

24 October 2024

LU7 BÉCANCOUR LITHIUM REFINERY DEFINITIVE FEASIBILITY STUDY ON TRACK TO BE RELEASED NEXT QUARTER

Highlights

- DFS is progressing and on track as expected
- Finalizing capital cost estimate for DFS
- 80% of supplier pricing program completed
- Procurement strategy and material take-offs being finalized
- Engineering design tailored to new site conditions
- Project led by John Loxton, Head of Refinery
- Overseen by Lithium expert, Dr Jingyuan Liu (NED)

Lithium Universe Limited (referred to as "Lithium Universe" or the "Company," ASX: "LU7") is pleased to announce that the Bécancour Lithium Refinery Definitive Feasibility Study (DFS) is at full steam and tracking as expected.

The Company completed and announced its Preliminary Feasibility Study (PFS) on September 30, 2024, less than 12 months since engaging Hatch Ltd (Hatch) to commence the engineering study. Since releasing the PFS, the Hatch/LU7 project team has been working at full speed to finalize the capital cost estimates for the upcoming DFS. While the process designs and equipment outlined in the PFS remain unchanged, the next crucial step involves obtaining the remaining fixed-price quotations from vendors.

Listen to LU7 Head of Refinery, John Loxton,
discuss the Bécancour Lithium Refinery Design

<https://youtu.be/04dm794J3EU>



Listen to LU7 NED, Dr Jingyuan Liu, discuss the
strategy to focus on Lithium Carbonate

<https://youtu.be/ubfy4zZhxT0>



The Definitive Feasibility engineering is advancing well, focusing on closing interactions with equipment suppliers. Suppliers have been requested to provide a firm offer or a budget price depending on the significance of a package considering cost, lead time, and technical specifications. Design criteria documents for all engineering disciplines have been finalized, and with 80% of supplier interactions now complete, the engineering team is moving toward finalizing material take-offs and related deliverables based on the reference plant. These outputs will serve as the foundation for the final capital cost estimate, ensuring long-lead items can be ordered promptly. This effort will also underpin the project's execution schedule.

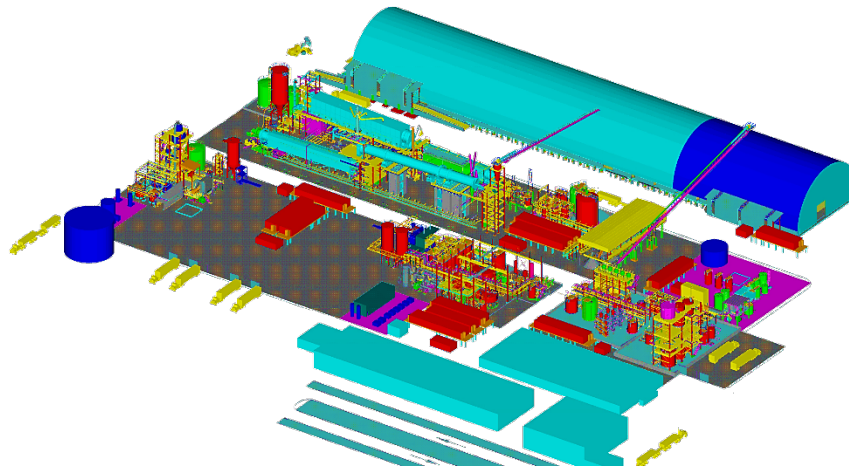


Figure 1 – Completed Bécancour Lithium Refinery Design

In parallel, the procurement strategy is complete, and efforts are now focused on refining the capital cost estimate to achieve an accuracy of $\pm 20\%$, with minimal reliance on factored estimates. This accuracy will be achieved by utilising material take-offs and unit rates and confirmed by a Quantitative Risk Assessment (QRA). Additionally, trade-off optimization studies and the environmental assessment have been completed. Meanwhile, the feasibility engineering design for aspects unique to the Bécancour plant, such as the process plant building, site earthworks, and drainage, is well advanced.

The major engineering activities have been completed, including the finalization of the plant layout and the preparation of documentation for key equipment packages, such as datasheets, scopes of work, and specifications. Key tasks such as creating the main power distribution single-line diagram and providing clarifications during the pricing processes have also been accomplished. Additionally, the effective management of process effluent and site runoff has been fully addressed. The development of the package register, material take-offs (MTOs), and comprehensive equipment lists are being finalized in readiness for the commencement of detailed engineering.

On the Lithium Universe side, the project is led by John Loxton, Head of Refinery. John's experience in lithium began in 2010 with Hatch, where he worked on the Jiangsu Lithium Carbonate Plant EPCM for Galaxy Resources in China, overseeing its construction and commissioning. In 2019, he joined Tianqi Lithium as Head of Projects, managing the execution of their investment in a lithium hydroxide processing plant in Kwinana, Western Australia. John successfully led the commissioning of the first train, achieving first product in 2021, and subsequently developed the execution plan and project team for the second, identical train in 2022.

The Bécancour project is overseen by Lithium Universe Non-Executive Director, Dr. Jingyuan Liu, a widely respected technical expert in the lithium industry. Dr. Liu has served as a consultant on over 20 lithium conversion projects worldwide, from due diligence to commissioning. He previously held the role of General Manager of Development and Technologies at Galaxy Resources Limited, where he oversaw the construction and commissioning of the world-renowned Jiangsu Lithium Carbonate plant. Since then, he has acted as a special advisor to various global lithium carbonate and lithium hydroxide projects, including Tianqi's Lithium Hydroxide Plant in Kwinana, Western Australia.

Lithium Universe Head of Lithium Refinery, John Loxton said, *"The project is on track to complete the DFS next quarter. Leveraging extensive data from our reference plant has significantly streamlined the process, making it both faster and more cost-effective. We're primarily updating prices for the same plant and equipment we've used before, often working with the same suppliers, which ensures more accurate quotations and reduces the risk of cost overruns. While some new work includes civil and design specific to the new site conditions, the majority of the engineering has been based on the reference plant."*

-Ends-

Authorised by Iggy Tan, Chairman of Lithium Universe Limited.

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/>

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Forward-looking Statements

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 of 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 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.

ABOUT LITHIUM UNIVERSE LIMITED (ASX:LU7)

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

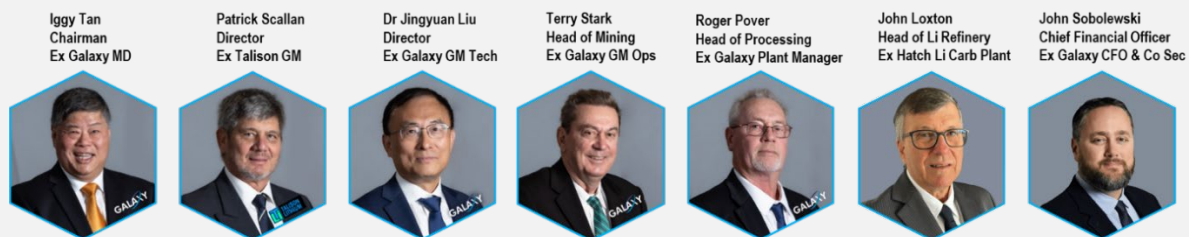
North America anticipates a surge in battery manufacturing, with over 20 major manufacturers planning to deploy an estimated 1,000GW of battery capacity. The Company estimates that 850,000t of LCE per annum will be required to satisfy demand in North America by 2028.

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, who 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 Jiangsu Lithium Carbonate Plant for Hatch Engineering and John Sobolewski, former CFO and Co Sec of Galaxy Resources, assumes 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 firm 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.