





## **ASX** Release

30 October 2024

## **BAM Project Update**

# Renascor progressing through advanced planning stage with early contractor involvement and long-lead upstream work streams

- Renascor is advancing work to mature the engineering design and minimise the
  construction period of its proposed graphite mine and processing operation, the
  upstream portion of Renascor's planned vertically integrated Battery Anode Material
  (BAM) project in South Australia.
- Early Contractor Involvement (ECI), focusing on optimising and progressing engineering design of the upstream mineral processing plant and non-processing infrastructure, is underway.
- Recently completed ECI work programs, including vendor equipment testing and value engineering, have resulted in the finalisation of the process design criteria for the mineral processing plant. On-going work includes site geotechnical testing, incorporation of vendor design, equipment pricing and preparation of final designs and estimates.
- Additional on-going upstream work includes upgrades to the electrical infrastructure to allow site connection with SA Power Network's existing electricity grid network<sup>1</sup>, completion of detailed design for the mine dewatering system and road upgrades and finalising the construction accommodation plan.
- In parallel with these upstream works, Renascor continues to progress its planned Purified Spherical Graphite (PSG) manufacturing facility, the downstream portion of the BAM Project. Recent activities include completing an environmental impact statement for the proposed Bolivar PSG site and awarding the design contract for proposed Australian government co-funded PSG demonstration facility.











Renascor Resources Limited (ASX: RNU) (**Renascor**) is pleased to provide an update on work programs recently completed and underway in relation to its proposed vertically integrated Battery Anode Material (**BAM**) project in South Australia in South Australia.

Activities include early contractor involvement (ECI), focussed on optimising and progressing the engineering design of the upstream mineral processing plant, as well as environmental and design work scopes related to Renascor's proposed Purified Spherical Graphite (PSG) manufacturing facility, the downstream portion of the BAM project.

Commenting, Renascor's Managing Director, David Christensen stated:

"Renascor continues the development of our planned upstream graphite mine as we progress through the ECI process, upgrades to the electrical infrastructure to connect with SA Power Network's existing electricity grid connection and other upstream work activities.

In addition to further de-risking the BAM project, we expect these programs to provide opportunities to improve upon the process design and to minimise the planned construction time of the upstream operation to coincide with projected graphite supply shortfalls."

#### **Discussion**

Renascor is developing a vertically integrated operation in South Australia comprising: (i) an upstream graphite mining and processing operation, and (ii) a downstream BAM facility in which graphite concentrate will be converted into Purified Spherical Graphite (**PSG**) before being exported to lithium-ion battery anode manufacturers (see Figure 1).

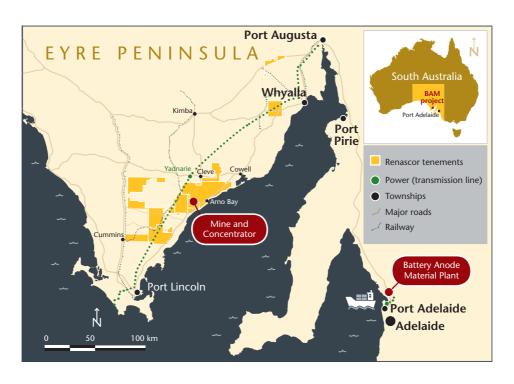


Figure 1. Renascor's BAM project, showing the locations of the planned mine and BAM facility

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

#### ECI process and additional upstream works

Renascor is progressing the competitive Early Contractor Involvement (**ECI**) process to mature engineering design of the upstream mineral processing plant and non-processing infrastructure.

Recently completed ECI work programs have resulted in the finalisation of the process design criteria for the mineral processing plant. These programs include vendor equipment testing and value engineering work, including modifications to the comminution and flotation circuits.

In addition, Renascor has revised the plant design to permit recovery of additional coarse flake graphite,<sup>2</sup> including modifying the flotation and re-grind equipment and adding a screening and bagging circuit, and has completed engineering geotechnical drilling to finalise geotechnical parameters for the mineral processing plants and non-process infrastructure.

On-going ECI work includes geotechnical testing for the mining pit design, incorporation of vendor design into the revised plant configuration, commencement of tendering activities for long lead equipment and preparation of the final designs and estimates.

The outcome of the ECI process will include 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 openbook process<sup>3</sup>.



Figure 2. Conceptual illustration of Renascor's planned graphite mine and process facility

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Additional upstream work includes upgrades to the electrical infrastructure to connect with SA Power Network's existing electricity grid connection<sup>4</sup>, completion of detailed design for mine dewatering system, road upgrades and finalising the construction accommodation plan.



Figure 3. Upgrades to connect SA Power's electricity grid network to Renascor's proposed Siviour graphite mine and processing plant

#### **Downstream PSG facility**

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

Renascor recently completed an environmental impact statement related to it proposed PSG site in Bolivar, South Australia. Renascor has an option-to-lease agreement with South Australian Government-owned utility SA Water over a 20 ha site adjacent to SA Water's Bolivar water treatment facility<sup>5</sup>.

The environmental impact statement was prepared to allow South Australia's planning department (**PlanSA**), the City of Salisbury council and relevant state agencies, local residents and other interested parties to assess Renascor's plans to construct the PSG facility at the proposed Bolivar site. Renascor is currently assessing comments to the environmental impact statement in anticipation of preparing a response document and seeking approval through PlanSA for the construction and operation of the PSG facility at the Bolivar site.

