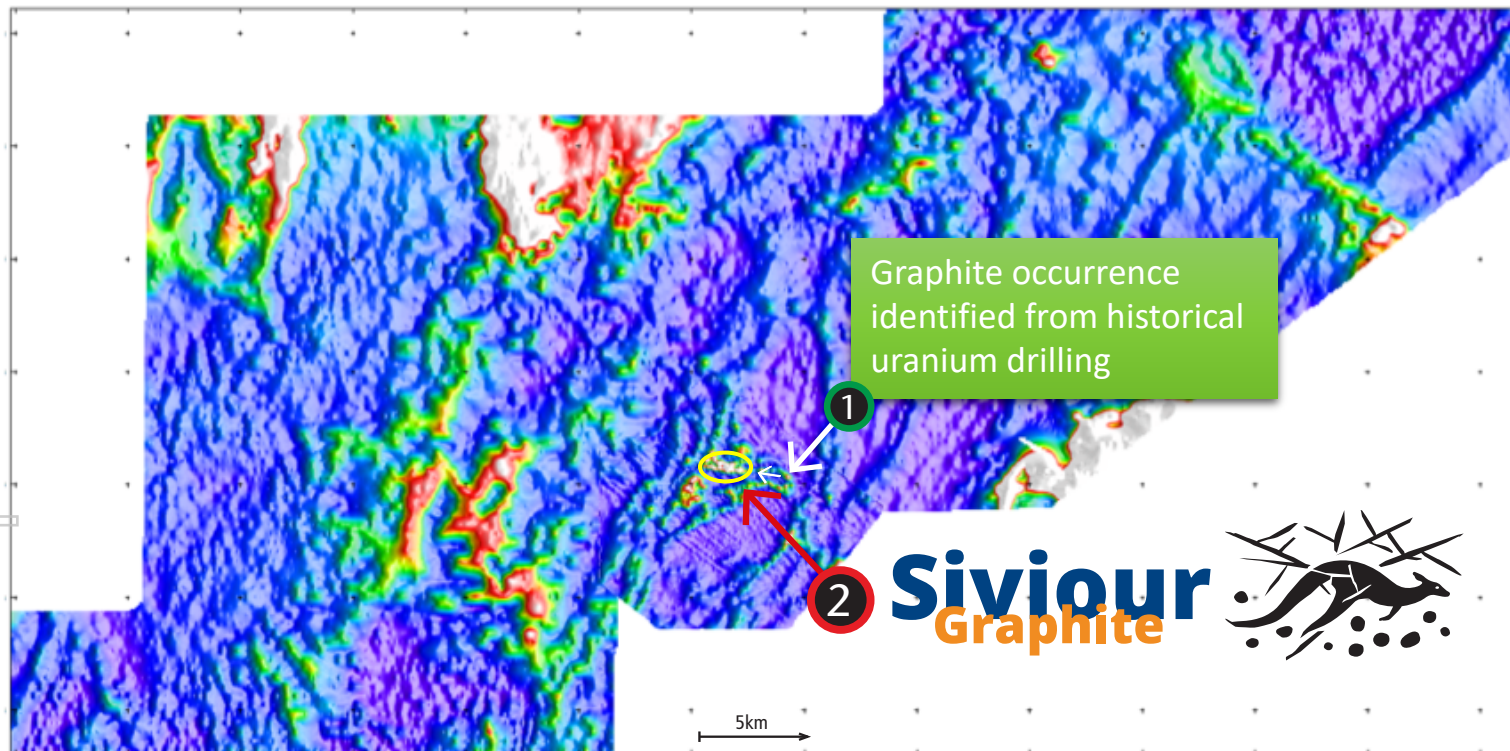
## Historical Graphite Region

Siviour is located in the Eyre Peninsula of South Australia, a historical graphite-producing region



