

The Siviour Battery Anode Material Project

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**Presentation to the South
Australian Exploration and
Mining Conference**

1 December 2023

David Christensen

Managing Director



Powering Clean Energy™

Section 1:

Executive Summary

Powering Clean Energy™

*EV demand is forecast to grow at a **CAGR of 17.5%*** from 2023 to 2033, driving demand for lithium-ion battery anodes*



Project Highlights

- **Vertically integrated** operation to produce uncoated Purified Spherical Graphite (PSG) located **wholly within South Australia**.
- **World's 2nd largest Proven Graphite Reserve and largest Graphite Reserve outside of Africa¹**.
- **Proven eco-friendly, HF-free purification process** endorsed by leading global anode companies.
- **Development-ready**
 - DFS assessment completed with Battery Anode Material Study.
 - Key regulatory approvals (PEPR, Mineral Lease) from South Australian Department of Energy and Mining for graphite mine and concentrator.
 - Conditionally approved A\$185 million Loan Facility from Export Finance Australia via the A\$2 billion Critical Minerals Facility.
- **Strong market fundamentals**, driven by rapid growth in EVs, USA & Europe incentives and recently announced Chinese graphite export restrictions.
- Non-binding offtake MOUs with leading anode companies, including **Mitsubishi Chemical and POSCO**.

* Source: Benchmark Mineral Intelligence

1. See Renascor ASX announcement dated 21 July 2020



BAM Project Value Drivers



Scale

- World's 2nd largest Proven Graphite Reserve
- Largest Graphite Reserve outside of Africa



Cost position

- Favourable geology and in-country vertical integration drive globally competitive projected OPEX
- Competitive with current Chinese production and advantaged over new developments outside of China



Economics

- Post-tax NPV₁₀ of A\$1.5b
- Post-tax unleveraged IRR of 26%
- Average annual EBITDA of A\$363m



Financing

- A\$185m conditional loan from Australian Government's Critical Minerals Facility
- Start-up CAPEX for upstream operation expected to be funded through existing cash and debt



Secure & Sustainable

- 100% Australian made PSG
- Tier 1 jurisdiction with low sovereign risk
- USA Free Trade Agreement (meets requirements under Inflation Reduction Act)
- Low ESG footprint with ~70% South Australia renewable electricity supply



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Capital structure

Shares on issue <i>(29 November 2023)</i>	2,539M
Share price <i>(29 November 2023)</i>	A\$0.15/sh
Market Cap (at A\$0.15/sh)	A\$380.9M
Cash (30 September 2023)	A\$127.8M
Debt (30 September 2023)	Nil
Enterprise Value	A\$253.1M

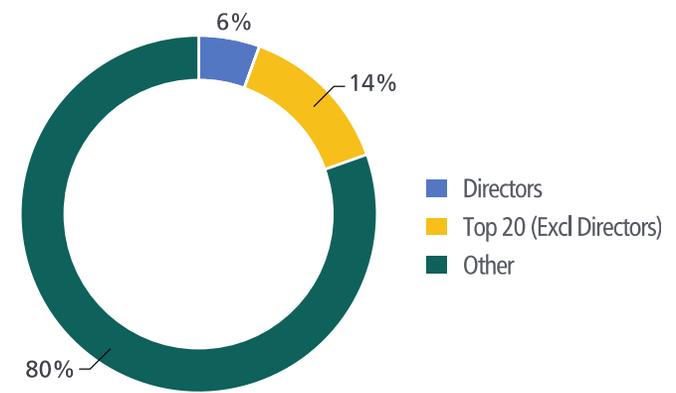


Corporate overview

Share Chart – ASX code: RNU



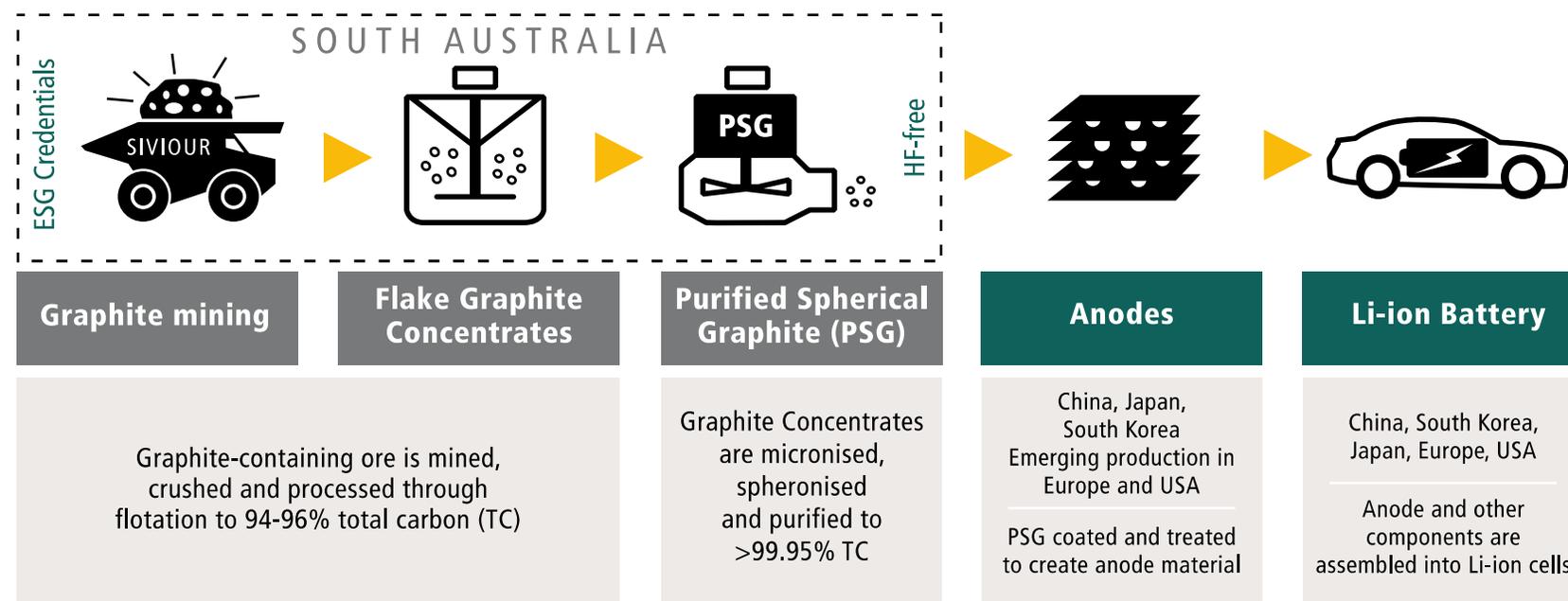
Shareholder breakdown – 29 November 2023



Renascor's Battery Anode Material Project in the Graphite Supply Chain

Renascor is developing a vertically integrated operation within South Australia consisting of a mine, concentrator and downstream manufacturing facility to produce **Purified Spherical Graphite (PSG)** via eco-friendly chemical purification for sale to anode makers and use in Li-ion batteries for **Electric Vehicles**.

