

# ASX Release

23 September 2024

## Completion of Bulk Sample Collection for PSG Demonstration Plant

### 730 tonnes of graphite ore collected from Siviour Graphite Deposit to support Renascor's Australian Government co-funded PSG demonstration facility

- Renascor has completed the collection of 730 tonnes of graphite ore from its 100%-owned Siviour Graphite Deposit in South Australia.
- The large-scale sample will be used to produce graphite concentrate for Renascor's planned Purified Spherical Graphite (**PSG**) demonstration facility.
- The sample ore from Siviour will be processed into graphite concentrate at a commercial graphite facility in China using Renascor's optimised flowsheet<sup>1</sup>. The graphite concentrate will subsequently be milled and purified into PSG using Renascor's eco-friendly, HF-free purification process at Renascor's planned PSG demonstration facility.
- As announced on 11 July 2024, Renascor was recently awarded a \$5 million grant under the Australian Government's International Partnerships in Critical Minerals Program for the design, construction and operation of the PSG demonstration facility<sup>2</sup>.
- Initial deliveries of the Siviour graphite ore have arrived at the commercial graphite facility in China, with the concentrate production scheduled for Q4 2024.
- Renascor has commenced engineering for the PSG demonstration facility and plans to commence commissioning of the demonstration plant in Q2 2025.

**Siviour**  
Battery Anode Material Project  
Powering Clean Energy



**HF-free**



Renascor Resources Limited (ASX: RNU) (**Renascor**) is pleased to announce the successful collection of 730 tonnes of graphite ore from its 100%-owned Siviour Graphite Deposit in South Australia.

The large-scale sample will be used to produce graphite concentrate for Renascor's planned Purified Spherical Graphite (**PSG**) demonstration facility.

The sample ore from Siviour is being delivered to China for processing into graphite concentrate at a commercial graphite facility using Renascor's optimised flowsheet<sup>3</sup>. The graphite concentrate will subsequently be milled and purified into PSG using Renascor's eco-friendly, HF-free purification process at Renascor's planned PSG demonstration facility.

Commenting on the bulk sample collection, Renascor Managing Director David Christensen stated:

*The successful completion of this 730 tonne, bulk sample from Siviour is a key milestone for our Australian Government co-funded Purified Spherical Graphite demonstration facility.*

*With the sample collection now safely completed, we will build upon the significant work already completed on our downstream processing designs as we look to demonstrate that our eco-friendly, HF-free purification technology can create a competitive advantage for Renascor as a low-cost, ex-China producer of Purified Spherical Graphite for the lithium-ion battery sector.*



Figure 1. Bulk sample collection and shipment at Renascor's Siviour Graphite Deposit in South Australia



## Discussion

Renascor is developing a vertically integrated Battery Anode Material (**BAM**) operation in South Australia. The BAM project comprises: (i) an upstream graphite mining and processing operation, and (ii) a downstream BAM facility in which graphite concentrate will be converted into PSG before being exported to lithium-ion battery anode manufacturers (see Figure 2).