## Siviour Discovery

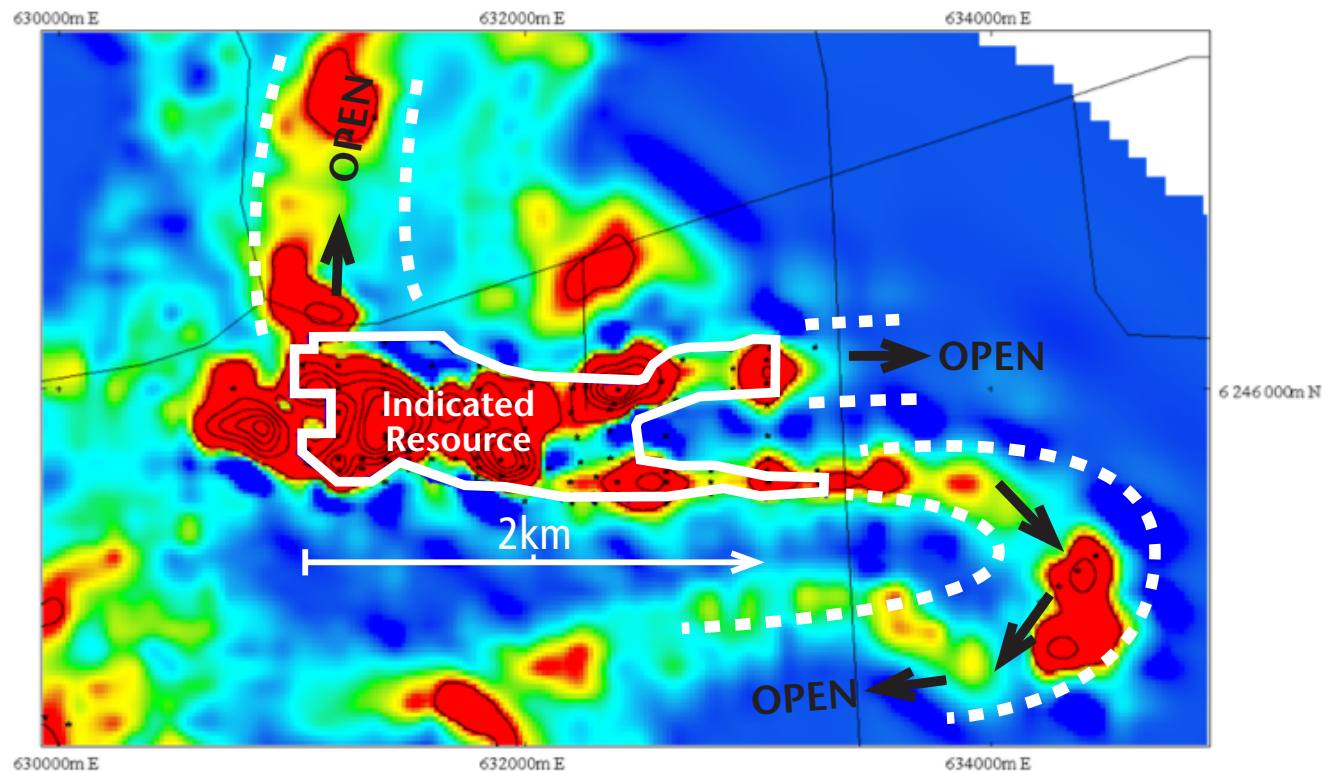
While nearly all previous graphite deposits in the region were identified through surface outcropping, Siviour was discovered by re-interpreting regional airborne geophysics originally undertaken for uranium exploration



Cameco regional electromagnetic survey 2009

## Siviour Discovery

Detailed electromagnetic surveys have shown high correlation between Siviour resource and geophysical anomaly, allowing rapid identification of massive resource



Siviour Indicated Resource outline over 40m airborne EM depth slice highlighting conductivity continuity

## Development Summary

### Siviour can be developed sooner by a two-staged development

Stage 1 uses mains water and diesel power offering outstandingly low CAPEX. This stage allows Renascor to target initial off-take agreements while providing bulk samples of Siviour graphite. Importantly, Stage 1 also provides cash flow and establishment as a graphite producer.