Renascor's Integrated Battery Anode Material Manufacturing Operation



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Section 2:

Impact of Lithium-Ion Battery Growth on the Graphite Market

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EV Sales Continue to Increase

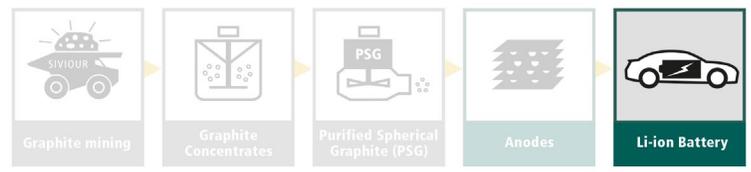
Trend toward increased adoption of EVs has continued in 2023 and is forecast to accelerate moving forward

Year-to-date (through September) global EV sales up 34%, with strong growth in across major markets:

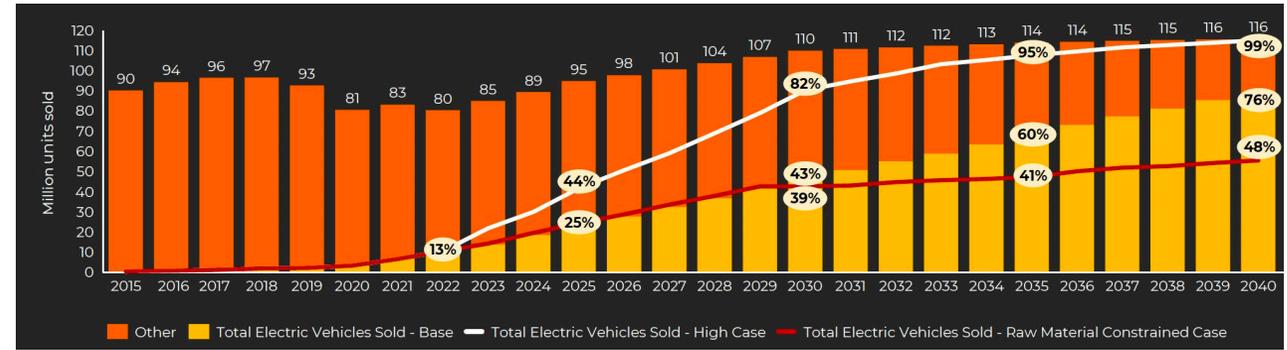
- China, worlds' largest market: up 29%
- North America: up 78%
- European: up 26%

Strong 2023 growth despite easing of subsidies in China and Germany

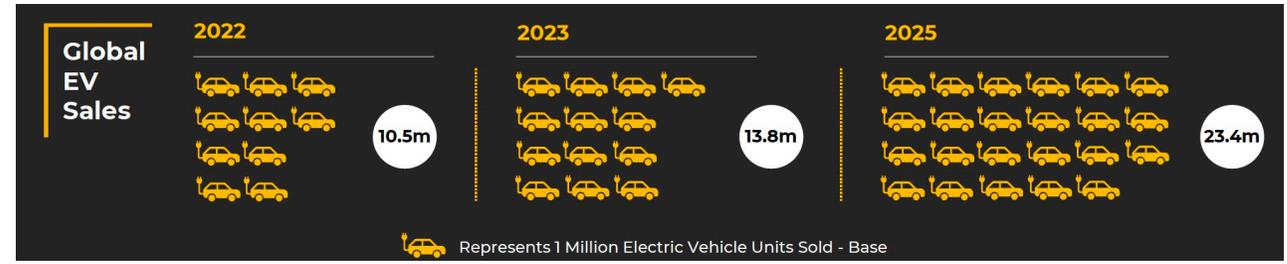
Source: Reuters, citing Rho Motion



EV Penetration 2015 to 2040



Source: Benchmark Mineral Intelligence



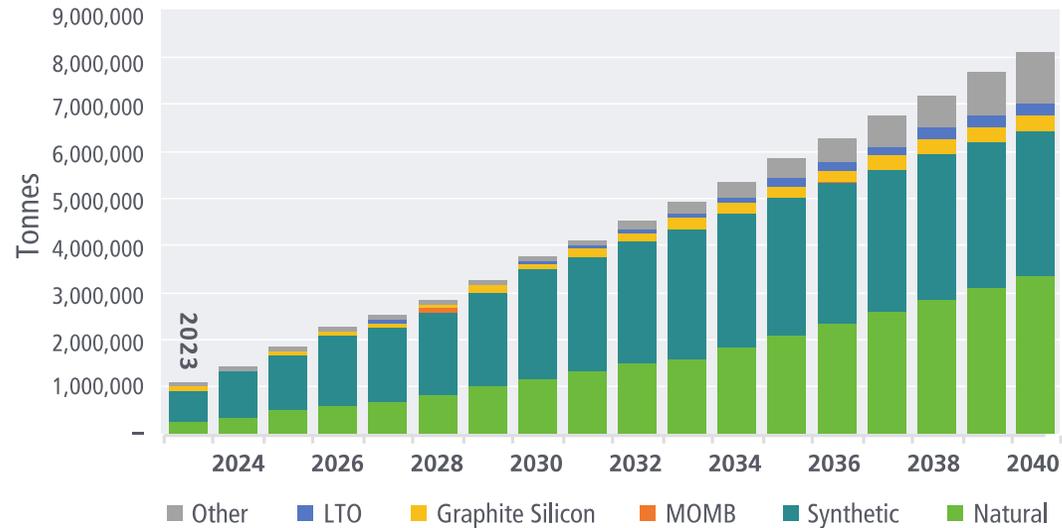
Source: Benchmark Mineral Intelligence



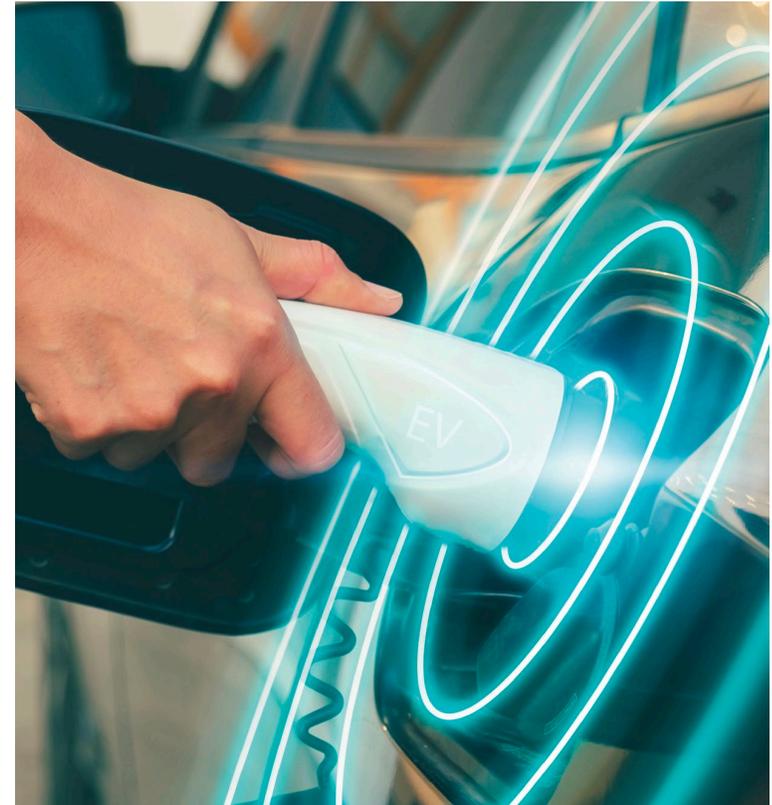
Anode and Graphite Demand are Directly Linked to Battery Production Growth

Graphite is the fundamental raw material in lithium-ion battery anodes, with strong growth projected in all major anode chemistries