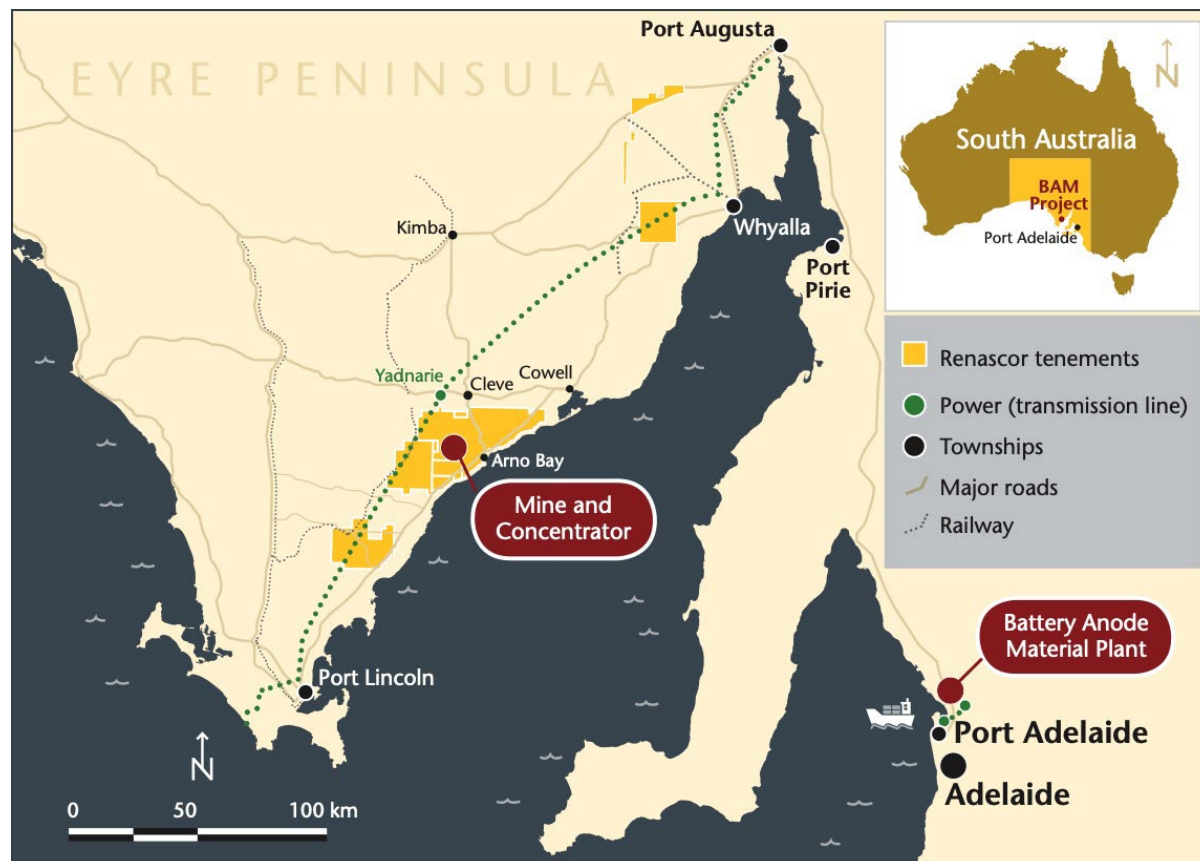


Figure 2. Renascor's BAM project, showing the locations of the planned mine and concentrator and the BAM facility

The BAM project is in the advanced planning stages, with Renascor intending to accelerate the development of the upstream mining operation to reduce the time to first production of graphite to coincide with projected near-term supply shortfalls.

Renascor continues to progress the competitive Early Contractor Involvement (**ECI**) process to mature engineering design of the upstream minerals processing plant and non-processing infrastructure. The ECI process is intended to culminate with an executable EPC contract for the upstream operation, comprising a fully priced offer, agreed commercial terms, finalised project works scope, technical specifications and performance parameters under a competitive and open-book process<sup>4</sup>.

### Downstream PSG facility and bulk sample

Concurrent with the development of the upstream mining operation, Renascor is continuing to advance the downstream PSG facility.

As announced in July 2024, Renascor was awarded a \$5 million grant under the Australian Government's International Partnerships in Critical Minerals Program to construct a PSG demonstration facility<sup>5</sup>. The demonstration facility will convert graphite concentrate from Renascor's Siviour Graphite Deposit into PSG through a continuous production process,



enabling Renascor to test, demonstrate and optimise its purification. Learnings obtained from the demonstration facility will be utilised in the detailed design stage and carried through into the construction and operation of the full-scale commercial facility<sup>6</sup>.

In preparation for construction of the PSG demonstration facility, Renascor recently completed the collection of 730 tonnes of graphite ore from its 100%-owned Siviour Graphite Deposit in South Australia.

The ore was collected over an eight-week period from locations that Renascor considers to be representative of graphite ore that Renascor will process during the first three years of the planned mining operation at Siviour.

The large-scale sample will be used to produce graphite concentrate at a commercial graphite facility via conventional froth flotation utilising the optimised flowsheet that Renascor developed after the completion of the Siviour BAM Study<sup>7</sup>. This optimised flowsheet has adjusted the flowsheet parameters of the mineral processing plant to increase the production of size fractions greater than 150 microns (+100 mesh) by approximately 60% from a projected 17% to 27% of total production<sup>8</sup>.

The sample ore from Siviour is currently being delivered to China for processing, with the initial deliveries having arrived at the commercial graphite facility. Concentrate production is scheduled to commence in Q4 2024.

This ASX announcement has been approved by Renascor's Board of Directors and authorised for release by Renascor's Managing Director David Christensen.

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## Appendix 1 About Renascor

Renascor is developing a vertically integrated Battery Anode Material Manufacturing Operation (“the Project”) in South Australia. The Project comprises:

- **the Siviour Graphite Deposit** - the world’s second largest Proven Reserve of Graphite and the largest Graphite Reserve outside of Africa<sup>9</sup>;
- **the Graphite Mine and Concentrator** - a conventional open-pit mine and crush, grind, float processing circuit delivering world-class operating costs in large part due to the favourable geology and geometry of Renascor’s Siviour Graphite Deposit; and
- **a Battery Anode Material Production Facility** - where Graphite concentrate will be converted to PSG using an eco-friendly processing method before being exported to lithium-ion battery anode manufacturers.

