

29 October 2021

## Quarterly Activities Report for the period ended 30 September 2021

### Significant Events

- Renascor entered into a non-binding Strategic Cooperation and Offtake Memorandum of Understanding (“**MOU**”) with South Korean conglomerate POSCO.
  - The MOU provides for the purchase of 20,000 to 30,000tpa of Purified Spherical Graphite (“**PSG**”) from Renascor’s planned Battery Anode Material operation in South Australia and also provides for a potential equity investment by POSCO in Renascor<sup>1</sup>.
  - POSCO, one of South Korea’s largest conglomerates, is the largest anode manufacturer outside of China, with production capacity of 44,000tpa and a further 69,000tpa in construction.
  - With the MOU with POSCO, Renascor has now executed and announced offtake MOUs covering up to 60,000tpa of PSG. Renascor’s currently proposed Stage 1 PSG production capacity is approximately 30,000tpa. In addition, Renascor continues to receive a significant volume of inbound enquiry from globally-recognised international groups that are leaders in the battery supply chain.
- Renascor’s Battery Anode Material Project was awarded Major Project Status by the Australian Government. The grant of Major Project Status by the Australian Government is a recognition of the strategic significance of the Siviour Project in contributing to Australia’s *Critical Mineral Strategy 2019* and the *Resource Technology and Critical Mineral Processing National Manufacturing Priority Roadmap*.
- Renascor<sup>2</sup> lodged the Program for Environment Protection and Rehabilitation (**PEPR**) for the proposed Siviour Graphite Mine, the upstream component of Renascor’s Battery Anode Material Project. The PEPR seeks approval for a 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<sup>3</sup>.
- Renascor successfully completed large scale pilot flotation trials at an independent graphite facility as part of advanced testing for the proposed Siviour Graphite Mine. Pilot trials adopting the flowsheet parameters used in recent locked-cycle tests<sup>4</sup> achieved an overall average graphite purity of 95.7% total carbon (“**TC**”) at 94.6% graphite recovery. This compares favourably to the results from the locked cycle tests, which achieved purities of 94.6% TC with graphite recovery of 94.5%<sup>5</sup>.
- Renascor’s cash position as of 30 September 2021 was approximately \$16.1m.

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



## Sivour Battery Anode Material Project

### Strategic Cooperation and Offtake MOU with POSCO

During the recently completed quarter, Renascor entered into a non-binding Strategic Cooperation and Offtake Memorandum of Understanding ("**MOU**") with South Korean conglomerate POSCO.

The MOU with POSCO covers the purchase of 20,000 to 30,000tpa of PSG from Renascor's planned Battery Anode Material operation in South Australia. The final annual amount to be delivered under the offtake and the term of the agreement will be finalised as POSCO and Renascor progress to a formal binding offtake agreement.

Subject to the satisfactory completion of technical and economic studies, the MOU also provides that POSCO may propose one or more forms of strategic cooperation between Renascor and POSCO (or one of its affiliate companies) which may include an equity investment in Renascor. Any such proposal for strategic cooperation will be at the complete discretion of POSCO, and acceptance of any such proposal is at the discretion of both parties. If any such strategic cooperation includes a proposal for equity investment that is acceptable to Renascor, such equity investment will be based on the value of Renascor immediately prior to the execution of the MOU with POSCO.

Including the MOU with POSCO, Renascor has now executed and announced offtake MOUs covering up to 60,000tpa of PSG, compared to Renascor's current Stage 1 PSG production capacity of approximately 30,000tpa. In addition, Renascor continues to receive a significant volume of inbound enquiry from globally-recognised international groups that are leaders in the battery supply chain.

To fulfil the increased offtake volume requirements, Renascor has commenced feasibility work to facilitate an increase in Stage 1 PSG production capacity and a Stage 2 expansion.

The MOU with POSCO provides the framework for further negotiations in relation to price, term, product quality and other offtake parameters. Under the terms of the MOU, Renascor and POSCO have agreed to work together to undertake additional product validation tests with a view to concluding a formal and definitive agreement for the sale to POSCO of PSG and for potential further strategic cooperation between Renascor and POSCO.

