

4 June 2024

## LU7 – BECANCOUR LITHIUM REFINERY 3D LAYOUT COMPLETED

### Highlights

- DFS Engineering work producing significant progress
- 3D model and plot plan layout completed
- Plant layout strategy for efficient space utilization
- Significant milestones including flow sheets and stream tables
- Procurement strategy using “same equipment, same suppliers”
- Infrastructure development and utility connections at the site are underway

Lithium Universe Limited (referred to as "Lithium Universe" or the "Company," ASX: "LU7") is pleased to provide an update on the Definitive Feasibility Study (DFS) engineering work associated with the Company's Bécancour Lithium Refinery project.

The Bécancour Lithium Refinery project is progressing extremely well, marked by significant milestones. The engineering study, managed by Hatch Ltd, is advancing well, with critical elements already completed. Essential documents, including the process flow sheets and stream tables, have been finalized. These documents are crucial for managing material and energy flow through the refinery, detailing the processing steps and the interconnections between various units within the plant.

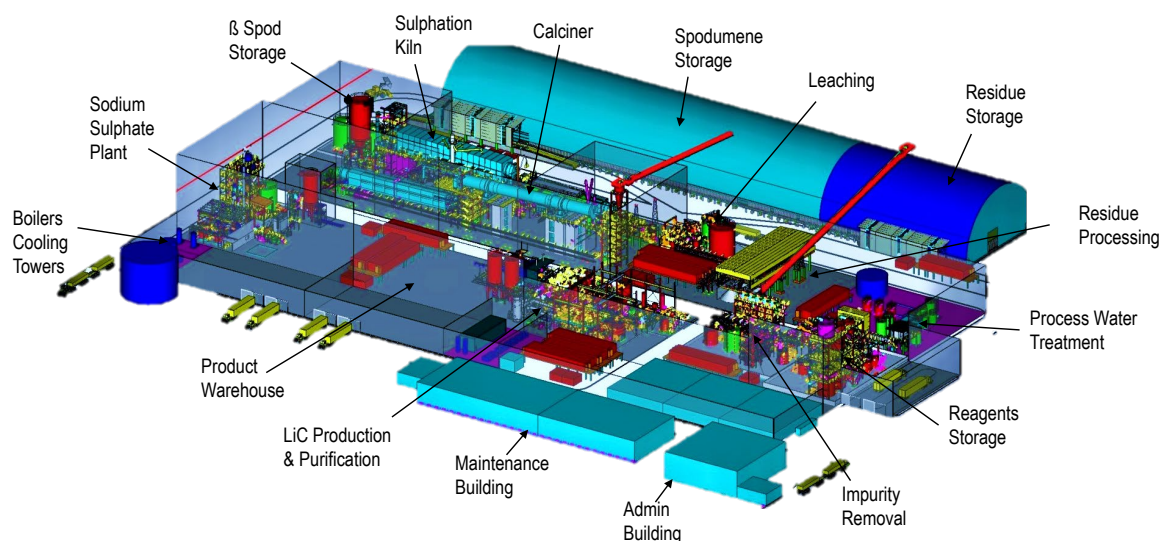


Figure 1: Lithium Universe Bécancour Lithium Refinery 3D Model

Furthermore, a preliminary 3D model and plot plan layout have been developed, providing a comprehensive visual and spatial understanding of the refinery's design. This model helps visualize the placement of equipment and infrastructure, ensuring efficient space utilization and facilitating future modifications if necessary. The design of the refinery layout has considered safety standards and best practices, effective process flow, material compatibility and adequate spacing required for plant operation.

Procurement efforts are advancing strategically, with a focus on sourcing major equipment from the same suppliers used for the Jiangsu reference plant. This approach leverages existing relationships to ensure consistency in quality and performance. Another advantage of utilizing established offshore suppliers is the mitigation of potential scheduling disruptions caused by the increased demand for construction materials and highly skilled tradespeople in North America driven by the surge in supply chain related projects. Active negotiations with selected suppliers aim to secure firm pricing, helping to control costs and mitigate financial risks.

Infrastructure development and utility connections at the site are underway, addressing essential elements such as water supply, power, and transportation links needed for the refinery's operations. Material take-offs (MTOs) are being performed to prepare a detailed Capex estimate, ensuring a comprehensive financial plan for the project's construction and operational phases.

Chairman Iggy Tan said *"The Hatch team engaged for this project is dynamic, practical and experienced, fully understanding our strategy to fast-track the DFS process by leveraging the insights and proven technology from the Jiangsu Lithium Carbonate reference plant. Hatch can easily apply their knowledge on this project as the original designer and builder of the reference project as well as any other lithium plants in their impressive portfolio of projects. We are delighted with the progress of the engineering work"*.

**- Ends -**

### **Lithium Universe Interactive Investor Hub**

Engage with Lithium Universe directly by asking questions, watching video summaries and seeing what other shareholders have to say about this, as well as past announcements, at our Investor Hub <https://investorhub.lithiumuniverse.com/>

### **Authorisation**

Authorised by Iggy Tan, Executive Chairman of Lithium Universe Limited.

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## **ABOUT LITHIUM UNIVERSE LIMITED (ASX:LU7)**

Lithium Universe has two distinct operations that encompass its business objectives.

