



**Lithium Universe**  
LIMITED

**ASX: LU7**

## HIGHLIGHTS

### **Closing the Lithium Conversion Gap in North America**

- Lithium Universe to convert supply in North America
- Geopolitical shift to onshore the battery supply chain
- LFP batteries expected to capture 87% of the ESS market share by 2033
- Strong Federal and Provincial government financing support within the industry

### **Application for 22.5 Mw Green Power for Bécancour Lithium Refinery**

- Lithium Universe application for 22.5 MW of green power for Bécancour Lithium Refinery
- Hydroelectricity has significant cost effective advantage
- Strategy to produce greener battery grade lithium carbonate
- Application only for train 1 of 16,000 tpa battery grade lithium carbonate

### **Lithium Universe Completes Two Environmental Field Studies at Bécancour Site**

- No significant biological issues reported by environmental team
- Wetlands identified are of low ecological value
- Further environmental surveys planned

### **Lithium Universe Board Visits Operating Refineries in China**

- LU7 Board and CEO travel to China to meet with existing lithium refineries
- Team validates existing design process improvements with existing operators
- Jiangsu Refinery built by Galaxy maintains benchmark LU7 construction philosophy of Jiangsu-style refinery reinforced
- Chinese converter expansions focussed on lithium carbonate

### **Bécancour Lithium Refinery Design Proving to Handle Various Spodumene Types**

- Testwork conducted to Linyi University Lithium Research Centre
- Second batch completed and meets stringent battery grade specs
- Not often achievement of battery grade on first pass programs
- Metallurgical testing on various international sources of spodumene
- Able to process spodumene from any part of the world

### **Procurement Strategy for Bécancour Lithium Refinery**

- Procurement strategy for Bécancour Lithium Project
- “Same equipment, same supplier” strategy
- Board visit to Hatch's Shanghai procurement office
- Proven equipment and same suppliers fast tracks engineering
- Jiangsu used 70% of Chinese top quality suppliers

### **Bécancour Lithium Refinery 3D Layout Completed**

- DFS Engineering work producing significant progress
- 3D model and plot plan layout completed
- Plant layout strategy for efficient space utilisation

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## Closing the Lithium Conversion Gap in North America

### What is the 'Lithium Gap'?

North America anticipates a surge in battery manufacturing, with over 20 major manufacturers planning to deploy an estimated 1,000GW of battery capacity. Canada has ascended to the top spot in BloombergNEF's Global Lithium-Ion Battery Supply Chain Ranking, signalling its emergence as a significant global supplier of battery materials. However, bridging the gap between the growing supply of lithium ore and the increasing demand for highly processed lithium carbonate remains a challenge and opportunity. Lithium Universe is advancing a mine-to-battery-grade lithium carbonate strategy in Canada through the Québec Lithium Processing Hub (QLPH). The QLPH includes a multi-purpose independent 1 Mtpa concentrator and an independent 16,000 tpa battery-grade lithium carbonate refinery.

Over the past decade, numerous lithium conversion plants worldwide have encountered technical and startup challenges. Even established lithium producers have found lithium conversion to be a challenging task. Lithium Universe presents a solution to mitigate these risks.

The company has formed a team, dubbed the Lithium Dream Team, comprising experts in hard rock lithium extraction and downstream conversion operations. By leveraging proven technology in spodumene concentration and lithium conversion design, the company aims to minimize execution risk. Notably, the Dream Team previously spearheaded the successful construction of the Jiangsu Lithium Carbonate facility, surpassing design expectations to produce the world's premier battery-grade carbonate. This project was built by Hatch Ltd. Lithium Universe intends to replicate the design and operational methodologies implemented at Jiangsu, viewing this, coupled with the expertise of the Dream Team, as pivotal in establishing conversion capacity in North America.

Lithium Universe Limited provided a strategic update on addressing the gap in lithium conversion capacity and enhancing the North American supply chain.



