

## ASX Release

4 March 2021

### Siviour Battery Anode Material Project - Update

#### On track to become the world's first integrated, in-country mine and Purified Spherical Graphite operation outside of China

Renascor Resources Limited (ASX: RNU) ("**Renascor**") is pleased to provide the following update for its 100%-owned Siviour Battery Anode Material Project ("**the Project**") in South Australia.

##### Project Development:

- **Recent flotation optimisation testwork shows improved graphite purities and recovery**, validating the flowsheet in preparation of detailed engineering design and presenting opportunities for higher plant productivity and lower unit operating costs for the Graphite Concentrate operation.
- Advanced mineral processing trials of **Renascor's eco-friendly, HF-free downstream purification process**, which was recently validated in trials by German industrial processing specialists Dorfner Anzaplan<sup>1</sup>, continue, with results to be used for detailed engineering design for the construction of Renascor's downstream Purified Spherical Graphite ("**PSG**") manufacturing facility.
- **Final Battery Anode Material Manufacturing Facility Site Selection Assessment has commenced** to select and acquire the rights to the site for the PSG downstream processing facility.
- Regulatory workstreams and approvals are being prepared for the submission of Renascor's **Program for Environmental Protection and Rehabilitation ("PEPR")**.
- **Stakeholder engagement is progressing well with Letters of Support secured from all levels of government** and numerous community and regional groups.

##### Financing Strategy:

- **Letter of in-principle Support received from the Clean Energy Finance Corporation ("CEFC")**, an Australian Government backed clean energy technology financier.
- **CEFC in-principle support adds to the in-principle financing support** received from Export Finance Australia ("**EFA**"), and Atradius, the respective export credit agencies of the Australian and Dutch Governments.

##### Offtake and Marketing:

- **Offtake process for remaining one-third of Stage 1 PSG progressing well**, with Renascor receiving strong interest from leading battery anode makers and global commodity traders.
- **Customer testing of Siviour PSG is ongoing with a number of leading battery anode material customers** for the remaining one-third of Stage 1 PSG.
- **Negotiation of Binding Offtake Agreements for existing Offtakers is progressing well**, with preparation of bulk PSG samples underway.

On the recent Project milestones, Renascor Managing Director David Christensen stated:

*“Recent developments at the Siviour Battery Anode Material Project place Renascor on track to construct, in Australia, the first integrated, in-country mine and Purified Spherical Graphite operation outside of China.*

*Renascor’s strategy to source Graphite Concentrate from our 100% owned, South Australia-located, Siviour Graphite deposit and then convert that feedstock to Purified Spherical Graphite at our Battery Anode Manufacturing Facility, also located in South Australia, gives rise to significant cost, ESG and security of supply advantages.*

*Flotation optimisation trials ongoing at ALS Metallurgy in Perth, WA, have achieved increased recoveries of graphite and improved purities into the concentrate graphite feedstock, and thus reveal opportunities to further lower operating costs and increase project value.*

*Furthermore, results from recent purification testwork have been extremely encouraging. German industrial processing specialists, Dorfner Anzaplan, have verified that our eco-friendly, HF-free downstream caustic roasting and leaching purification process has exceeded typical PSG purity specifications with a result of 99.98% carbon.*

*In regard to funding the construction of the Project, we are delighted to be in discussions with the CEFC in relation to the potential provision of financing. CEFC’s financial support in the battery metals space in Australia is well known, and its support for the Siviour Project will provide added impetus to Renascor’s successful engagement with international anode manufacturers and lithium-ion battery companies, with respect to offtake agreements for Purified Spherical Graphite.*

*On offtake, inbound enquiries from globally recognised battery anode manufacturers and trading companies for Siviour PSG have been strong, and we look forward to providing further updates as we progress these discussions.*

*As we advance the development of the world-class Siviour Battery Anode Material Project, we are grateful to have the support of the local community, all levels of government, financing agencies, including the Clean Energy Finance Corporation and Export Finance Australia, and strong potential offtake partners.”*

## **Project Development**

### **Flotation Optimisation Testwork**

Flotation optimisation trials ongoing at ALS Metallurgy in Perth, WA, have achieved increased purities and recoveries of graphite into concentrate through optimisation of processing parameters within the flowsheet established for the Siviour Graphite Concentrate Definitive Feasibility Study<sup>2</sup>.