Larger users of graphite generally require bulk samples for testing of consistency. The supply of these bulk samples to technical and off-take partners will greatly assist in Stage 2 development. Between Stages 1 and 2, Renascor will also work with product development targeted at particular niche markets for expansion.

#### STAGE 1 – 2020

22,800 TONNES CONCENTRATE

CAPEX : US\$29M

OPEX: US\$577 PER TONNE

INITIAL OFF-TAKES AND BULK SAMPLES

#### STAGE 2 - 2023

156,000 TONNES CONCENTRATE

CAPEX: US\$91M

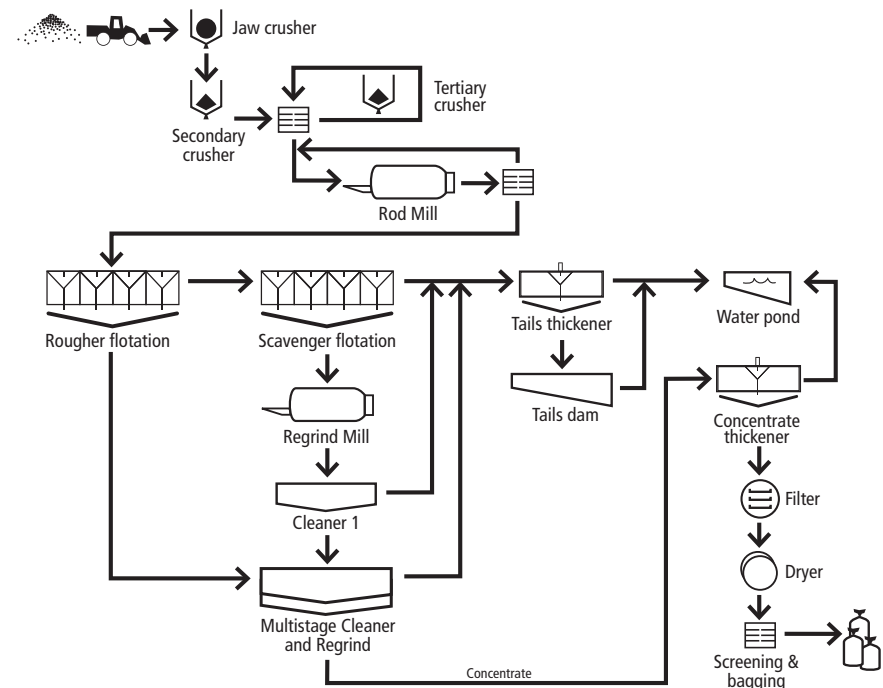
OPEX: US\$333 PER TONNE

FULL DEVELOPMENT

# Metallurgy

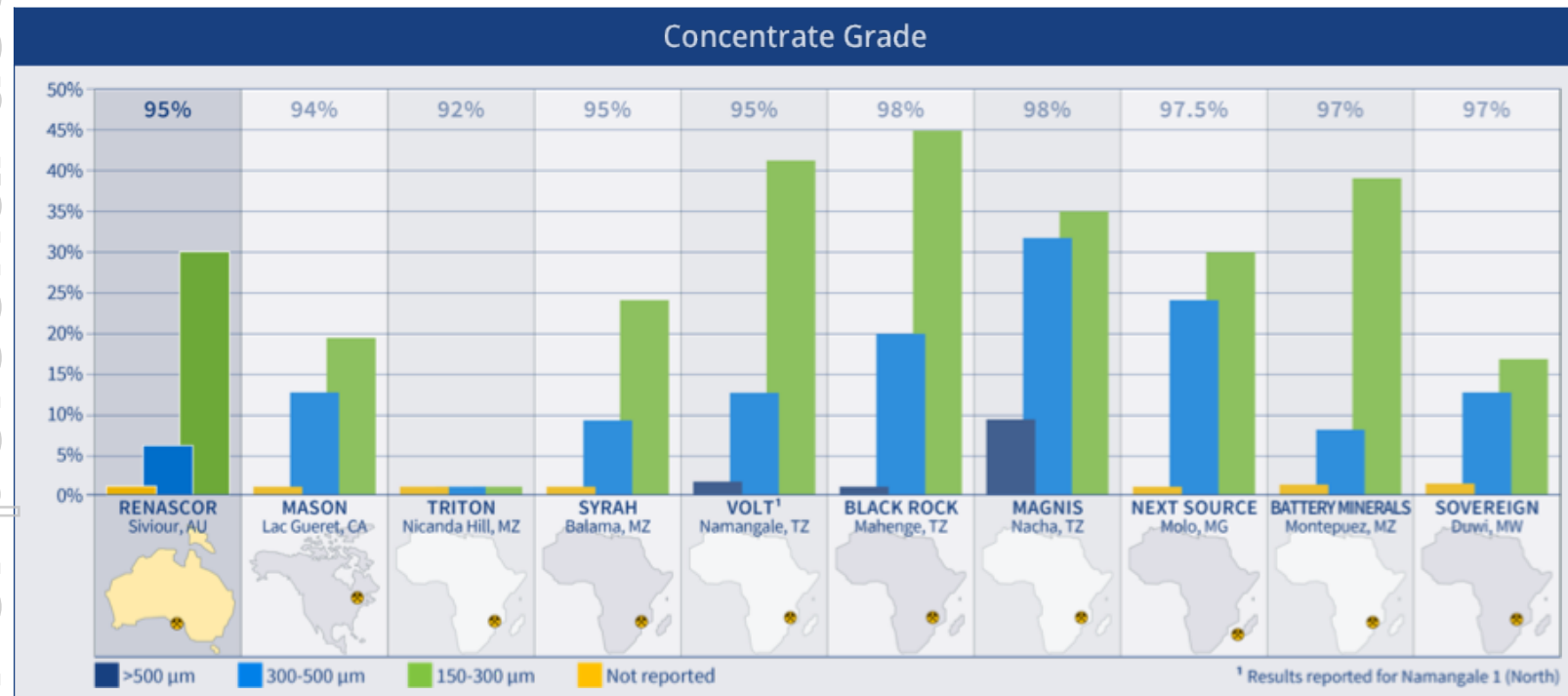
Metallurgical testing has established ability to produce high quality graphite products at low OPEX using conventional (non-chemical, non-thermal) flowsheet

Flake Category	Particle Size		Percentage	Annual Production
	Microns (µm)	Mesh		
Jumbo	>300	+48	6%	8,520t
Large	180 to 300	-48 to +80	20%	28,400t
Medium	150 to 180	-80 to +100	10%	14,200t
Small	75 to 150	-100 to +200	43%	61,060t
Fine	<75	-200	21%	29,820t



## Metallurgy

Sivour offers the potential to produce low-cost, globally competitive concentrates within mining friendly Australia