LiB anode demand



Source: Benchmark Mineral Intelligence



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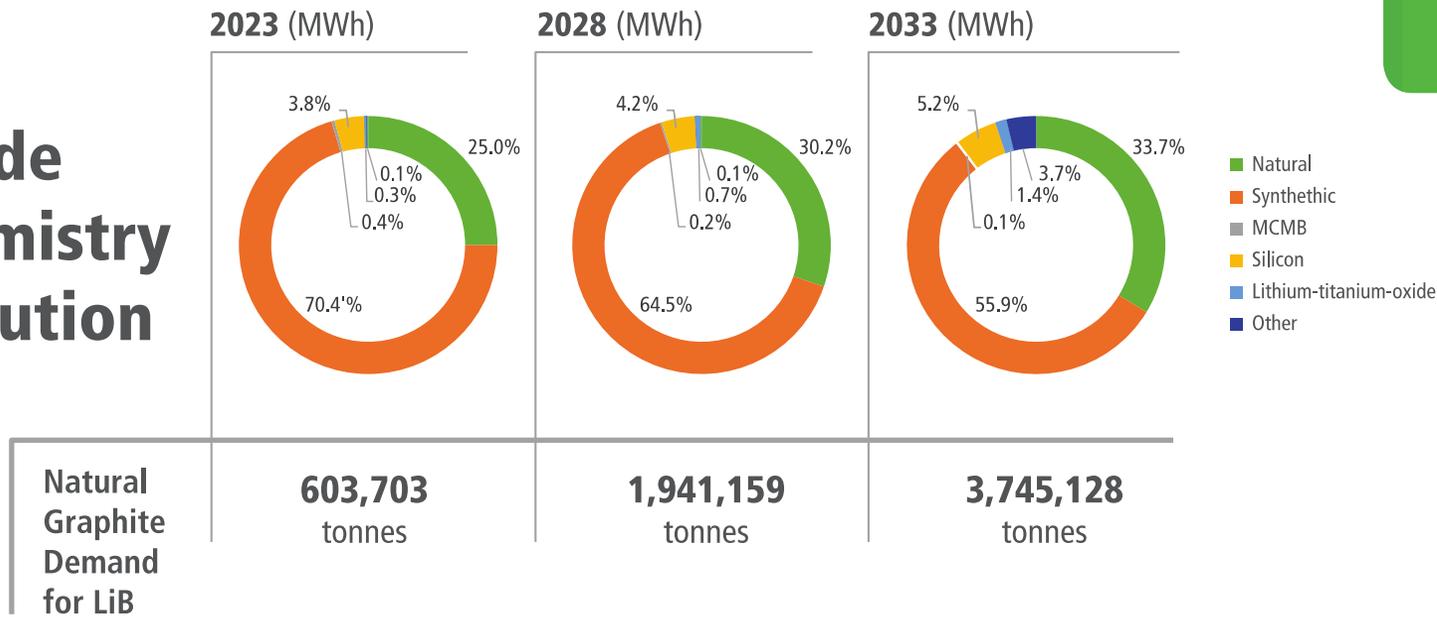
Natural Anode Market Will Continue to Grow

The growth of the natural anode market will require significant new production of flake graphite concentrates and purified spherical graphite

Natural and synthetic graphite are both currently used as precursor materials to produce anodes, with synthetic graphite anodes having a larger market share.

Due to its lower cost of production and more favourable ESG credentials, natural graphite anode demand growth is expected to outpace synthetic anodes, in particular, in ex-China markets.

Anode Chemistry Evolution



Natural anode 2023 – 2033

Supply growth	Demand growth
133%	489%

Source: Benchmark Mineral Intelligence

Source: Benchmark Mineral Intelligence



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New ex-China sources are needed to fill the growing supply gap

100% Australian-made

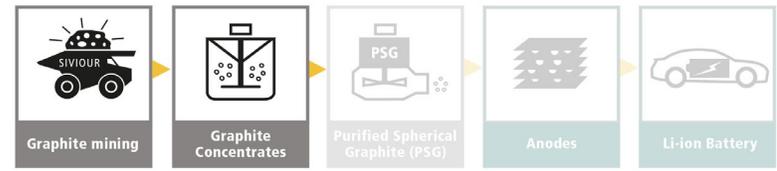
Graphite Flake Market Balance Moving to Undersupply

Significant new production is required to meet projected demand for graphite flake concentrates.



■ Base Case Balance - Operational, Ideled, Brownfield Expansions, Highly Probable, Probable
— Base Case Balance - Operational, Ideled, Brownfield Expansions, Highly Probable

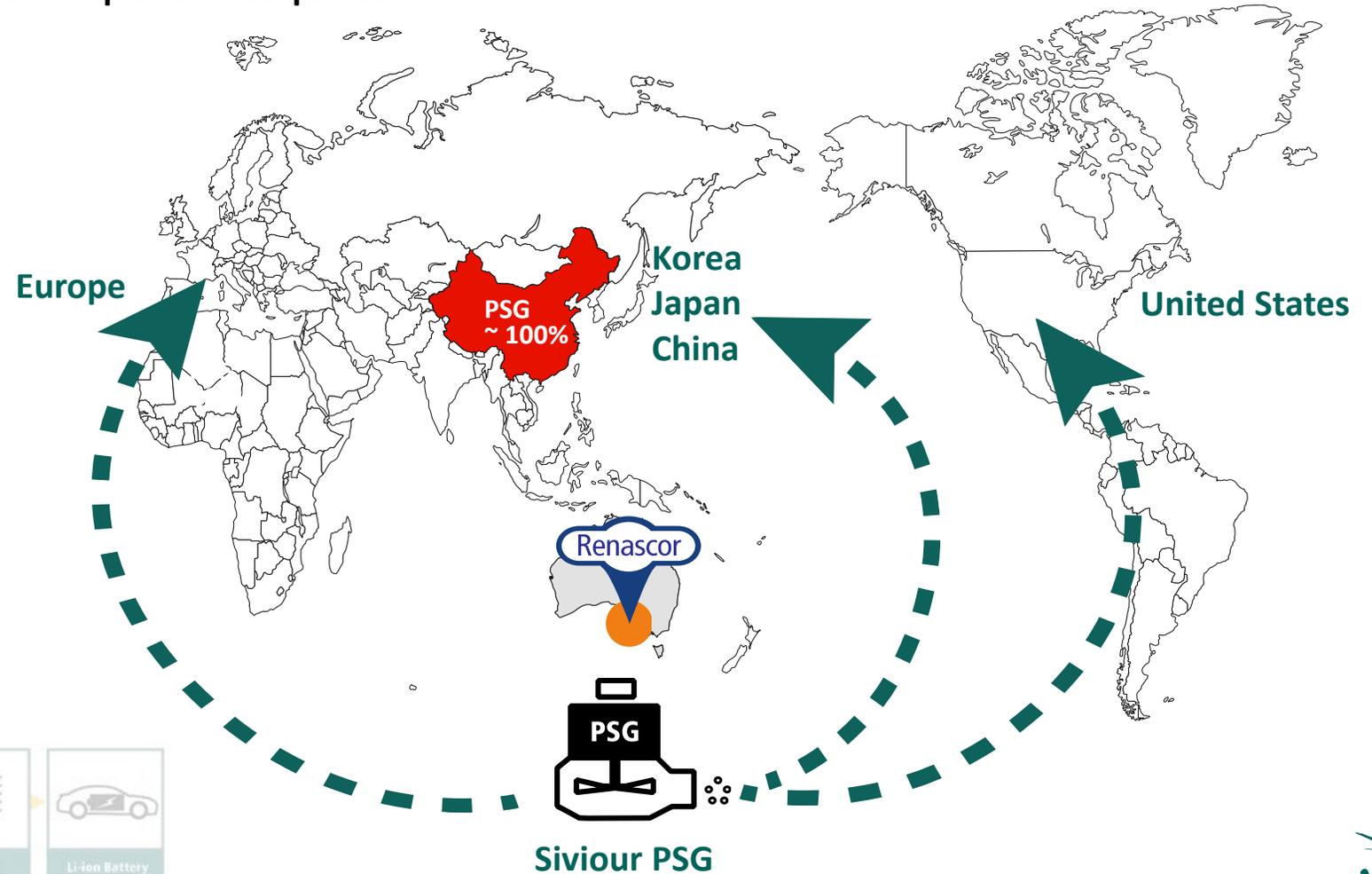
Source: Benchmark Mineral Intelligence



China Currently Controls ~ 100% of the Market for Purified Spherical Graphite

All anode producers (including manufacturers in South Korea and Japan) are currently dependent on China for Purified Spherical Graphite.