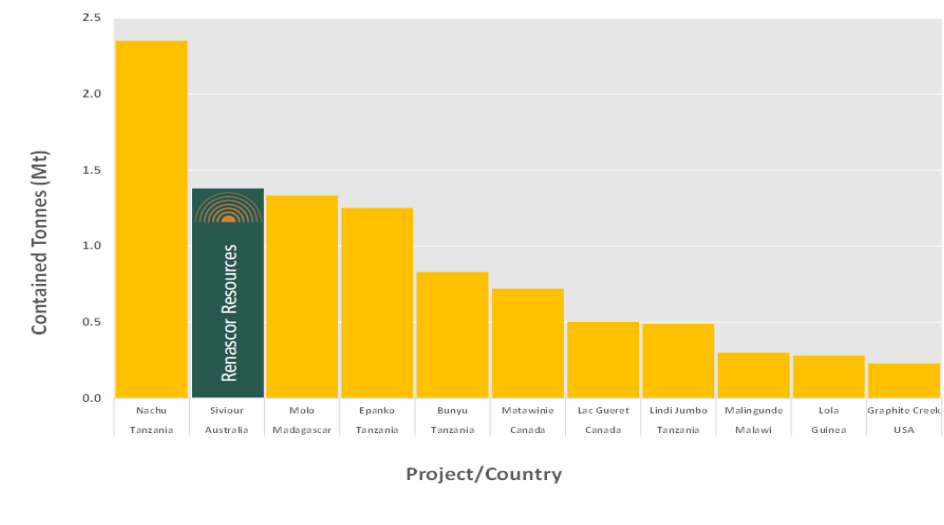


Figure 1. Renascor’s Battery Anode Material Project location



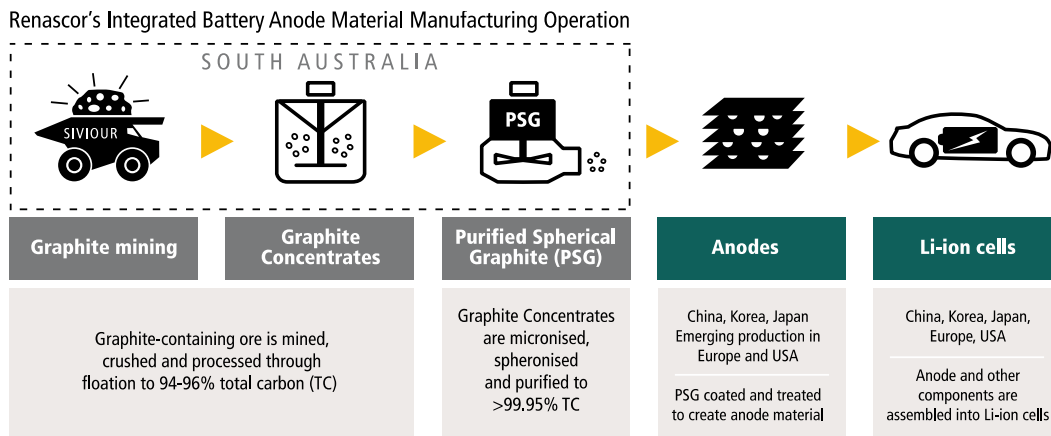
The 100% Renascor owned Siviour Graphite deposit is unique in both its near-surface, flat-lying orientation and its scale as one of the world’s largest graphite Reserves. The favourable geology and size of the deposit will allow Renascor to produce Graphite Concentrate at a low-cost over a 40-year mine life.





**Figure 2. Globally Reported Proven Ore Reserve estimates (September 2023)<sup>10</sup>**

Renascor intends to leverage this inherent advantage and develop a vertically integrated operation to manufacture high value PSG from a low-cost graphite concentrate feedstock and provide a secure cost-competitive supply of battery anode raw material into the rapidly growing lithium-ion battery market.