Video Summary of 'The Lithium Gap' Video summary of the Company's strategy to address the lithium gap:

<https://investorhub.lithiumuniverse.com/link/7eXaEr>

**Only 100,000t LCE conversion capacity**

**850,000t LCE required per annum**

# THE LITHIUM GAP

**Mine Supply | Upstream:**

For the first time Canada has surpassed China to claim the top spot in BloombergNEF's Global Lithium-Ion Battery Supply Chain Ranking, signalling its emergence as a significant global supplier of battery materials.

The James Bay region in Québec, now has over 40 companies dedicated to lithium exploration and LU7's assessments indicate a cumulative lithium resource exceeding 500Mt at +1% Li2O across eight distinct projects, which has increased over 100% within the last 12 months. We expect this to grow significantly over the coming years.

**Processing Capability | Midstream:**

With battery manufacturing capacity set to explode in the region, LU7 estimates that 850,000t of LCE per annum will be required to satisfy demand in North America. However, there are currently no operational converters in North America and only 100,000t of planned hard rock converters are currently slated for construction in the region.

This leaves a massive LITHIUM GAP between the mine supply and the needs of the battery manufacturers.

**Battery Demand | Downstream:**

North America is set to experience a massive surge in battery manufacturing, with over 20 major manufacturers planning to deploy an estimated 1,000GW of battery capacity by 2028. That is a ten-fold increase on today's capacity. When fully operational these factories will have a voracious appetite - requiring upwards of 850,000t of processed lithium carbonate every year.

Acknowledging the significance of energy security, both the U.S. and Canada have also intensified efforts to reduce Chinese involvement in the sector as part of a 'onshoring' of supply chains of energy and critical minerals.