Renascor will provide a reliable source of PSG to the global market



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Policy Initiatives Favour New, Non-Chinese Graphite Supply

Public policy is driving cell manufacturers and OEMs to procure graphite supply outside of China

United States Inflation Reduction Act

EV credit of up to US\$7,500/vehicle:

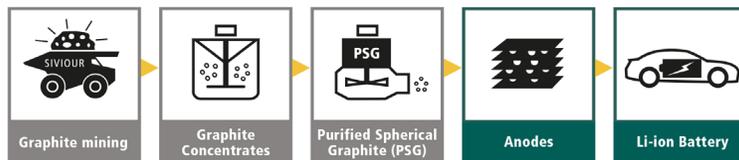
- Phased threshold sourcing requirements from the US or US free trade countries (inc. Australia)
- No battery components from 2024 and no battery minerals from 2025 from FEOC (inc. China)

EU Critical Raw Materials Act

- Not more than 65% of EU critical mineral demand to be met by a single country by 2030

Chinese graphite export restrictions

- Restrictions on export of graphite products from 1 December 2023



Graphite Prices

Supply-demand dynamics and public policy favour increased graphite pricing in the near-term

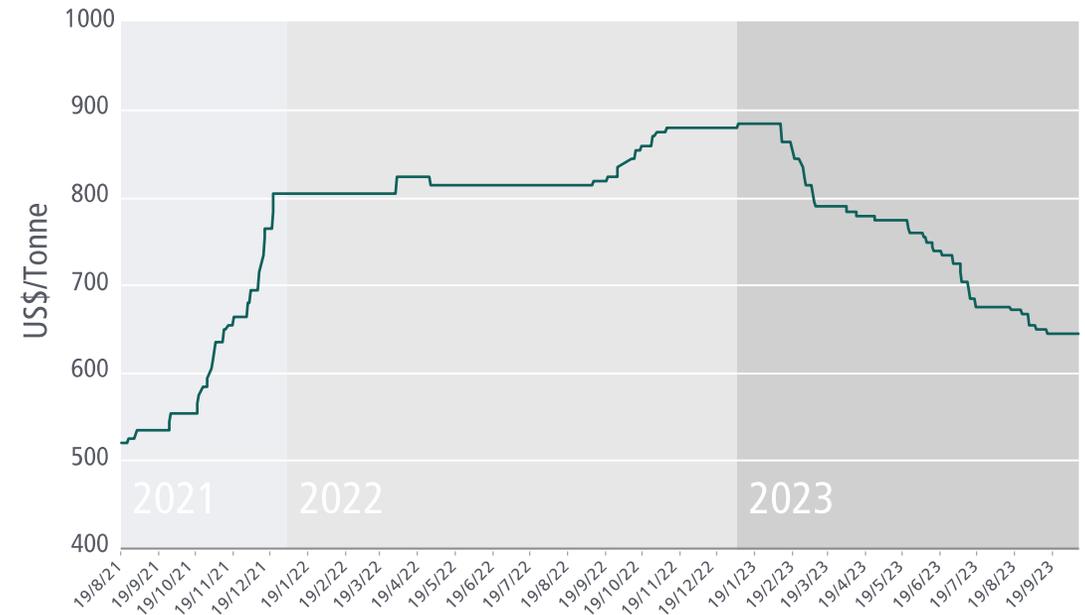
Graphite prices increased through calendar year 2022, as China imported material amounts in large part to support greater demand for graphite from the Chinese anode sector.

Beginning in early 2023, the graphite price trend reversed on lower overall Chinese demand (across all battery minerals) and increasing substitution of natural graphite for low-priced synthetic graphite.

Renascor believe any of several factors are poised to contribute to increased graphite pricing:

- Low-priced synthetic graphite is not sustainable and not replicable outside of China
- To supply the growing Chinese lithium-ion battery sector, China will revert to being a net importer of graphite
- Public policy is incentivizing ex-China supply chains

-195 Graphite Concentrate Prices



Source: Asian Metal



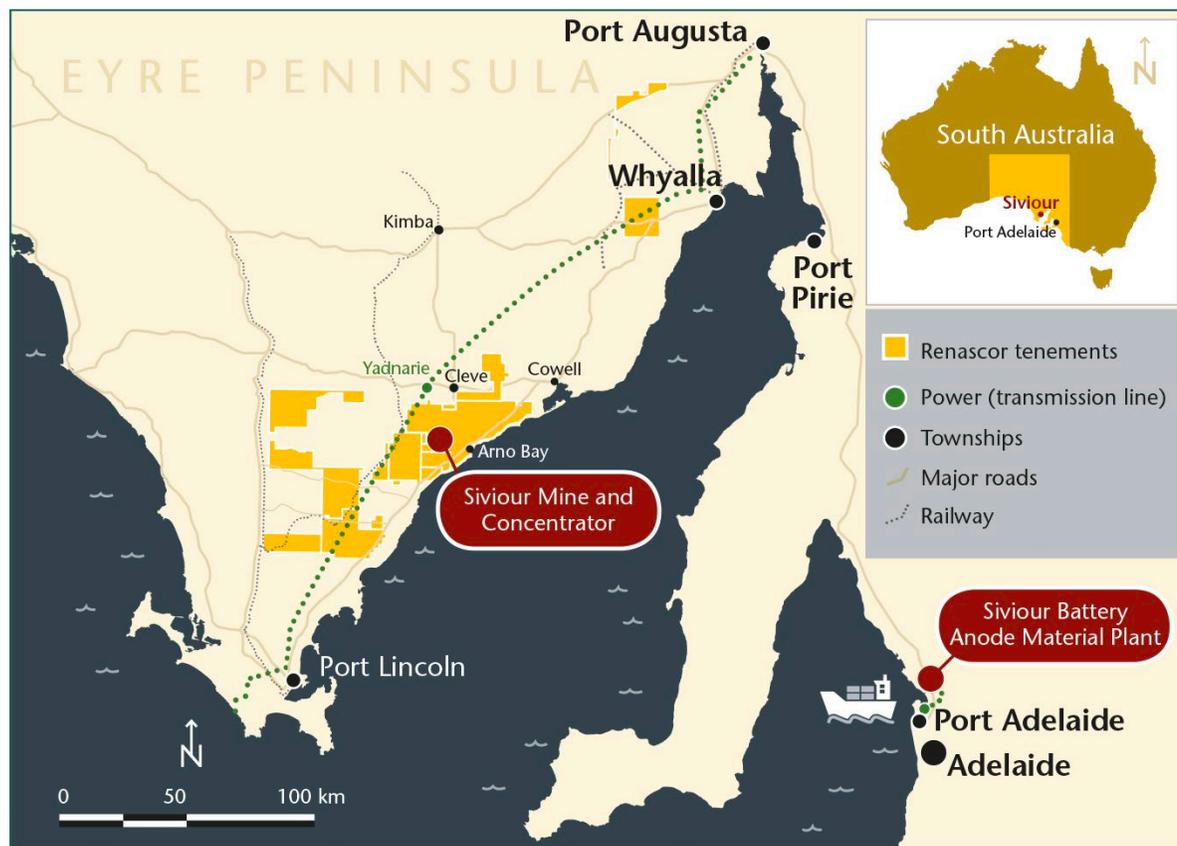
Section 3:

The Siviour Battery Anode Material Project

Powering Clean Energy™

Prime Australian Location Offers Mine to Market Supply Chain Security

The Siviour Graphite Deposit is located in coastal South Australia, with nearby access to major highway for delivery to state-of-the-art Battery Anode Material Plant located with 20km of Port Adelaide.