#### About POSCO

Listed on the New York Stock Exchange (NYSE: PKX) and Korean Stock Exchange (KRX: 005490) with a market capitalisation of over US\$25 billion<sup>6</sup>, POSCO is the world's leading steel-making company and is consistently recognised among the World's Most Sustainable Companies (Dow Jones Sustainability Indices) and the Global 100 Most Sustainable Corporations in the World (Davos World Economic Forum)<sup>7</sup>. POSCO operates in 52 countries with more than 29,000 employees<sup>8</sup>.

POSCO is the largest single private customer of Australian exports<sup>9</sup>.

Through POSCO's materials manufacturing and supply division, POSCO Chemical Co. Ltd, POSCO is among the world's largest suppliers of lithium-ion battery anodes and the largest supplier outside of China, with existing production capacity of 44,000tpa, and a further 69,000tpa planned or under construction<sup>10</sup>.

Recently, POSCO has been actively pursuing battery minerals exposure in Australia through transactions with Pilbara Minerals (lithium)<sup>11</sup> and First Quantum (nickel)<sup>12</sup>. POSCO's stated<sup>13</sup> goal is to become the world's top player in the global electric vehicle battery materials market by 2030 by establishing a value chain from raw material procurement to battery materials production.



## Major Project Status

During the recently completed quarter, Renascor's Battery Anode Material Project was awarded Major Project Status by the Australian Government.

The grant of Major Project Status by the Australian Government is a recognition of the strategic significance of the Siviour Project in contributing to Australia's *Critical Mineral Strategy 2019* and the *Resource Technology and Critical Mineral Processing National Manufacturing Priority Roadmap*.

The Battery Anode Material Project combines the Siviour Graphite Deposit in South Australia (the largest reported graphite Reserve outside of Africa<sup>14</sup>), and a state-of-the-art processing facility in South Australia to manufacture Purified Spherical Graphite through Renascor's eco-friendly, HF-free<sup>15</sup> purification process.

Through the Battery Anode Material Project, Renascor's aim is to become a leading supplier of 100% Australian-made and low-cost Purified Spherical Graphite for lithium-ion battery anode manufacturers worldwide.

The awarding of Major Project Status provides Renascor with extra support from the Major Project Facilitation Office Agency, including a single entry point for Australian Government approvals, project support and coordination with State approvals.

The granting of Major Project Status was announced in a statement by Minister for Resources and Water, the Hon Keith Pitt MP. A copy of the media release is available at: <https://www.minister.industry.gov.au/ministers/pitt/media-releases/south-australian-battery-mineral-project-receives-major-project-status>.

## Program for Environment Protection and Rehabilitation

During the recently completed quarter, Renascor<sup>16</sup> lodged the Program for Environment Protection and Rehabilitation (**PEPR**) for the proposed Siviour Graphite Mine, the upstream component of Renascor's Battery Anode Material Project.

### Background

South Australian legislation consists of a two-part assessment and approval process to conduct mining operations.

The first step requires the grant of a Mineral Lease to demonstrate that the Government of South Australia is satisfied that the proposed level of impact is acceptable given the anticipated economic and social benefits. The Mineral Lease application process involves assessing and reviewing the existing environment and the nature and method of proposed mining operations, the environmental impacts and measures to manage such impacts. Consultation and engagement across the relevant stakeholder base is required to ensure that the views of affected parties are understood and that stakeholders are provided with an opportunity to be involved and participate in the process.

The South Australian Minister for Energy and Mining granted a Mineral Lease for the proposed Siviour Graphite Mine in April 2019<sup>17</sup>. The grant of the Mineral Lease followed comprehensive environmental impact studies and stakeholder engagement commencing in 2016.

The Mineral Lease for Siviour also details the conditions that must be addressed in the PEPR, the second step in the assessment and approval process.

### Lodgement of PEPR

During the recently completed quarter, Renascor, through its wholly-owned subsidiary Ausmin Development Pty Ltd, lodged a PEPR for the proposed Siviour Graphite mine, seeking approval to process up to 1.65 million tonnes per annum, which would permit Renascor to produce up to 150,000 tonnes of Graphite Concentrates per year<sup>18</sup>.



Renascor's PEPR is supported by extensive stakeholder engagement and comprehensive studies undertaken to incorporate designs and management plans to comply with conditions outlined in the Siviour Mineral Lease. The PEPR preparation process was managed internally by Renascor, with input from external consultants, including independent expert audits to confirm that Renascor's proposed management and operational strategies are effective to comply with the Mineral Lease conditions.