The recent trials, which were conducted in collaboration with Renascor’s external engineering advisors, Wave International, further validate the Graphite Concentrate flotation plant design and present opportunities for higher plant productivity and lower unit operating costs for the Graphite Concentrate operation.

The outcomes from the on-going optimisation testwork will enhance the Feasibility Studies completed to date, as Renascor advances the Project toward front-end engineering and design (“FEED”).

### **Purification Testwork**

Renascor’s eco-friendly downstream caustic roasting and leaching purification process has been verified by German industrial processing specialists, Dorner Anzaplan, achieving a purity of 99.98% carbon (anode industry standard of 99.95% carbon).

The results follow over five years of mineral processing tests by Renascor that have led Renascor to



adapt a proven technique that avoids the use of Hydrofluoric acid (“**HF**”) to create an environmentally friendly and cost-effective method for purification of Renascor’s Siviour natural flake graphite for use in lithium-ion battery anodes.

Renascor intends to use its HF-free purification technology to create a competitive advantage in the production of high-quality PSG with leading Environmental, Social and Governance (“**ESG**”) credentials in the first integrated in-country mine and battery anode material operation outside of China.

The results of the current purification trials will be used for detailed engineering design of the Battery Anode Material manufacturing facility.

### **Regulatory and Stakeholder Relations**

Renascor has commenced a final site assessment to select and acquire the rights for the site of the downstream PSG processing facility. Renascor has identified several proposed sites in industrial zones located in South Australia, with Port Adelaide nominally selected.

The final study will investigate a range of additional opportunities along the existing raw materials supply chain to ensure that the low-cost advantage of the Siviour Graphite deposit is maintained.

Renascor is undertaking work programs and preparing documentation for the Program for Environmental Protection and Rehabilitation (“**PEPR**”) approvals. Approval of a PEPR is the second step in the South Australia Government’s two-step approval assessment and approval process and follows the granting of a Mineral Lease for Siviour in April 2019<sup>3</sup>.

Stakeholder engagement is processing well with Letters of Support secured from federal, state and local government, as well as numerous community and regional stakeholders.

### **Financing Strategy and Support**

#### **Clean Energy Finance Corporation (“CEFC”)**

Renascor has received confirmation from CEFC that it will progress to more detailed discussions in relation to the potential provision of financing for the Project. This represents the first milestone in Renascor’s engagement with the CEFC. The next step involves further due diligence by the CEFC.

The CEFC is an Australian Government organisation with a range of functions including to invest, directly or indirectly, in opportunities that facilitate the development of clean energy technologies (including renewable energy, energy efficiency and low emissions technologies) in Australia.

The support from CEFC does not constitute a commitment to provide finance and there is no certainty that an agreement will be reached between the parties. Renascor will assist CEFC through its required due diligence investigations.

### **Offtake and Marketing**

The offtake process for the remaining one-third of Stage 1 PSG is progressing well. Renascor has received a significant volume of inbound enquiries, and customer product testing of Siviour PSG is ongoing with a number of leading battery anode material customers.

The high levels of inbound enquiries from globally recognised battery anode manufacturers and commodity traders may see the Stage 1 PSG oversubscribed.

Renascor has already successfully executed two 10-year Offtake MOUs for up to 10ktpa of PSG each with leading anode manufacturing companies:

- Shanxi Minguang New Material Technology Co. Ltd., (“**Minguang New Material**”) a subsidiary of Fujian Metallurgical Holding Co. Ltd. (one of China’s largest battery material groups); and



- Jiangxi Zhengtuo New Energy Technology Co. Ltd. ("**Zeto**") an anode supplier to battery giant BYD Co. Ltd.

Both Minguang New Material and Zeto have rapidly advanced the Siviour PSG product through the initial product qualification process and will now commence more advanced testing of the product and negotiating binding offtake agreements.