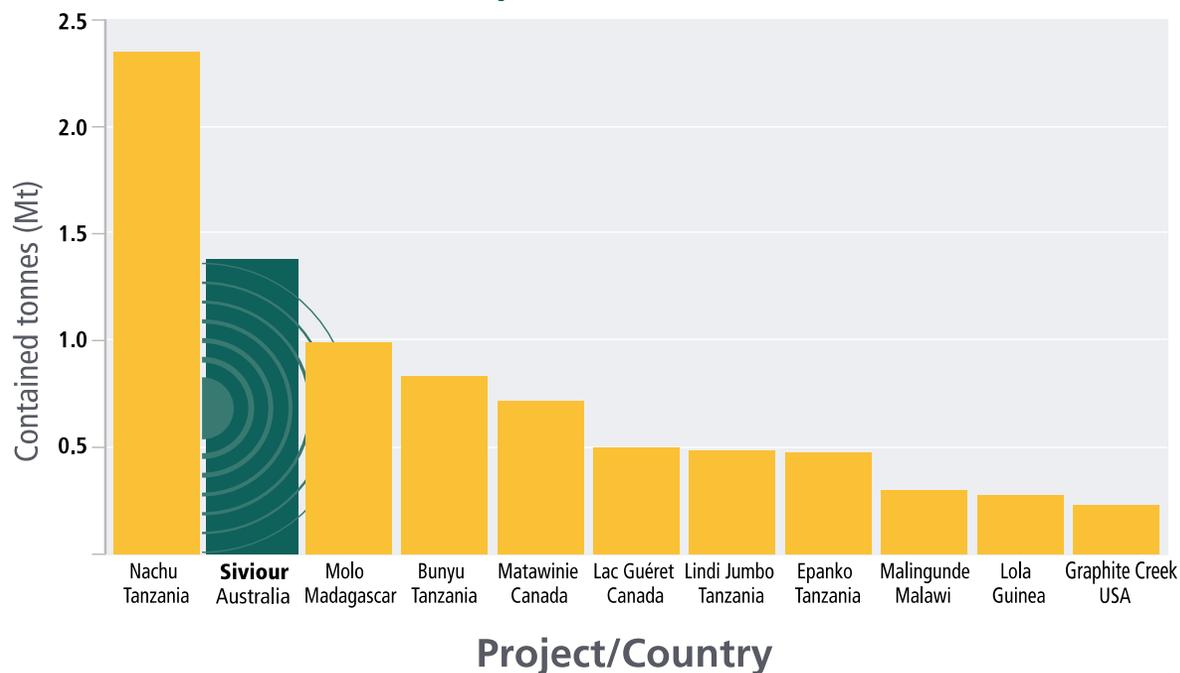
Conceptual illustration of the planned Siviour BAM manufacturing facility at Bolivar, South Australia



The Siviour Graphite Deposit is Amongst the World's Largest

Siviour is the second largest Proven Reserve of graphite globally and the world's largest reported graphite Reserve outside of Africa.

Global Graphite Proven Reserves¹



1. Source: public company reports. Does not include graphite deposits that do not publicly report data on main stock exchanges in Australia, Canada, the United Kingdom and the United States. See Appendix 1 for further details on sourcing.

Mineral Resource Estimate (September 2023)²

Category	Tonnes (Mt)	Grade (% TGC)	Graphite (Mt)
Measured	16.9	8.6%	1.4
Indicated	56.2	6.7%	3.8
Inferred	50.5	6.5%	3.3
Total	123.6	6.9%	8.5

2. ASX release 14 September 2023 "Siviour Mineral Resource Increases by 25%"

Ore Reserve Estimate (August 2023)³

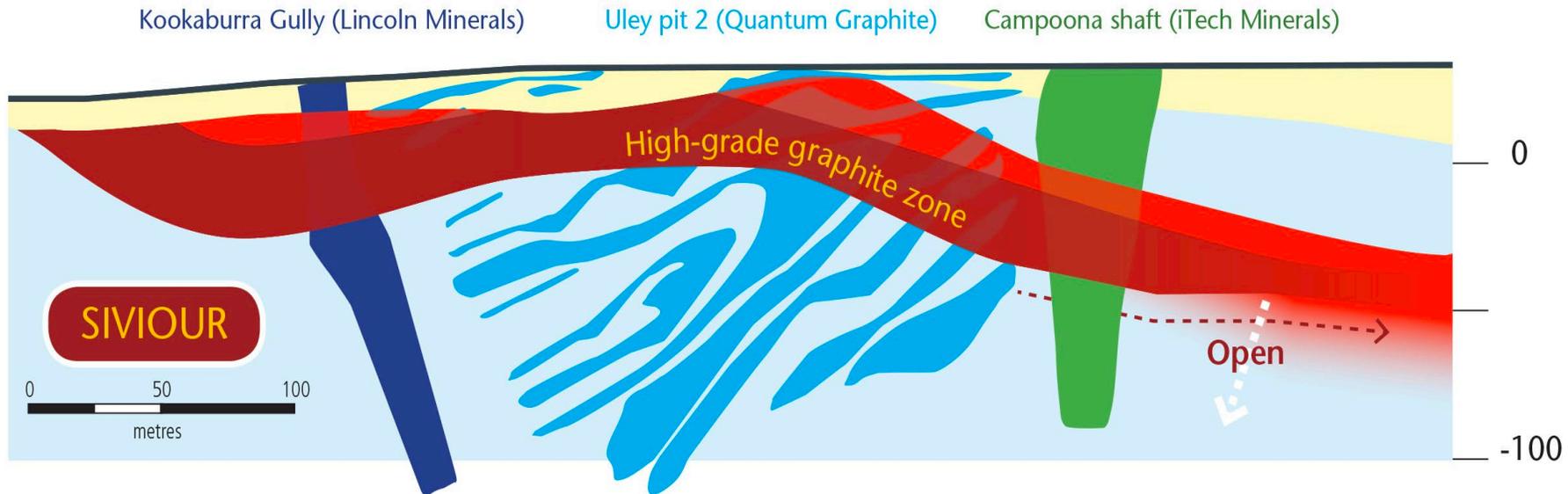
Category	Tonnes (Mt)	Grade (% TGC)	Graphite (Mt)
Proven	16.8	8.2%	1.4
Probable	45.0	6.6%	3.0
Total	61.8	7.0%	4.3

3. ASX release 24 August 2023 "Updated Mineral Ore Reserve Estimate for Siviour"



The Siviour Graphite is Unique in Both its Near-surface, Flat-lying Orientation

The deposit is flat, shallow and large, resulting in low-cost mining and consequently low-cost production of Graphite Concentrate world's largest reported graphite Reserve outside of Africa.



Cross-section of Siviour Deposit (shown in red) compared to other Australian graphite deposits



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Approval of PEPR positions Renascor to respond to potential bottleneck in supply chain caused by rapid anode and battery capacity expansions downstream that have not been matched by comparable mine start-ups

100% Australian-made

Approval of Program for Environmental Protection and Rehabilitation (PEPR)

PEPR approval from South Australian Department of Energy and Mining announced¹

- Second stage (following previous grant of Mineral Lease²) in South Australia’s two-step approval process.
- PEPR allows processing capacity of up to 1.65 million tonnes per annum, which would permit Renascor to produce up to 150,000 tonnes of Graphite Concentrates per year.
- Approval of PEPR permits Renascor to move forward with the development of the upstream Graphite Mine and Concentrator.
- PEPR approvals are a key condition precedent to A\$185M debt financing³.