Source: Company reports

# Spherical Graphite

Independent tests confirm Siviour concentrates can be processed into up to 99.99% spherical graphite suitable for use in Lithium-ion battery anodes

Parameter	Test 1	Test 2
Fixed Carbon	99.97%	99.99%
Ash content	0.03%	0.02%
D10 Size Fraction (-10% finer than this size)	9.8 µm	11.3 µm
D50 Size Fraction (-50% finer than this size)	16.3 µm	18.4 µm
D90 Size Fraction (-90% finer than this size)	27.5 µm	29.7 µm
Ratio D10 to D90 sizes	2.8	2.8
Tap Density (measure of density of spherical graphite powder settled in test cylinder)	0.93 g/cm <sup>3</sup>	0.95 g/cm <sup>3</sup>

Further test work to optimise product offering (size and purity) on-going

## Expandable Graphite

Independent tests confirm Siviour concentrates are suitable for expandable graphite in excess of the typical industry expansion coefficient requirements

Expansion Coefficient for Siviour Graphite Concentrations			
Parameter	Siviour Samples		Industry Standard
	+50 mesh ( >300 µm )	+80 mesh ( >180 µm )	
Expansion Coefficient (ml/g)	320	275	230

Both samples were tested for expansion using sulfuric acid based interaction agents and by heating to 1,000°C.