The South Australia Department for Energy and Mining has indicated to Renascor that it will require a minimum review period of up to four months, subject to no major revisions being required.

### Flotation Trials

During the recently completed quarter, Renascor successfully completed large scale pilot flotation trials at an independent graphite facility as part of advanced testing for proposed Siviour Graphite Mine.

A total of 77.8 tonnes of Siviour ore was processed, producing bulk samples of Siviour Graphite Concentrates, as well as validating and optimising Renascor's flotation circuit for the production of high purity Graphite Concentrates, which Renascor plans to use as feedstock in a downstream manufacturing facility to produce PSG.

The bulk pilot production trials were undertaken to produce large scale samples of Siviour Graphite Concentrates, as well as both to validate recent locked cycle flotation parameters<sup>19</sup> and to test at scale adjustments to the flotation circuit to optimise the production of high purity Graphite Concentrates in the upstream component of Renascor's Battery Anode Material Project.

The trials were undertaken at an independent commercial graphite facility in China to produce Graphite Concentrates via conventional froth flotation. In 2018, Renascor undertook an 18 tonne pilot production trial at the same graphite facility<sup>20</sup>. Sample for the recent trials consisted of 77.8 tonnes of ore collected from reverse circulation drilling at Renascor's Siviour Graphite Deposit and transported to the graphite facility earlier this year<sup>21</sup>.

The trials included nineteen production runs adopting the flowsheet parameters used in recent locked-cycle tests<sup>22</sup>, each of which was processed through a large-scale continuous pilot flotation circuit with a through-put capacity of up to 800kg per hour.

The overall average graphite purity from these production runs was 95.7% TC at an average graphite recovery of 94.6%. This compares favourably to the results from the locked cycle tests, which achieved purities of 94.6% TC with graphite recovery of 94.5%<sup>23</sup>, as well as the Siviour Graphite Concentrate Definitive Feasibility Study ("DFS"), which adopted average purity of 94% to 96% total graphitic carbon and graphite recovery of 91%<sup>24</sup>.

A separate 3.5 tonne trial, undertaken with an adjustment made to increase re-grind times in the flotation circuit, achieved purity of 97.5% TC with graphite recovery of 93.2%.

The higher purity achieved from this separate production run suggests there is potential to improve the purity of Siviour Graphite Concentrate feedstock to be used in the downstream PSG plant above the levels suggested from Renascor's previous test work.

The results from the pilot trials offer strong validation of the flowsheet parameters adopted in the recent locked cycle flotation tests<sup>25</sup> and offer potential for Renascor's Graphite Concentrate flowsheet to meet or exceed the results from previous mineral processing work, including the parameters adopted in the Siviour DFS<sup>26</sup>.

The results from the production run with increased re-grind times suggest there is potential for increased economic efficiencies in the downstream production of PSG, as less reagents and energy would be required in the downstream purification stage to achieve lithium-ion battery grade purities of +99.95% TC.

Samples of Graphite Concentrates produced from the pilot have been dispatched to existing PSG offtake partners<sup>27</sup> in order to advance to binding offtake agreements, with additional samples to be sent to



existing and potential PSG offtake partners following completion of on-going downstream equipment trials.

Renascor also plans to incorporate the results from the pilot operation into flotation optimisation and more detailed engineering on the Graphite Concentrate operation.

### Offtake and Product qualification

During the recently completed quarter, Renascor continued to advance discussions with existing and potential offtake partners.

In addition to the MOU announced during the recently completed quarter with POSCO, Renascor has already executed three other offtake MOUs, each for up to 10,000 tpa of PSG, with leading anode manufacturing companies and a leading Japan-based global trading company:

- 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 amongst others.
- Hanwa Co. Ltd. (“**Hanwa**”) amongst the largest traders of battery chemicals in the Asian region, with a market capitalization of ¥ 140 billion (A\$1.7 billion)<sup>28</sup> and reported net sales of more than ¥ 1,700 billion (A\$21 billion) in 2020<sup>29</sup>.

In total, Renascor has now executed and announced offtake MOUs covering up to 60,000tpa of PSG. Renascor’s currently proposed Stage 1 PSG production capacity is approximately 30,000tpa.