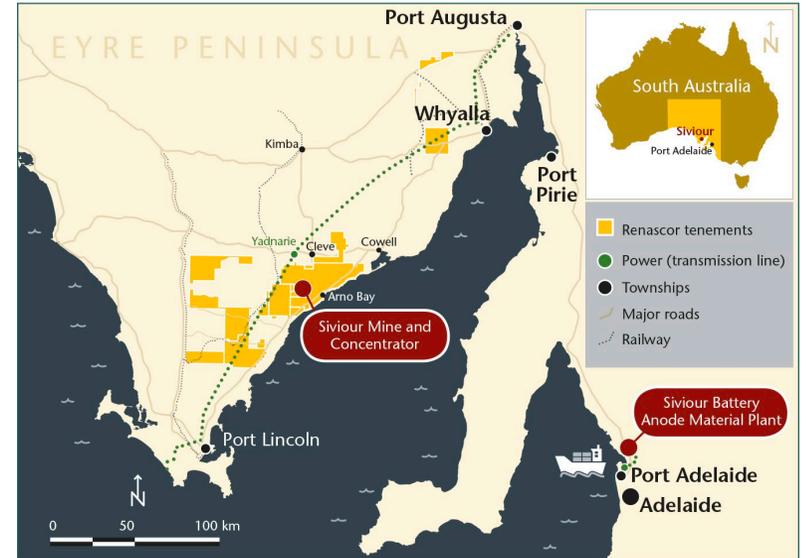
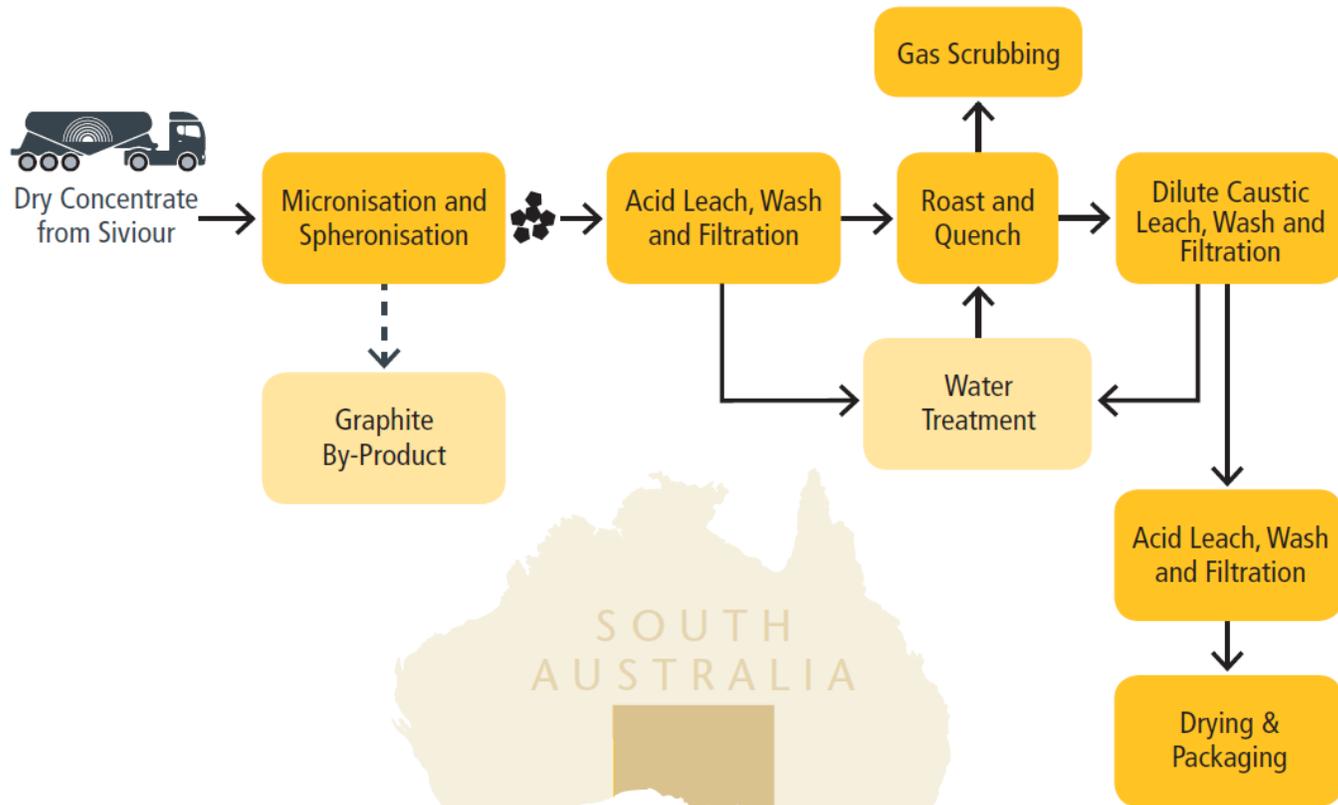


1. ASX 28 November 2022, “PEPR Approval for Siviour Graphite Mine and Concentrator”
2. ASX 8 April 2019, “Mineral Lease Granted for Siviour”
3. ASX 2 Feb 2022, “Australian Government conditionally approves A\$185 million Loan Facility to Fund the Development of the Siviour Graphite Project”



Production of Purified Spherical Graphite

Purified Spherical Graphite to be produced from Siviour Graphite Concentrates.



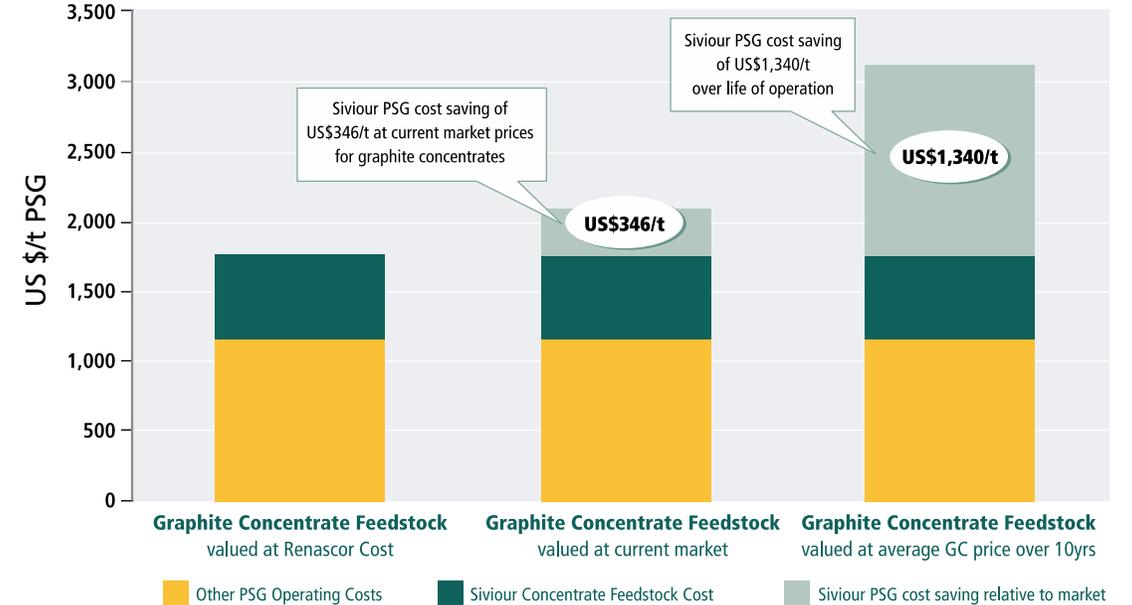
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Strong Comparative Advantage in PSG Production

Vertical integration underpins low-cost PSG production.