Both samples of Siviour graphite concentrates expanded at rates in excess of the typical industry standard for high-quality expandable graphite created from Chinese flake graphite concentrates

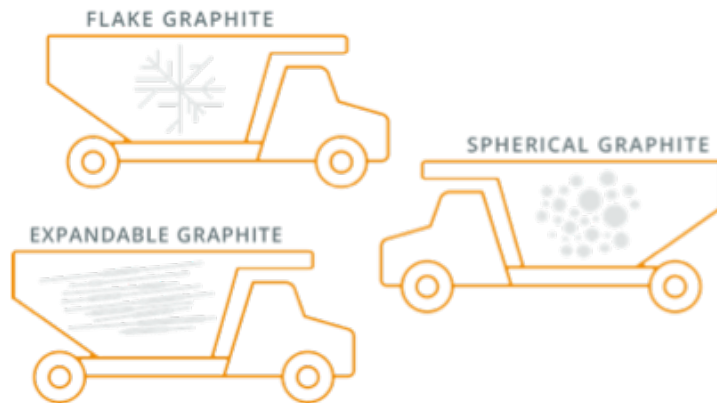
Expandable graphite is created by heating graphite to a temperature that causes exfoliation (expansion) of individual flakes of graphite

Expandable graphite is increasingly sought-after for several applications including flame retardant building materials and textiles

Graphite concentrates that expand at high rates selling at a significant premium to typical graphite concentrates