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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**Bibliography**

1. Renascor ASX announcement dated 8 April 2019, "Mineral Lease Granted for Siviour"
2. Renascor ASX announcement dated 10 April 2019, "In Principle Project Finance Support from Dutch ECA"
3. Renascor ASX announcement dated 30 April 2019, "High-Grade Measured Resource in Upgraded JORC Resource"
4. Renascor ASX announcement dated 11 November 2019, "Siviour Definitive Feasibility Study"
5. Renascor ASX announcement dated 3 March 2020, "In Principle Finance Support from Australian ECA"
6. Renascor ASX announcement dated 24 June 2020, "Siviour Graphite Project Financing Update"
7. Renascor ASX announcement dated 1 July 2020, "Renascor Announces Battery Anode Manufacturing Operation"
8. Renascor ASX announcement dated 21 July 2020, "Updated Mineral Ore Reserve Estimate"
9. Renascor ASX announcement dated 29 September 2020, "MOU with one of China's largest battery material suppliers"
10. Renascor ASX announcement dated 12 January 2021, "First Stage Product Qualification with Offtake Partner"
11. Renascor ASX announcement dated 27 January 2021, "Further Offtake MOU with Leading Battery Anode Manufacturer"
12. Renascor ASX announcement dated 22 February 2021, "Renascor's Eco-Friendly Graphite Purification Technology Achieves Outstanding Results"

**Disclaimer**

Renascor confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements 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.

This report may contain forward-looking statements. Any forward-looking statements reflect management's current beliefs based on information currently available to management and are based on what management believes to be reasonable assumptions. It should be noted that a number of factors could cause actual results, or expectations to differ materially from the results expressed or implied in the forward-looking statements.



## Appendix

### The World-Class Siviour Graphite Project

Renascor Resources Limited (ASX: RNU) (“Renascor”) is a ‘Critical Mineral’ project developer and minerals explorer with a portfolio of 100%-owned, high-upside assets in key minerals districts in South Australia.

Renascor presents an opportunity for Australia to leverage a world-class graphite Reserve and plug-in to the global electric vehicle (“EV”) revolution via downstream manufacturing of high-value Purified Spherical Graphite for use in EV batteries.

Renascor is developing a vertically integrated Battery Anode Material Manufacturing Operation 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>4</sup>
- **the Siviour 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 Purified Spherical Graphite (“PSG”) 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.

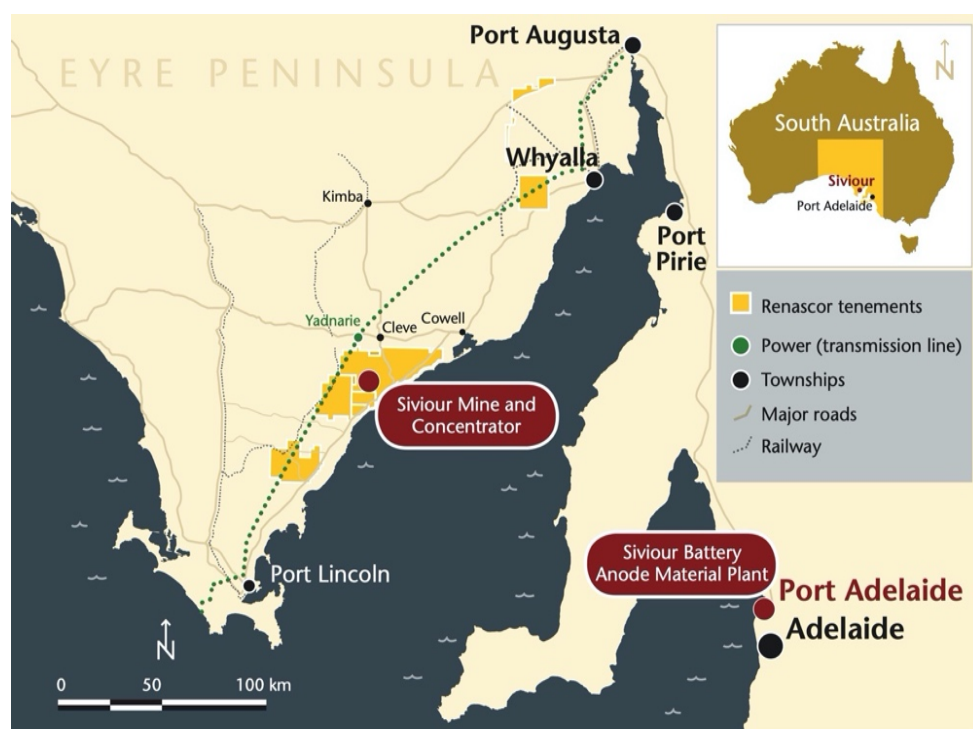
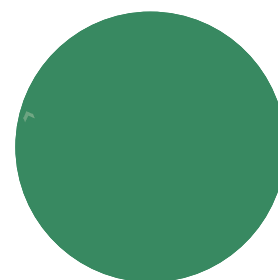