Both Minguang New Material and Zeto have advanced the Siviour PSG product through the initial product qualification<sup>30</sup> process, and samples have been sent to both POSCO and Hanwa for further testing to support progression to binding offtake.

Renascor continues to receive a significant volume of inbound enquiries from leading anode and battery companies, and as a result, Renascor is undertaking detailed planning to assess the feasibility of expanding its production capacity, including an increase to its Stage 1 production plans and / or an additional Stage 2 PSG production.

### Corporate Events

During the recently completed quarter, Renascor appointed Jon Colquhoun to the position of Chief Financial Officer and Joint Company Secretary of Renascor with effect from 1 July 2021. Mr Pierre van Der Merwe, the previous Chief Financial Officer and Company Secretary, has continued with Renascor as Joint Company Secretary.

Mr Colquhoun is an experienced accountant and company secretary with a broad financial and commercial background across a range of industries providing company secretarial and CFO services to a number of ASX listed and unlisted companies. Mr Colquhoun holds a Bachelor of Commerce from the University of Adelaide, is a Registered Company Auditor and a member of Chartered Accountants Australia and New Zealand.

### Notes in relation to Appendix 5B

The Company had exploration and evaluation costs of \$17,000 and development asset costs of \$1,021,000 during the quarter relating principally to the Siviour project as detailed above.

Payments to related parties and their associates during the recently completed quarter and outlined in Section 6 of Appendix 5B to this quarterly activities report were \$153,000. These payments are related to salaries, superannuation and service and consultancy fees paid to directors and director-related entities during the quarter.





## **Competent Person's Statements**

### **Exploration Results**

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.

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.

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

### **For further information, please contact:**

**David Christensen**

Managing Director

+61 8 8363 6989

[info@renascor.com.au](mailto:info@renascor.com.au)



## Appendix 1

### Summary of tenements for quarter ended 30 September 2021

#### (ASX Listing Rule 5.3.3)

Project Name	Tenement	Area km <sup>2</sup>	Registered holder/Applicant	District	Company Interest
Willouran	EL 6170	259	Renascor Resources Limited (Renascor)	South Australia	100%
Flat Hill	EL 6549	283	Renascor	South Australia	100%
Witchelina	EL 6403	316	Renascor	South Australia	100%
Iron Baron	EL 5822 (ELA 2020/232)	253	Renascor	South Australia	100%
Old Wartaka	EL 6191	14	Renascor	South Australia	100%
Carnding	EL 5856 (ELA 2020/231)	35	Renascor	South Australia	100%
Malbooma Railway	EL 6585	32	Renascor	South Australia	100%
Outalpa	EL 6450	159	Astra Resources Pty Ltd (Astra)*	South Australia	100%*
Cutana	EL 6451	157	Astra*	South Australia	100%*
Malbrom	EL 6197	81	Ausmin Development Pty Ltd (Ausmin)*	South Australia	100%*
Lipson Cove	EL 6423	329	Ausmin*	South Australia	100%*
Verran	EL 6469	690	Ausmin*	South Australia	100%*
Malbrom West	EL 6668	270	Ausmin*	South Australia	100%*
Dutton Bay	EL 6032	31	Ausmin*	South Australia	100%*
Siviour	ML 6495	16	Ausmin*	South Australia	100%*

\* Astra and Ausmin are 100%-owned subsidiaries of Renascor.

<sup>1</sup> Source: Benchmark Mineral Intelligence, Anode Market Assessment, April 2021.

<sup>2</sup> The PEPR was lodged by Renascor's wholly-owned subsidiary Ausmin Development Pty Ltd, the registered holder of the Mineral Lease for Siviour.