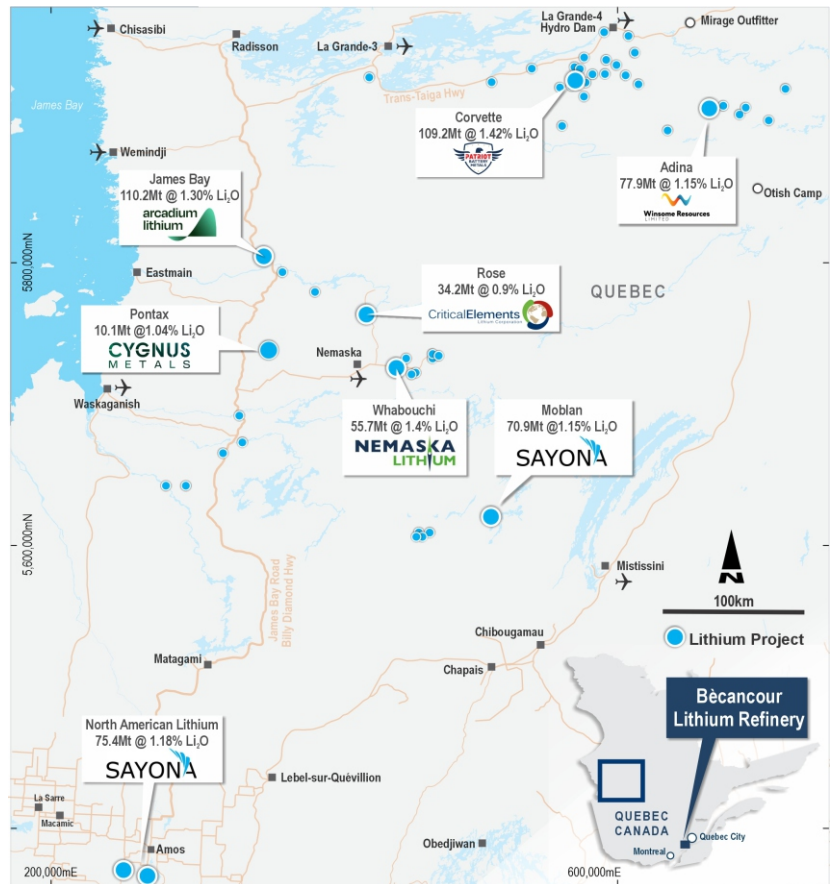
## The Emerging James Bay Supply

The Company has engaged with numerous exploration entities operating within the region of James Bay, Québec and estimate there are over 40 companies dedicated to lithium exploration in the area. Our assessments indicate a cumulative lithium resource exceeding 500Mt at +1% Li<sub>2</sub>O across eight distinct projects, which has increased over 100% within the last 12 months. This significant increase is due to the upgraded resource of 110.2Mt at 1.3% Li<sub>2</sub>O by Arcadium Lithium at the James Bay Project, the maiden resource of Patriot Battery Metals at Corvette of 109Mt at 1.42% Li<sub>2</sub>O and most recently the announcement of Winsome Resource's 59Mt at 1.12% Li<sub>2</sub>O resource at their Adina Project.

Despite these advancements, the James Bay region remains relatively underexplored compared to more established lithium industries, such as those in Western Australia. We anticipate continued globally significant discoveries and resource upgrades in the region in the years ahead. The genuine prospectivity of James Bay, combined with its active exploration scene, presents a promising supply opportunity for our company's proposed lithium carbonate refinery.

### The Scale of the Lithium Conversion Gap

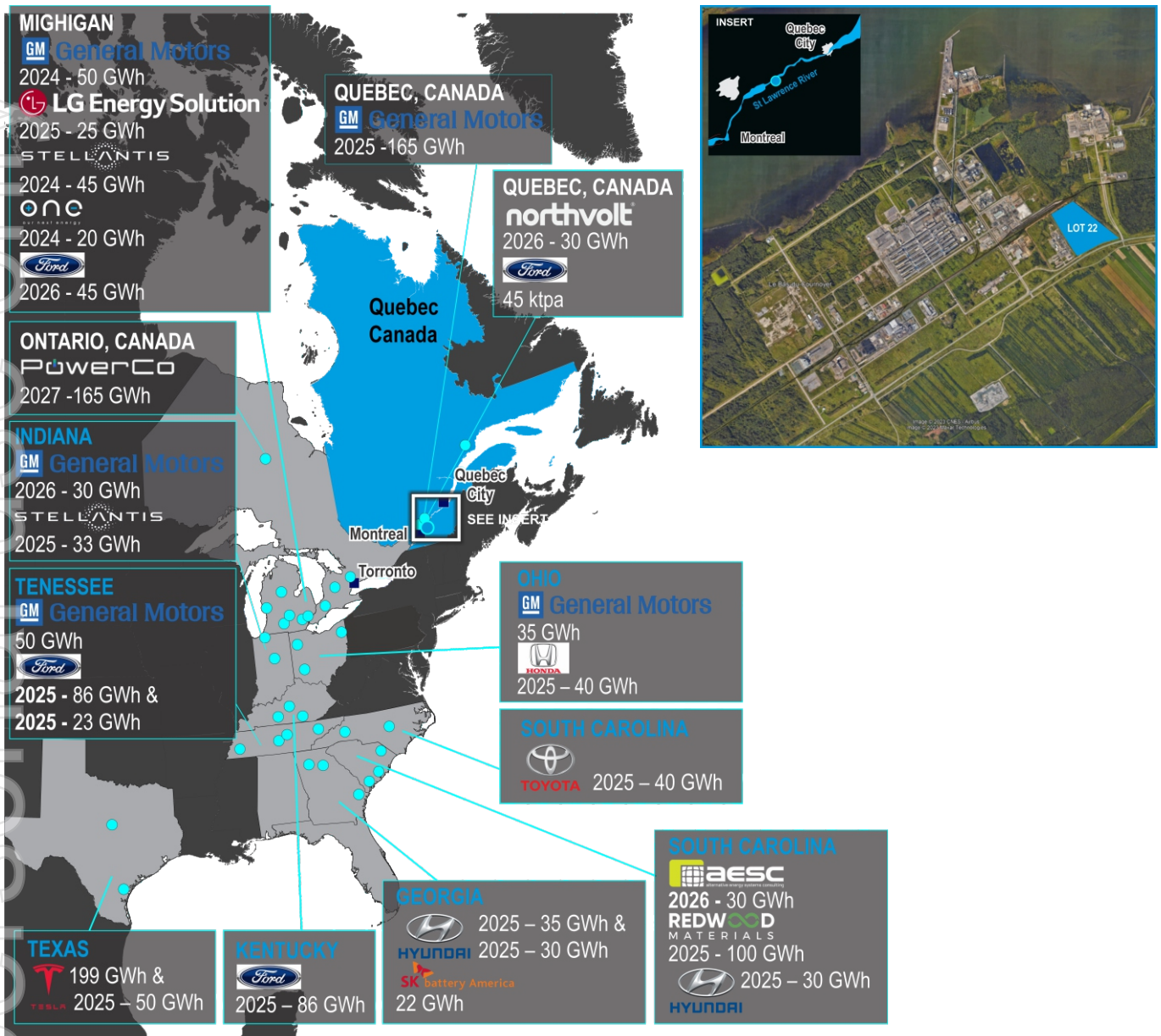
With strong planned demand in the United States and a burgeoning spodumene mine supply in Québec and Ontario, the issue lies in the scarcity of independent lithium converters planned for construction in North America, potentially stemming from a lack of expertise or a series of recent failures in the sector. A significant gap in lithium conversion and processing looms in North America. Assuming the planned battery manufacturing capacity of 1,000 GW by 2028, using a ratio of 850g lithium carbonate equivalent (LCE) per kWh, the Company estimates that 850,000t of LCE per annum will be required to satisfy demand in North America. Currently, there are no operational converters in North America and the Company estimates approximately only 100,000t of planned hard rock converters are slated for construction in the region. The Lithium Universe strategy is to bridge this gap by leveraging a proven track record in constructing such converters.