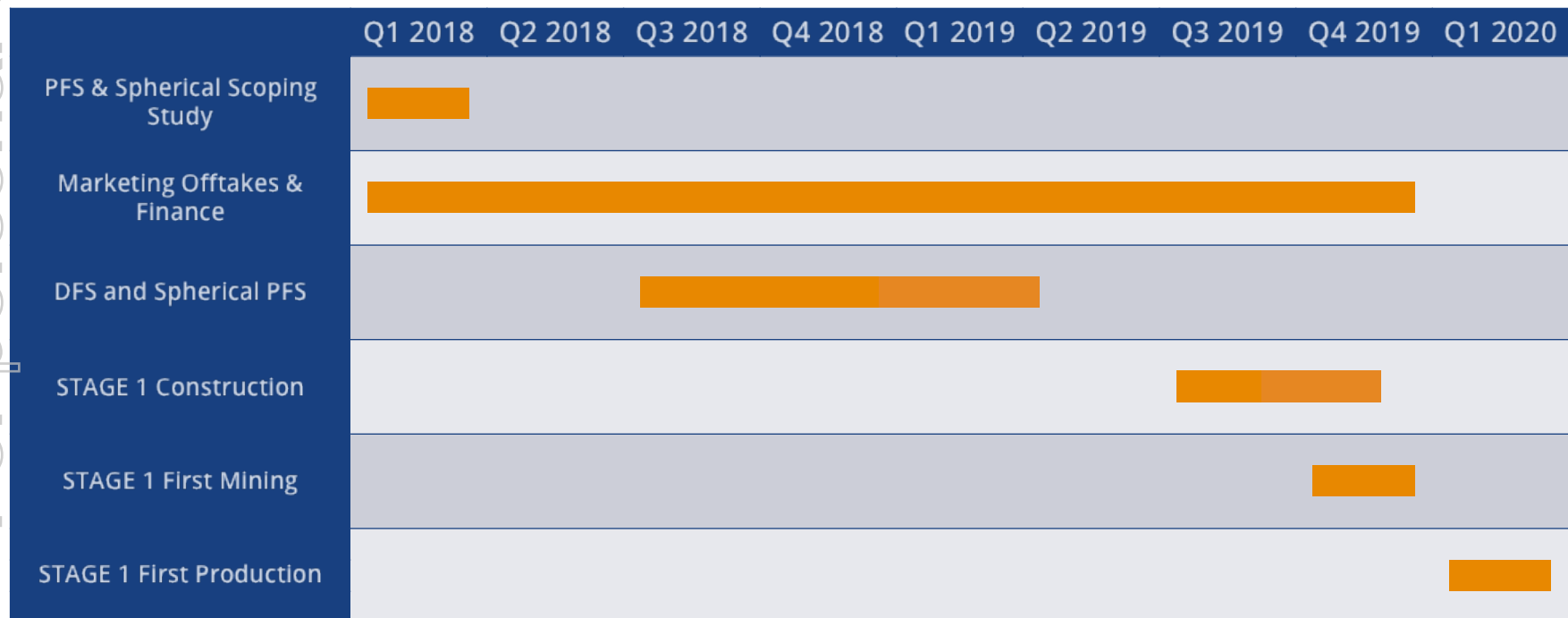
## Mine to Market

- Simple, safe and reliable transport from our Australian graphite resource
- Road transport from Arno Bay to Port Adelaide
- Initial mining planned for Q4, 2019, with production as early as Q1 2020
- Possibility to further process in-country and value add to spherical grade and/or expandable graphite