<sup>3</sup> The 1.65 million tonne per annum approval sought pursuant to the PEPR relates to the volume of ore processed from the proposed Siviour mine through the adjacent processing plant. Pursuant to Renascor's proposed mining plan, this would result in up to 150,000 tonnes per annum of Graphite Concentrate production at full capacity. See Renascor ASX release dated 11 November 2019, page 40. Renascor has previously announced plans for a staged start-up at Siviour, starting with an ore processing capacity of 825,000 tonnes per annum and Graphite Concentrate production of up to 78,000 tonnes per annum in the first of a two-stage expansion to 1.65 million tonnes per annum of processing capacity. See Renascor ASX release dated 11 November 2019. During this first stage, 60,000 tonnes per annum of Graphite Concentrate would be used as raw material feedstock for Renascor's planned downstream battery anode material manufacturing operation to produce approximately 28,000 tonnes of Purified Spherical Graphite per annum. See Renascor ASX release date 1 July 2021. As a result of increasing interest in Siviour Purified Spherical Graphite from existing and potential offtake partners, Renascor is currently evaluating an expansion to the initial, Stage One production of Purified Spherical Graphite and an additional Stage Two production capacity of Purified Spherical Graphite. See Renascor ASX release dated 1 April 2021.

<sup>4</sup> See Renascor ASX release dated 12 July 2021.

<sup>5</sup> See Renascor ASX release dated 12 July 2021.

<sup>6</sup> Source: Bloomberg, June 2021.

<sup>7</sup> Source: POSCO Fact Sheet, <https://newsroom.posco.com/en/about-posco>.

<sup>8</sup> Source: POSCO Fact Sheet, <https://newsroom.posco.com/en/about-posco>.

<sup>9</sup> Source: <https://www.humecoal.com.au/about/posco-australia>.

<sup>10</sup> Source: Benchmark Mineral Intelligence, Anode Market Assessment, April 2021.

<sup>11</sup> See Pilbara Minerals ASX release dated 11 May 2021.

<sup>12</sup> See First Quantum media release dated 19 May 2021.

<sup>13</sup> Source: <https://www.kedglobal.com/newsView/ked202012150002>.



---

<sup>14</sup> See Renascor ASX release dated 21 July 2020.

<sup>15</sup> Hydrofluoric acid-free. Renascor has developed a purification process that avoids the use of hydrofluoric acid, which is generally used in Chinese PSG operations. Renascor's HF-free method uses less environmentally harmful reagents to purify Siviour graphite for use in lithium-ion battery anodes. See Renascor ASX releases dated 1 July 2021, 28 May 2021, 14 July 2020, 30 September 2019, 12 August 2019 and 21 February 2019.

<sup>16</sup> The PEPR was lodged by Renascor's wholly-owned subsidiary Ausmin Development Pty Ltd, the registered holder of the Mineral Lease for Siviour.

<sup>17</sup> See Renascor ASX release dated 8 April 2019.

<sup>18</sup> See note 2.

<sup>19</sup> See Renascor ASX release dated 12 July 2021.

<sup>20</sup> See Renascor ASX announcement dated 31 October 2018. Graphite concentrates produced from the 2018 pilot program were used both for test work supporting the processing of Graphite Concentrates into PSG and for subsequent testing by existing and potential PSG offtake partners.

<sup>21</sup> Renascor originally planned to process approximately 63 tonnes of ore in the pilot trials. See Renascor ASX release dated 28 July 2021. The pilot was later expanded to permit the processing of additional ore samples, totalling 77.8 tonnes.

<sup>22</sup> See Renascor ASX release dated 12 July 2021.

<sup>23</sup> See Renascor ASX release dated 12 July 2021.

<sup>24</sup> For purposes of the Siviour DFS, Renascor reported Graphite Concentrate in total graphitic carbon. See Renascor ASX announcement dated 11 November 2019, p 17. Renascor has subsequently adopted the convention of reporting Graphite Concentrate purities in total carbon, which is more widely used by perspective purchasers of Siviour Graphite Concentrates and Purified Spherical Graphite.

<sup>25</sup> See Renascor ASX release dated 12 July 2021.

<sup>26</sup> Renascor ASX release dated 11 November 2019, p 19.

<sup>27</sup> See Renascor ASX releases dated 25 August 2021, 25 March 2021, 27 January 2021 and 29 September 2021.

<sup>28</sup> Bloomberg data 24 March 2021.

<sup>29</sup> Hanwa news announcement 12 February 2021. See [https://www.hanwa.co.jp/ms/data/pdf/ir/20210212en\\_3704.pdf](https://www.hanwa.co.jp/ms/data/pdf/ir/20210212en_3704.pdf).

<sup>30</sup> See Renascor ASX announcement dated 11 February 2021