Summary of key lithium projects within the James Bay region in Québec, amounting to a cumulative global resource of over 500Mt at +1% Li<sub>2</sub>O.

Multiple original equipment manufacturers (OEMs) have secured spodumene supply contracts from mines globally to ensure a steady provision of lithium chemicals for their cathode/battery plants. If these OEMs are in the automotive sector, the batteries are intended for their proposed electric vehicle (EV) facilities in Europe and North America. However, a challenge arises as they need to convert this spodumene supply in China before shipping the lithium units to their supply chains in Europe and America. This poses a significant hurdle in establishing a dependable supply chain, particularly due to limited lithium converters in North America.

Focused on Québec due to its proximity to the promising hard rock lithium region of James Bay and direct port access to the Atlantic Ocean, the Company has announced an option agreement to acquire a commercial property within the Bécancour Waterfront Industrial Park (BWIP) as a crucial step toward its goal. Despite prevailing lithium market dynamics, Lithium Universe remains committed to building through lithium market cycles and addressing the North American lithium conversion deficit with the QLPH Lithium Carbonate Refinery.



**Canada as the next emerging battery supply chain**

Canada has surpassed China to claim the top spot in BloombergNEF's Global Lithium-Ion Battery Supply Chain Ranking, a comprehensive annual evaluation of 30 countries' potential to develop secure, reliable, and sustainable lithium-ion battery supply chains. This marks a significant milestone as it's the first time China has been displaced from the number one position. Canada's consistent advancements in manufacturing and production, coupled with robust ESG credentials, have positioned it as a frontrunner in shaping the future of battery supply chains. Additionally, Canada's close integration with the US automotive sector has further bolstered its standing, particularly benefiting from the 'friendshoring' goals outlined in the Inflation Reduction Act.

The country's high ranking is driven by dedicated policy commitments at both provincial and federal levels. While China retains a strong foothold in the established supply chain, the growing emphasis on sustainability underscores the significant opportunity within Canada. Lithium Universe's focus on Québec and the broader North American region is not only due to the favourable operating environment but also the significant opportunity presented within the supply and demand dynamics emerging in the region.