### **Lithium Exploration**

LU7 seeks to establish itself as a prominent lithium project builder by prioritizing the swift and successful development of lithium projects. Instead of exploring for the sake of exploration, LU7's mission is to quickly obtain a resource and construct a spodumene-producing mine in Québec, Canada. Unlike many other lithium exploration companies, LU7 possesses the essential expertise and skill to develop and construct profitable projects. Additionally, LU7 has access to significant Lithium opportunities in Tier 1 mining jurisdictions in Canada and Australia.

### **Lithium Conversion**

Lithium Universe is dedicated to closing the 'Lithium Conversion Gap' in North America by developing a mine-to-battery-grade lithium carbonate strategy in Québec, Canada. Our mission is to support the supply chain needs of original equipment manufacturers (OEMs), particularly in the automotive sector, by converting spodumene supply into lithium chemicals for EV battery plants North America.

Our business model focuses on converting spodumene supplies under "take or pay" agreements with OEMs. These agreements include protective pricing mechanisms, such as floor and ceiling prices, to ensure stable margins and mitigate market volatility. This approach guarantees our LU7 refinery's payback while providing OEMs with a reliable and sustainable supply of lithium chemicals.

### **THE LITHIUM CONVERSION GAP**

North America anticipates a surge in battery manufacturing, with over 20 major manufacturers planning to deploy an estimated 1,000GW of battery capacity. The Company estimates that 850,000t of LCE per annum will be required to satisfy demand in North America by 2028.

Spodumene concentrate needs to be converted to battery-grade lithium carbonate or hydroxide to be used in the production of cathode materials for lithium batteries. Currently, there are no operational converters in North America and the Company estimates only 100,000t of LCE hard rock converters are slated for construction in the region by 2028. The region seeks to decrease dependence on Chinese lithium converters, aligning with both commercial and national security goals to onshore the lithium battery supply chain in North America.



### **PROVEN LITHIUM EXPERTISE**

The Company is comprised of lithium industry leaders known as the 'Lithium Dream Team', who are known for rapidly developing and operating hard rock lithium extraction and downstream operations across Australia and China. The Company's Chairman, Iggy Tan, is considered a pioneer in the modern lithium industry; spearheading Galaxy Resources, Iggy Tan built the first large-scale vertically integrated mine-to-refinery project including the 1 million tpa Mt Cattlin Spodumene Project and the downstream 17,000 tpa Jiangsu Lithium Carbonate Refinery. Patrick Scallan, Director, is a seasoned veteran of the lithium industry with over 25 years of managing the world-class Greenbushes Mine including production expansion from 200ktpa to 1.4mtpa during his tenure. Dr Jingyuan Liu is a world-leading technical expert in downstream lithium processing having consulted for over 25 different refinery operations over the world having previously managed the construction and commissioning of the Jiangsu Lithium Refinery for Galaxy.



Mr Terry Stark previously served as the General Manager of Operations for both Mt Cattlin and James Bay projects; Mr Roger Pover, with extensive experience as Plant Manager at Greenbushes and Mt Cattlin. John Loxton, who was involved in the construction of the Jiangsu Lithium Carbonate Plant for Hatch Engineering, and John Sobolewski, former CFO and Co-Sec of Galaxy Resources, assume the role of Chief Financial Officer at Lithium Universe.

### **PROVEN LITHIUM TECHNOLOGY**

The Jiangsu Lithium Carbonate Plant, initially designed to produce 17,000 tpa of battery-grade lithium carbonate, has set a global benchmark for lithium refineries by incorporating advanced Western continuous process control techniques. The plant has surpassed its design capacity, now producing 20,000 tpa of high-quality battery-grade lithium carbonate. Remarkably, it achieved steady-state quality within two years of groundbreaking. Building on this success, Lithium Universe plans to replicate the Jiangsu plant's design, utilizing the same suppliers, equipment, and engineering firms to mitigate risks. Hatch Limited, the engineering company behind the original Jiangsu plant, has been contracted to conduct the Definitive Feasibility Study (DFS) for the Company's Bécancour Lithium Refinery.

### **Forward-looking Statements**

The Company wishes to remind investors that the presence of pegmatite does not necessarily equate to spodumene mineralization. Also that the presence of pegmatite and spodumene mineralization on nearby tenements does not necessarily equate to the occurrence on Lithium Universe Limited's tenements. This announcement contains forward-looking statements which are identified by words such as 'anticipates', 'forecasts', 'may', 'will', 'could', 'believes', 'estimates', 'targets', 'expects', 'plan' or 'intends' and other similar words that involve risks and uncertainties. Indications of, and guidelines or outlook on, future earnings, distributions or financial position or performance and targets, estimates and assumptions in respect of production, prices, operating costs, results, capital expenditures, reserves and resources are also forward-looking statements. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions and estimates regarding future events and actions that, while considered reasonable as at the date of this announcement and are expected to take place, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of our Company, the Directors and management. We cannot and do not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur and readers are cautioned not to place undue reliance on these forward-looking statements. These forward-looking statements are subject to various risk factors that could cause actual events or results to differ materially from the events or results estimated, expressed or anticipated in these statements.