**Figure 3. Renascor's vertically integrated Mine and Concentrator and Downstream PSG production facility within the Electric Vehicle supply chain.**



## 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	<a href="https://announcements.asx.com.au/asxpdf/20161215/pdf/43drhlpvdwbhxp.pdf">https://announcements.asx.com.au/asxpdf/20161215/pdf/43drhlpvdwbhxp.pdf</a>
Epanko	EGR	Ecograf Ltd	Tanzania	Updated Epanko Ore Reserve	25 July 2024	<a href="https://announcements.asx.com.au/asxpdf/20240725/pdf/065xhvir74hlh2.pdf">https://announcements.asx.com.au/asxpdf/20240725/pdf/065xhvir74hlh2.pdf</a>
Graphite Creek	GPH	Graphite One Inc	USA	Preliminary Feasibility Study Technical Report Graphite One Project	14 October 2022	<a href="https://www.graphiteoneinc.com/wp-content/uploads/2022/10/JDS-Graphite-One-NI-43-101-PFS-20221013-compressed.pdf">https://www.graphiteoneinc.com/wp-content/uploads/2022/10/JDS-Graphite-One-NI-43-101-PFS-20221013-compressed.pdf</a>
Lac Guéret	LLG	Mason Graphite Inc	Canada	Feasibility Study Update of the Lac Guéret Graphite Project	12 December 2018	<a href="https://masongraphite.com/wp-content/uploads/2021/06/a53b7c_22115be39ccf4d85b9579f359680997c.pdf">https://masongraphite.com/wp-content/uploads/2021/06/a53b7c_22115be39ccf4d85b9579f359680997c.pdf</a>
Lindi Jumbo	WKT	Walkabout Resources Ltd	Tanzania	Updated Ore Reserve delivers 17.9% graphite grade	28 February 2019	<a href="https://announcements.asx.com.au/asxpdf/20190228/pdf/44321stl8dlk5f.pdf">https://announcements.asx.com.au/asxpdf/20190228/pdf/44321stl8dlk5f.pdf</a>
Lola	SRG	SRG Mining Inc.	Guinea	Lola Graphite Project NI 43-101 Technical Report – Updated Feasibility Study	12 April 2023	<a href="https://srgmining.com/wp-content/uploads/2023/04/16626-SRG_Lola_UFS_Rev_0_Fin_2023-0407.pdf">https://srgmining.com/wp-content/uploads/2023/04/16626-SRG_Lola_UFS_Rev_0_Fin_2023-0407.pdf</a>
Malingunde	NGX	NGX Ltd	Malawi	Replacement Prospectus	14 June 2023	<a href="https://announcements.asx.com.au/asxpdf/20230614/pdf/05qn89bfqrhwx8.pdf">https://announcements.asx.com.au/asxpdf/20230614/pdf/05qn89bfqrhwx8.pdf</a>
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	<a href="https://nmg.com/wp-content/uploads/2022/08/Feasibility-Study-NMGs-Integrated-Phase-2-Projects.pdf">https://nmg.com/wp-content/uploads/2022/08/Feasibility-Study-NMGs-Integrated-Phase-2-Projects.pdf</a>
Molo	NEXT	NextSource Materials Inc	Madagascar	Molo Phase 2 Preliminary Economic Assessment NI 43-101 Technical Report	12 December 2023	<a href="https://nextsourcematerials.com/P9239_Molo_Graphite_Phase_2_NI43-101_Technical_Report">P9239 Molo Graphite Phase 2 NI43-101 Technical Report (nextsourcematerials.com)</a>
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	<a href="https://announcements.asx.com.au/asxpdf/20220927/pdf/45fhzx2nsgmjb.pdf">https://announcements.asx.com.au/asxpdf/20220927/pdf/45fhzx2nsgmjb.pdf</a>
				Supplementary Information Regarding Nachu BFS Update Released 27.9.2022	30 September 2022	<a href="https://announcements.asx.com.au/asxpdf/20220930/pdf/45fq3q6h3hpw4.pdf">https://announcements.asx.com.au/asxpdf/20220930/pdf/45fq3q6h3hpw4.pdf</a>

<sup>1</sup> See Renascor ASX announcement dated 17 January 2024.

<sup>2</sup> See Renascor ASX announcement dated 11 July 2024.

<sup>3</sup> See Renascor ASX announcement dated 17 January 2024.

<sup>4</sup> See Renascor ASX announcement dated 24 June 2024.

<sup>5</sup> See Renascor ASX announcement dated 11 July 2024.

<sup>6</sup> See Renascor ASX announcement dated 11 July 2024.

<sup>7</sup> See Renascor ASX announcement dated 8 August 2023.

<sup>8</sup> See Renascor ASX announcement dated 17 January 2024.

<sup>9</sup> See Renascor ASX release dated 21 July 2020.

<sup>10</sup> 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 2 for further details on sourcing.