**LFPs Becoming the Battery of Choice**

The Company's emphasis on constructing a lithium carbonate refinery is rooted in the expertise of key executives from Lithium Universe, who spearheaded the successful development of the Jiangsu Refinery.

### LFPs Becoming the Battery of Choice (cont.)

This decision is further supported by the significant investment potential driven by the rising demand for LFP batteries, where lithium carbonate serves as the required lithium chemical precursor.

Lithium Iron Phosphate (LFP) batteries are poised to dominate the global battery market, encompassing electric vehicles (EVs), energy storage systems (ESSs), and consumer electronics (CEs), with a projected 48% market share by 2033, according to analysts at Fastmarkets. Renowned for their stability, safety, and cost-effectiveness despite relatively lower energy density compared to Nickel Cobalt Manganese (NCM) batteries, LFP batteries currently reign supreme in China's domestic EV market, accounting for over 67% of installations in 2023.

While LFP adoption outside of China is growing, its advantages over NCM batteries position it favourably as economies worldwide push for EV and ESS adoption to drive the energy transition. With its cathode material reliant on lithium carbonate and iron phosphate, LFP is particularly vital in large-scale energy storage applications. Experts foresee substantial growth in the ESS market, with LFP batteries expected to capture 87% of the market share by 2033, driven by their affordability and reliability.

The Company estimates that over 90% of worldwide LFP manufacturing is currently hosted in China. Now, there is a consistent trend in North America; Ford plans to build a \$3.5 billion factory in Marshall, Michigan, which will produce 35 gigawatt-hours of LFP cells annually for electric vehicles starting in 2026. Tesla have announced a research-sized facility in Sparks, Nevada, with a capacity of 10 gigawatt-hours of LFP cells per annum to investigate improvements to faster charging and high energy density. LG Energy Solutions have invested \$5.6 billion within Arizona on a dual-purpose facility manufacturing LFPs for ESS and cylindrical batteries for EVs.

### Onshoring the Supply Chain

The industry encounters a significant challenge in establishing a reliable supply chain, especially due to limited access to lithium converters in North America. The region seeks to decrease dependence on Chinese companies, aligning with both commercial and national security goals. Currently, Chinese firms hold a commanding position in the global lithium converter and refining market. Our company estimates that over 95% of the world's spodumene conversion capacity is located in China. Similarly, Canada, acknowledging the significance of energy security, has intensified efforts to reduce Chinese involvement in the sector as part of a "decoupling" or "de-risking" strategy, mirroring the actions taken by the United States.

In November 2022, following a national security review, the Canadian government mandated the divestment of Sinomine (Hong Kong) Rare Metals Resources, Chengze Lithium International Ltd., and Zangge Mining Investment from Canadian critical minerals companies, transitioning from words to decisive actions. The prevailing trend towards supply chain localization presents a significant opportunity for Lithium Universe to leverage.

### Proactive Government Support

Canada's Critical Minerals Strategy, unveiled in December 2022, outlines Canada's commitment to becoming the premier global supplier of critical minerals for green technologies. With C\$3.8 billion in funding allocated, the strategy aims to reduce reliance on foreign mineral inputs. Budget 2022 introduced the Canada Growth Fund (CGF), a \$15 billion initiative facilitating private sector investment in Canadian businesses and projects.

Lithium battery supply chain development has a strong recent history of provincial and federal government support and attractive operational incentives for delivery of critical minerals supply chain solutions. Recent government involvement extends to the General Motors (GM) and Korea-based POSCO Chemicals' US\$1 billion cathode active material (CAM) factory, the Ford/EcoPro BM US\$800 million cathode factory in addition to the Northvolt's EV US\$7 billion Battery Facility at Saint-Basile-le-Grand, placing the Company's project in a favourable regulatory environment.