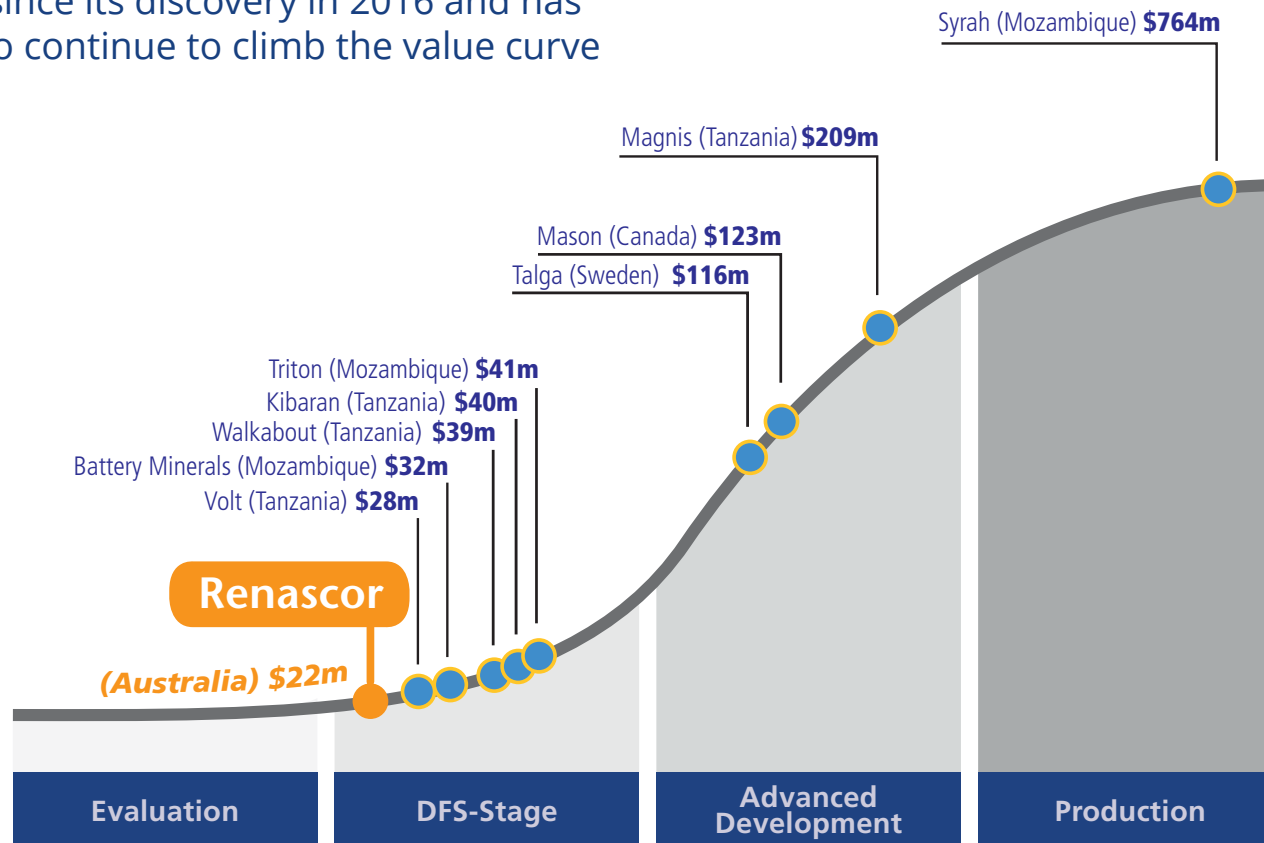
## Siviour Timelines

- Project Feasibility Study (PFS) and Spherical Scoping Study complete
- Definitive Feasibility Study (DFS) and Spherical PFS underway
- Mine lease expected by Q1, 2019
- Mine Construction (pending financing) planned as early as Q3 and Q4, 2019
- First mining planned for Q4, 2019, with first production in Q1 2020



## Re-rating Potential

Renascor has quickly advanced the development of Siviour since its discovery in 2016 and has potential to continue to climb the value curve



Market capitalisation as of 24 August 2018 (Renascor adjusted to include planned share issuance to shareholders of Ausmin Development Pty Ltd pursuant to shareholder approval of 3 September 2018)

## Near-term Value Drivers

**Renascor is fully-funded to Decision to Mine. Strong upcoming news flow expected to include:**

- **Offtake.** With completion of PFS and dispatch of customer samples, potential for additional offtake developments in 2018
- **Regulatory.** Mineral lease application lodged in August 2018
- **Project improvements.** Upcoming metallurgical and technological programs and reserve-definition drilling offer potential to improve PFS project economics
- **Spherical graphite.** Completion of Spherical PFS (expected next quarter) offers potential for improved project economics and more direct involvement in lithium-ion battery supply chain
- **Project finance and DFS.** As the Siviour DFS advances towards completion (expected in Q1 2019), focus will turn to project finance for stage one construction



## Summary

### **Siviour is a new discovery of a world-class graphite deposit**

One massive ore body offers consistent high-quality supply

Globally competitive: Low OPEX and CAPEX

Fully-funded to Decision to Mine

Mining-friendly Australia



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**Sivour**  
Graphite

### Forward Looking Statements

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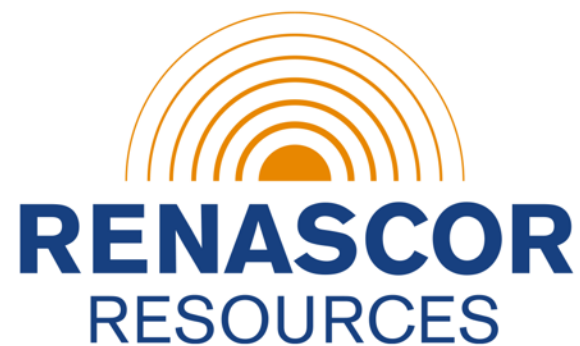
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### Competent Persons Statement

The results reported herein, insofar as they relate to exploration activities and exploration results, are based on information provided to and reviewed by Mr G.W. McConachy (Fellow of the Australasian Institute of Mining and Metallurgy) who is a director of the Company. Mr McConachy has sufficient experience relevant to the style of mineralisation and type of deposits being considered to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012 Edition). Mr McConachy consents to the inclusion in the report of the matters based on the reviewed information in the form and context in which it appears.

The results reported herein, insofar as they relate to metallurgical test work results, are based on information provided to and reviewed by Mr Simon Hall, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy and a consultant to the Company. Mr Hall has sufficient experience relevant to the mineralogy and type of deposit under consideration and the typical beneficiation thereof. Mr Hall consents to the inclusion in the report of the matters based on the reviewed information in the form and context in which it appears.



David Christensen: Managing Director  
Telephone: +61 (8) 8363 6989  
Email: [info@renascor.com.au](mailto:info@renascor.com.au)  
Website: [renascor.com.au](http://renascor.com.au)  
Office Location: 36 North Terrace, Kent Town  
South Australia 5067