- Graphite Concentrate feedstock is a significant cost input in the PSG manufacturing process.
- Renascor’s PSG operation benefits from obtaining Siviour Graphite Concentrate feedstock at the cost of production rather than buying feedstock at market price.
- The difference in feedstock price has an exaggerated impact on PSG operating costs because only a portion of the Graphite Concentrates used as feedstock are spheronised to PSG during the milling process (PSG production yields of less than 50% are common¹).
- Renascor’s market data suggests an average operating costs of ~US\$2,000/t PSG for existing PSG market (100% China).
- Renascor’s gross operating cost estimate of US\$1,846/t PSG is favourable by comparison².



Renascor cost data based on Siviour Battery Anode Material Study (ASX release dated 10 August 2023). Graphite price data based on: (i) Asian Metals price for -195 as of 31 October 2023 of US\$630 per tonne and (ii) for life of mine market value: graphite price forecast data sourced from Fastmarkets for Battery Anode Material Study.

1. The BAM Study has adopted a yield of 65%. See Renascor ASX release dated 10 August 2023.
 2. See Renascor ASX release dated 10 August 2023

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The study results confirm Renascor's BAM Project as a low-cost, high value supplier of 100% Australian-made graphite for the growing lithium-ion battery anode sector



Battery Anode Material Study Results

Low graphite concentrate feedstock costs drives Renascor's low PSG production costs, high margins and strong cash generation.

Snapshot of the Siviour BAM Project

A\$1.5B NPV ₁₀ after tax	26% IRR after tax	A\$363m Annual average EBITDA
40 years Life of Mine	US\$405/t ave. graphite concentrates OPEX years 1-10	US\$1782/t PSG OPEX years 1-10
A\$215m Initial upstream investment	75ktpa Initial graphite concentrates production	4½ years (payback)

1. BAM Study results were released to the ASX on 8 August 2023



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Independent life cycle assessment confirms Siviour's potential as a cleaner source of Purified Spherical Graphite

100% Australian-made

Strong Environment, Social and Governance (ESG) credentials

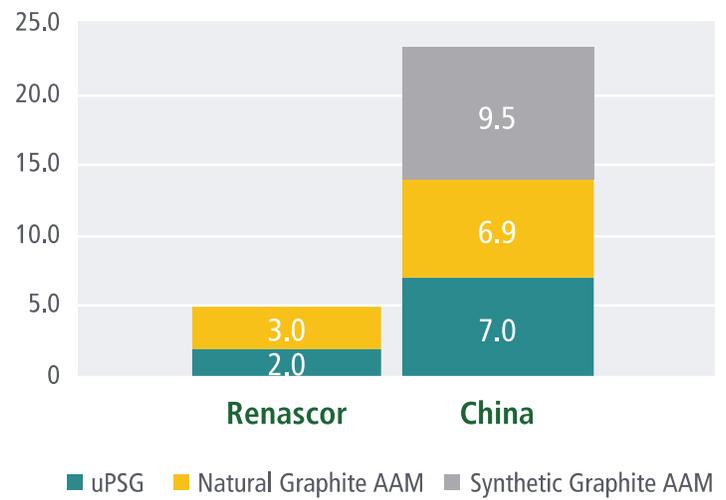
Renascor's purification process is eco-friendly.

- Renascor had developed a purification process that avoids the use of Hydrofluoric ("HF") acid, offering a cleaner HF-free alternative to prevailing process used in China.

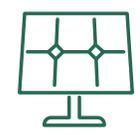
Locating the BAM facility in South Australia drives strong ESG credentials.

- By leveraging South Australia's largely renewable electricity grid, the BAM facility can achieve a CO₂e footprint under 1/3rd that from existing sources in China (for natural flake graphite processed into uPSG).

Co₂e / Tonne* (Scope 1, 2 & 3)



* See ASX release dated 1 November 2023.



1. ASX 28 November 2022, "PEPR Approval for Siviour Graphite Mine and Concentrator"

Offtake Strategy: Aligned with Global Leading Battery Anode Manufacturers

Total non-binding commitments for up to full Stage 1 PSG capacity of 50ktpa



POSCO (South Korea): largest ex-China anode producer. Non-binding offtake MOU for up to 30ktpa for 10 years with scope for strategic cooperation, including the potential for equity investment.



Mitsubishi Chemical (Japan): largest Japanese chemical company. Non-binding offtake MOU, with a framework for strategic cooperation.



HANWA CO., LTD.

Hanwa (Japan): leading trading company in battery sector. Offtake MOU for up to 10ktpa for 10 years.

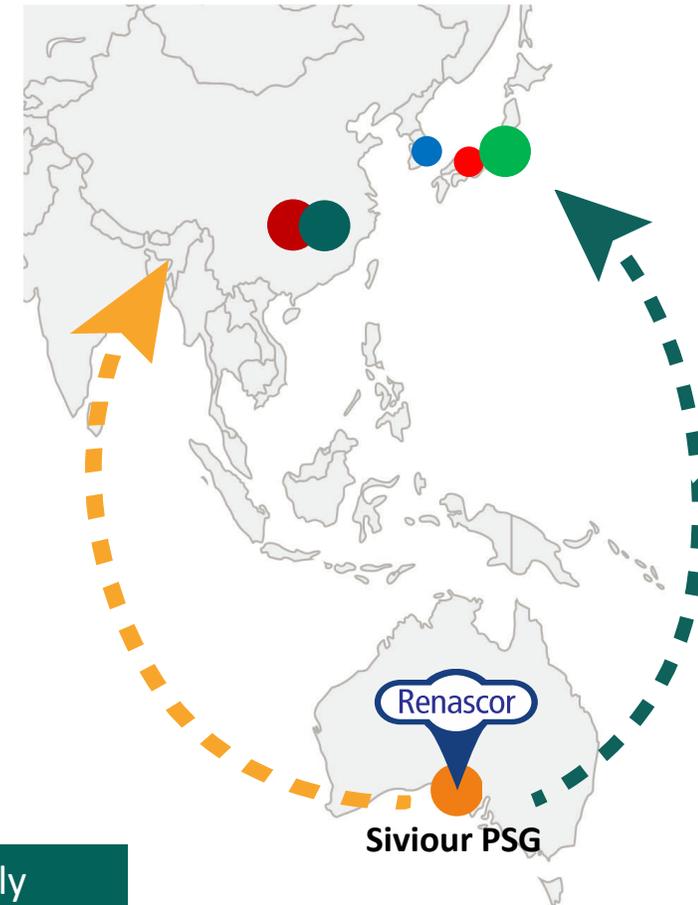


Mingunag (China): Anode manufacturer. Offtake MOU for up to 10ktpa for 10 years.



Zeto (China): Anode manufacturer. Offtake MOU for up to 10ktpa for 10 years.

Negotiation on binding offtake terms, including long-term pricing, currently underway



A\$185 Million Conditional Loan Approval from Australian Government

The Australian Government has conditionally approved a A\$185 million loan facility to support the development of the Siviour Graphite Project in South Australia.¹

- This loan is approved under the Australian Government's **\$2 billion Critical Minerals Facility**, which was established to assist the development of Australian critical minerals projects and to secure the vital supplies of resources needed to drive the new energy economy and support the resources jobs of the future.
- The Siviour BAM Project has been **granted Major Project Status by the Federal Government**, in recognition of its potential to contribute to Australia's Critical Mineral Strategy and Resource Technology, and Critical Mineral Processing National Manufacturing Priority Roadmap.
- Renascor aims to become a **world leader in the sustainable production of 100% an Australian-made advanced graphite product** for use in the Li-ion batteries.
- Final Approval of the Loan Facility is subject to conditions customary for project financings of this nature or otherwise required under the Critical Minerals Facility. Export Finance Australia (EFA), the Australian Government's Export Credit Agency, will manage this process.