### North American Battery Surge

North America is set to witness a substantial surge in battery manufacturing, with over 20 major battery manufacturers planning to deploy an estimated 1,000GW of battery capacity by 2028. By 2030, Georgia, Kentucky, and Michigan in addition to other states are poised to dominate electric vehicle (EV) battery production in the United States. These states aim to collectively manufacture between 97 and 136 gigawatt hours of EV batteries annually. To meet the escalating demand for EVs, it is estimated that North America's EV battery manufacturing capacity will skyrocket from 92 gigawatt-hours in 2022 to nearly 1,000 gigawatt-hours by 2028. This strategic expansion is expected to support the production of 10 to 13 million all-electric vehicles annually by 2028, positioning the U.S. as a formidable global EV competitor. Additionally, Canada's recent focus on investing in battery plants, backed by collaborations with Volkswagen, Stellantis, LG Energy Solution, and Northvolt, aims to safeguard its auto sector.

## Application For 22.5 MW Green Power for Bécancour Lithium Refinery

Lithium Universe Limited announced that the Company is taking a significant step towards the production of greener battery-grade lithium carbonate at the proposed Bécancour Lithium Refinery. The Company has officially submitted an application for up to 22.5 MW of green electricity (Train 1) to Hydro-Québec. This milestone comes following a comprehensive engineering study conducted by Hatch Engineering, which has finalized the power requirements for train 1 of the proposed lithium refinery.

Hydro-Québec is a prominent player in renewable energy, playing a central role in the emergence of Québec's low-carbon economy by generating close to 100% of its power from water sources. Hydro-Québec is one of the largest hydroelectricity producers in the world, operating over 60 hydroelectric generating stations with very low greenhouse gas (GHG) emissions and no toxic waste.

The proposed lithium refinery is located within the Bécancour Waterfront Industrial Park (BWIP), specifically on Lot 22 of the Parc industriel et portuaire de Bécancour in Bécancour, Québec, Canada. Situated at the crossroads of hydro-electrical distribution networks, the industrial park offers a stable and cost-effective source of hydroelectric power in Québec. The application process with Hydro-Québec, outlines the power needs for construction, commissioning, start-up, and the gradual ramp-up to full production of the first 16,000 tpa battery grade lithium carbonate train.

## LU7 Completes Two Environmental Field Studies At Bécancour Site

Lithium Universe Limited announced that two environmental field studies have been completed at the Company's proposed refinery site at Bécancour Waterfront Industrial Park (BWIP), Québec.

The Company completed a survey, adhering to provincial protocols, which found no presence of the short-eared owl, a species of concern, in the Lot 22 area. The site's proximity to the CEPSA chemical plant, railway, and highway likely makes it less attractive for this species. This information is vital for our ongoing environmental assessments and planning.

A recent breeding bird survey revealed the presence of Chimney Swifts, a species at risk known to nest in human structures, likely to inhabit structures away from Lot 22. No habitat was observed for salamanders or the least bittern bird, indicating no further surveys are necessary for these species.

Wetland delineation, conducted according to provincial guidelines, aligns with desktop review information, with no unexpected findings. Wetlands are primarily located in the northern and eastern portions of the site, with smaller patches in the southwestern sector. These wetlands are likely of low ecological value, characterized by agricultural ditches and the presence of the invasive species *Phragmites australis*. Wetland surveys will continue through June and July.



The Company's environmental field study completed by Hatch Ltd from the Montreal and Trois-Rivières offices.

## Lithium Universe Board Visits Operating Refineries in China

Lithium Universe Limited informed shareholders of a recent trip by key leadership members to various Chinese lithium converters. Led by Chairman Iggy Tan, alongside Board directors Patrick Scallan and Dr. Jingyuan Liu, and CEO Alex Hanly, the team aimed to gather industry feedback, validate process design, reaffirm construction philosophy, and assess strategic expansions. They inspected three lithium refinery facilities in the provinces of Shandong, Hubei, and Sichuan. Discussions with lithium conversion executives highlighted current market conditions and sustainability concerns, indicating that current market pricing represents the breakeven point for battery-grade lithium hydroxide and carbonate production. This reaffirms our commitment to navigating lithium market dynamics and solidifying our role within the growing North American lithium supply chain.