In parallel, Renascor is advancing its plans to construct a PSG demonstration 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>6</sup>. The demonstration facility will convert graphite into PSG through a continuous production process and is intended to demonstrate the commercial viability of

Renascor's eco-friendly, hydrofluoric acid-free PSG process<sup>7</sup>. 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>8</sup>.

Following the completion of downstream equipment trials, 9 Renascor has incorporated the equipment specifications from the trials into its design for the demonstration facility and has recently awarded the design contract.

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 (**BAM**) in South Australia. The BAM project comprises:

- **the Siviour Graphite Deposit** the world's second largest Proven Reserve of Graphite and the largest Graphite Reserve outside of Africa<sup>10</sup>;
- the Graphite Mine and Processing Operation 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 will be converted to Purified Spherical Graphite (PSG) using an eco-friendly processing method before being exported to lithium-ion battery anode manufacturers.

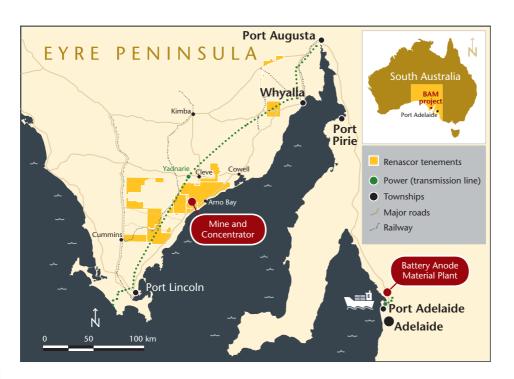








Figure 1. Renascor's Battery Anode Material Project location

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 at a low-cost over a 40-year mine life.

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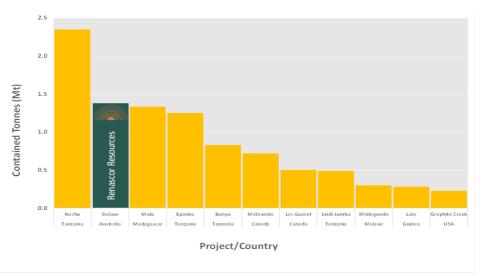


Figure 2. Globally Reported Proven Ore Reserve estimates (September 2023)11

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.

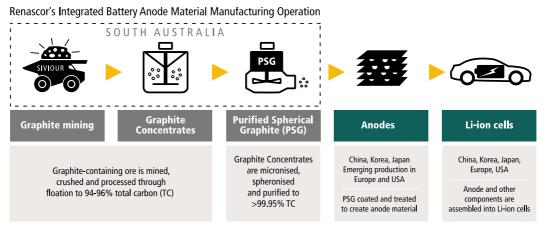


Figure 3. Renascor's vertically integrated Mine and Downstream PSG production facility within the Electric Vehicle supply chain.

#### **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	https://announcements.asx. com.au/asxpdf/20161215/pd f/43drlhpvdwbhxp.pdf
Epanko	EGR	Ecograf Ltd	Tanzania	Updated Epanko Ore Reserve	25 July 2024	https://announcements.asx. com.au/asxpdf/20240725/pd f/065xhvjr74hlh2.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/JD S-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/a5 3b7c 22115be39ccf4d85b95 79f359680997c.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/pd f/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/J6 626- SRG Lola UFS Rev 0 Fin 2 023-0407.pdf
Malingunde	NGX	NGX Ltd	Malawi	Replacement Prospectus	14 June 2023	https://announcements.asx. com.au/asxpdf/20230614/pd f/05qn89bfgrhwx8.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/Fe asibility-Study-NMGs- Integrated-Phase-2- Projects.pdf
Molo	NEXT	NextSource Materials Inc	Madagascar	Molo Phase 2 Preliminary Economic Assessment NI 43-101 Technical Report	12 December 2023	P9239 Molo Graphite Phase 2 NI43-101 Technical Report (nextsourcematerials.com)
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/pd f/45fhzx2nsgrmjb.pdf
				Supplementary Information Regarding Nachu BFS Update Released 27.9.2022	30 September 2022	https://announcements.asx. com.au/asxpdf/20220930/pd f/45fqs3q6h3hpw4.pdf

<sup>&</sup>lt;sup>1</sup> See Renascor ASX announcement dated 9 May 2023.

<sup>&</sup>lt;sup>2</sup> See Renascor ASX announcement dated 17 January 2024, in which Renascor announced modifications to the proposed flowsheet 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>&</sup>lt;sup>3</sup> See Renascor ASX announcement dated 24 June 2024.

<sup>&</sup>lt;sup>4</sup> See Renascor ASX announcement dated 9 May 2023.

<sup>&</sup>lt;sup>5</sup> See Renascor ASX announcement dated 20 September 2022.

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

<sup>&</sup>lt;sup>7</sup> See Renascor ASX announcement dated 10 August 2023.

 $<sup>^{\</sup>rm 8}$  See Renascor ASX announcement dated 11 July 2024.

<sup>&</sup>lt;sup>9</sup> See Renascor ASX announcement dated 21 August 2024.

 $<sup>^{10}</sup>$  See Renascor ASX release dated 21 July 2020.

<sup>&</sup>lt;sup>11</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.