Managing Director David Christensen representing Renascor at the *United States – Australia Critical Minerals Roundtable held on 24 October 2023*



1. ASX 2 Feb 2022, "Australian Government conditionally approves A\$185 million Loan Facility to Fund the Development of the Siviour Graphite Project"



Renascor's Strategy

We aim to become a global leader in the supply of sustainable, 100% Australian-made battery anode material

Stage 1



Commence Mining Operations

- Accelerate production of Graphite Concentrates
- Continue to build valuable offtake relationships with leading anode suppliers
- PSG Pilot Plant & qualification
- Increase Resource / Reserve

Stage 2



Commence PSG Operation

- Initiate production of Purified Spherical Graphite
- Staged approach to minimise upfront shareholder dilution
- Anode product development with current and next-generation anode suppliers
- Develop markets for other specialty graphite products

Stage 3



Full Renascor Potential

- Expand Graphite Concentrate and Purified Spherical Graphite production
- Establish further downstream processing expertise (and partnerships, as appropriate) to support development of fully integrated anode production
- Utilise expertise in graphite materials, engineering and applications to become industry leading manufacturer of high value graphite products and solutions



Renascor Resources: Multiple Near-Term Value Drivers

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Our goal is to become one of, if not the largest, global suppliers of PSG to the lithium-ion battery sector



Complete land acquisition



Complete Upstream FEED (including EPC contract)



Finalise Binding Offtake



Secure Financing / strategic partnering arrangements



Make Upstream Final Investment Decision



Forward Looking Statements

This Presentation may include statements that could be deemed "forward-looking" statements. Although Renascor Resources Limited (the "Company") believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those expected in the forward-looking statements or may not take place at all. Any forward-looking statements included in this document involve subjective judgment and analysis and are subject to uncertainties, risks and contingencies, many of which are outside the control of, and may be unknown to, the Company. In particular, they speak only as of the date of this document, they assume the success of the Company's strategies and they are subject to significant regulatory, business, competitive and economic uncertainties and risks. Actual future events may vary materially from the forward looking statements and the assumptions on which the forward looking statements are based. Recipients of this document ("Recipients") are cautioned not to place undue reliance on such forward-looking statements.

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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.

Bibliography

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



Appendix 1

Key Financial Parameters from BAM Study¹

Parameter	Stage-one		Stage-two	
Life of mine (LOM)	40 years			
Annual ore mining rate capacity (tpa)	825,000		1,650,000	
Annual Graphite Concentrate production capacity (tpa)	75,000		150,000	
Annual PSG production capacity (tpa)	50,000		100,000	
CAPEX Mine and MPP (\$M)	A\$214.5	US\$145.9	A\$173.3	US\$117.8
CAPEX PSG Facility (\$M)	A\$394.6	US\$268.3	A\$377.2	US\$256.5
Average operating cost of production of Graphite Concentrate (per tonne of Graphite Concentrate)	A\$596		US\$405	
	Years 1 to 10			
	A\$694		US\$472	
<i>LOM</i>				
Average operating cost of production of PSG (gross, per tonne of PSG)	A\$2,620		US\$1,782	
	Years 1 to 10			
	A\$2,714		US\$1,846	
<i>LOM</i>				
Average operating cost of production of PSG (with by-product credit)	A\$2,167		US\$1,474	
	Years 1 to 10			
	A\$2,136		US\$1,452	
<i>LOM</i>				
Payback Stage 1 and 2 (from commissioning Stage 1 PSG facility)	4 ½ years			
NPV ₁₀ (real, after-tax)	A\$1,486 million		US\$1,010 million	
IRR of integrated project (after-tax)	26%			
EBITDA of integrated project (annual average, LOM)	A\$363 million		US\$247 million	

1. See Renascor ASX released dated 10 August 2023 Siviour Battery Anode Material Study Results



Appendix 2

Peer Comparison Data

Project name	Code	Company	Country	Report name	Date	Link
Bunyu	VRC	Volt Resources Ltd	Tanzania	Pre-Feasibility Study Completed	15 December 2016	https://announcements.asx.com.au/asxpdf/20161215/pdf/43drlhpvdwbhxp.pdf
Epanko	EGR	Ecograf Ltd	Tanzania	Updated 60ktpa Bankable Feasibility Study	21 June 2017	https://announcements.asx.com.au/asxpdf/20170621/pdf/43k2d21wvk2sv1.pdf
Graphite Creek	GPH	Graphite One Inc	USA	Preliminary Feasibility Study Technical Report Graphite One Project	14 October 2022	https://www.graphiteoneinc.com/wp-content/uploads/2022/10/JDS-Graphite-One-NI-43-101-PFS-20221013-compressed.pdf
Lac Guéret	LLG	Mason Graphite Inc	Canada	Feasibility Study Update of the Lac Guéret Graphite Project	12 December 2018	https://masongraphite.com/wp-content/uploads/2021/06/a53b7c_22115be39ccf4d85b9579f359680997c.pdf
Lindi Jumbo	WKT	Walkabout Resources Ltd	Tanzania	Updated Ore Reserve delivers 17.9% graphite grade	28 February 2019	https://announcements.asx.com.au/asxpdf/20190228/pdf/44321stl8dlk5f.pdf
Lola	SRG	SRG Mining Inc.	Guinea	Lola Graphite Project NI 43-101 Technical Report – Updated Feasibility Study	12 April 2023	https://srgmining.com/wp-content/uploads/2023/04/J6626-SRG_Lola_UFS_Rev_0_Fin_2023-0407.pdf
Malingunde	NGX	NGX Ltd	Malawi	Replacement Prospectus	14 June 2023	https://announcements.asx.com.au/asxpdf/20230614/pdf/05qn89bfqrhw8.pdf
Matawinie	NOU	Nouveau Monde Graphite	Canada	NI 43-101 Technical Feasibility Study Report for The Matawinie Mine and the Becancour Battery Material Plant Integrated Graphite Projects	10 August 2022	https://nmg.com/wp-content/uploads/2022/08/Feasibility-Study-NMGs-Integrated-Phase-2-Projects.pdf
Molo	NEXT	NextSource Materials Inc	Madagascar	Molo Phase 2 Preliminary Economic Assessment NI 43-101 Technical Report	27 April 2022	https://www.nextsourcematerials.com/wp-content/uploads/2023/01/2022_04_27_molo_phase_2_pea_technical_report_dated_april_27_2022_final.pdf
Nachu	MNS	Magnis Energy Technologies Ltd	Tanzania	Bankable Feasibility Study Update Confirms Strong Financial and Technical Viability for the Nachu Graphite Project	27 September 2022	https://announcements.asx.com.au/asxpdf/20220927/pdf/45fhzx2nsgrmjb.pdf
				Supplementary Information Regarding Nachu BFS Update Released 27.9.2022	30 September 2022	https://announcements.asx.com.au/asxpdf/20220930/pdf/45fqs3q6h3hpw4.pdf



Renascor Resources Limited

Level 5, 149 Flinders Street
Adelaide, South Australia 5000

Phone: + 61 8 8363 6989

Email: info@renascor.com.au

Website: www.renascor.com.au

ASX Code: **RNU**

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