Anticipating a strengthening lithium market, Chinese lithium companies presented strategic expansion plans within China and Asia. Notably, conversion companies the Company met with are modifying existing plants to produce battery-grade lithium carbonate instead of expanding into lithium hydroxide. This shift is driven by the rising demand for lithium carbonate due to the popularity of Lithium Iron Phosphate (LFP) batteries, which are favored for their stability, safety, and cost-effectiveness despite lower energy density compared to Nickel Cobalt Manganese (NCM) batteries. In 2023, LFP batteries dominated China's domestic EV market, accounting for over 67% of installations. LFP batteries, reliant on lithium carbonate and iron phosphate, are also well-suited for large-scale energy storage applications. The increasing consumer preference for LFP batteries in China supports the Company's strategy to focus on delivering a 16,000 tpa lithium carbonate refinery at Bécancour, Québec.



The Company inspects an operational lithium refinery within the Sichuan province, China

## Bécancour Lithium Refinery Design Proving to Handle Various Spodumene Types

Lithium Universe Limited announced that ongoing testwork demonstrated the production of battery-grade (>99.5% Li<sub>2</sub>CO<sub>3</sub>) lithium carbonate from various spodumene concentrates using the Bécancour Lithium Refinery design. The company's key lithium Board members and CEO recently visited the Definitive Feasibility Study (DFS) metallurgical testing at the Linyi University Lithium Research Centre, a renowned facility with in-house analysis capabilities. The testwork program on various spodumene ores is a critical component of the DFS conducted by Hatch Ltd for the Bécancour Lithium Refinery, which is designed for a production capacity of 16,000 metric tons per annum, assuming a spodumene feed grade of approximately 5.5% Li<sub>2</sub>O. Spodumene samples, ranging from 5.0% to 6.0% Li<sub>2</sub>O with diverse particle sizes, are being comprehensively tested.

The objective of establishing a downstream standalone lithium refinery was to create robust capability in processing spodumene feedstock from global sources such as Australia, Brazil, and Africa. This strategic approach positions the Bécancour Lithium Refinery to effectively manage market fluctuations, ensuring operational continuity and stability while Canada's supply chain develops. The refinery's design, including cyclone preheaters at the calcination kiln feed, enhances extraction efficiency for various spodumene concentrates, adapting to finer ores from flotation techniques. Notably, the Bécancour design, based on the Jiangsu plant, pioneered ion exchange technology for calcium impurity removal, setting new standards in lithium purification. Additionally, a CO<sub>2</sub> purification circuit achieves significantly low sodium and sulfate impurities, well below industry thresholds. Located with access to ports and rivers, the site facilitates spodumene import from Africa and South America, ensuring adaptable and stable lithium production operations.

The Bécancour process achieves battery-grade lithium carbonate with sodium levels below 100 ppm and calcium content below 13 ppm, surpassing industry standards.

Lithium carbonate from hard rock sources also boasts low chloride levels (<2 ppm) compared to brine-based alternatives (200 ppm). Led by Dr. Jingyuan Liu, the testing protocol replicates the process for the proposed Québec Lithium Carbonate Refinery, demonstrating viability across various spodumene concentrates. This ongoing test program is integral to Hatch Ltd's engineering study for the Québec Lithium Processing Hub (QLPH), designed for 16,000 metric tons per annum capacity with spodumene grades of approximately 5.5% Li<sub>2</sub>O.