Figure 1: Siviour Battery Anode Material Project location.



Supporting  
ESG objectives

HF-free



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.

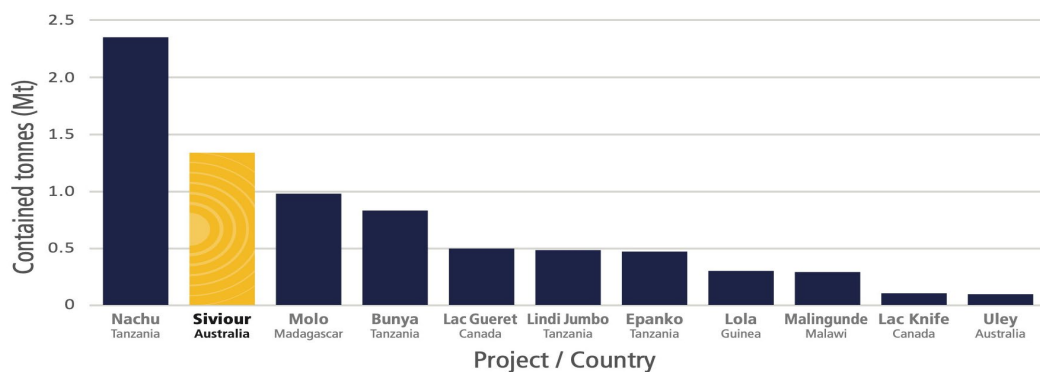


Figure 2. Global graphite Proven Reserves

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.

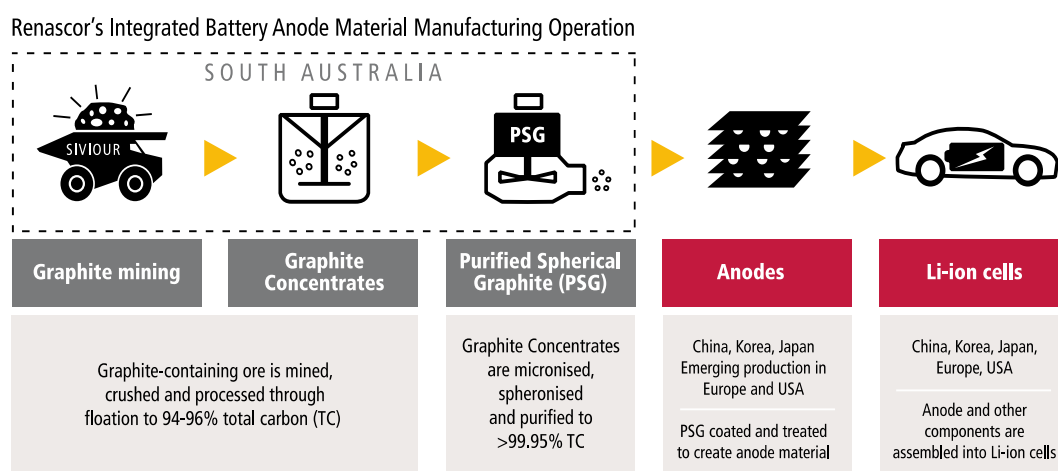


Figure 3: Renascor's vertically integrated Mine and Concentrator and Downstream PSG production facility within the Electric Vehicle supply chain.

<sup>1</sup> See Renascor ASX announcement dated 22 February 2019.

<sup>2</sup> See Renascor ASX announcement dated 1 July 2020.

<sup>3</sup> See Renascor ASX announcement dated 8 April 2019.

<sup>4</sup> See Renascor ASX announcement dated 21 July 2020.