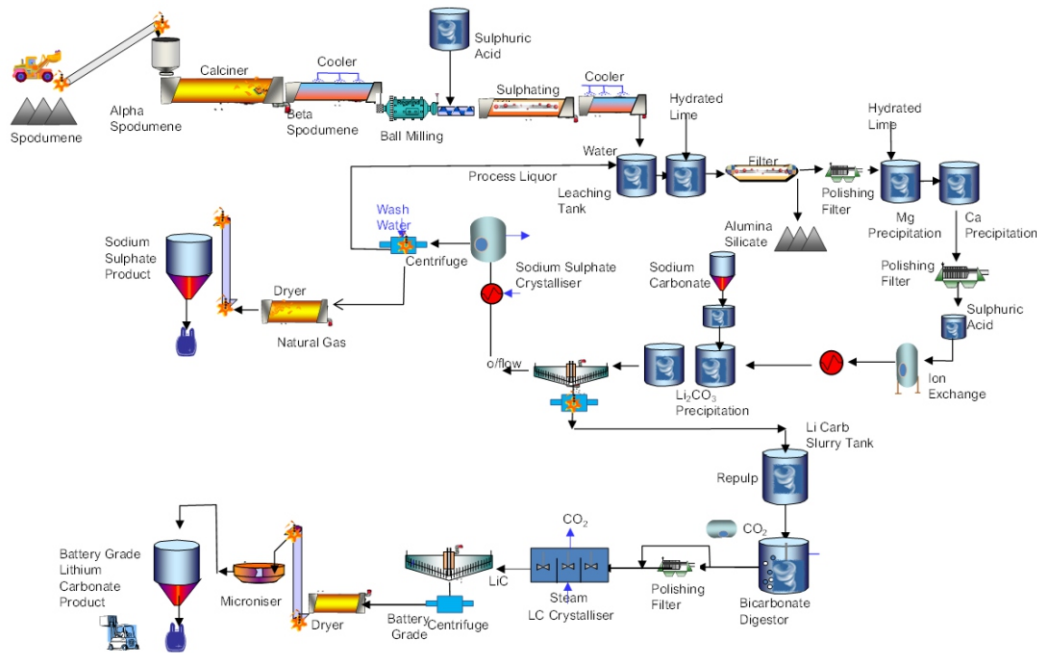
Scan to see tour of facilities video  
<https://youtu.be/yeD2S8l6ecM>



LU7 is using world-class lithium test facilities for all test work

Elements	LC Content	SO <sub>4</sub> <sup>2-</sup>	Cl <sup>-</sup>	Ca	Na	K	Al	Zn	Ni	Fe	Mn	Mg	Cu	B
	%													
							ppm							
Concentrate Sample 1	99.71	170	1	13	70	1	2	2	ND	ND	1	2	ND	1
Concentrate Sample 2	99.67	214	2	6	34	2	2	1	ND	3	ND	1	ND	1
LC CN Standard YS/T582-2013	≥99.5	800	30	50	250	10	10	3	10	10	3	80	3	NS
Brine LC CN Standard GB/T2385-2022	≥99.6	100	200	50	300	20	NS	NS	NS	10	10	NS	50	50





QLPH Lithium Refinery Process Flow Diagram

### Procurement Strategy for Bécancour Lithium Refinery

Lithium Universe Limited announced that the Company's key lithium Board members and CEO visited Hatch's Shanghai procurement office to establish the procurement strategy for Bécancour Lithium Project.

Lithium Universe aims to replicate the procurement success in Jiangsu at the Bécancour Lithium Refinery in Québec. Jiangsu had 70% of the plant supplied by top-quality Chinese suppliers and the rest from worldwide suppliers. By implementing rigorous quality control measures at the supplier's manufacturing site, Galaxy were able to achieve top-quality equipment that aligned with international engineering standards. Local fabricators have been servicing the Chinese lithium refinery industry for the last 15 years and key suppliers utilised for the Jiangsu project have become the backbone of the rapid expansion across the country.

For Lithium Universe to be competitive and to build cost effective lithium refineries, LU7 will be using the "same equipment, same supplier" procurement strategy.

Firstly, with no change in the equipment specifications, there will be reduced engineering work required for the Definitive Feasibility Study (DFS). Secondly, with the "same supplier" strategy, LU7 can tap into the original supplier's design and construction experience, minimising cost and time associated with repeated detailed engineering.

Another key advantage is that the preferred suppliers will be able to provide LU7 with very accurate quotations, as opposed to budget numbers like most other projects. Key Board members and CEO reinforced this procurement strategy, design, and logistics with the Hatch procurement office in Shanghai last month.

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. This surge in demand is anticipated due to the numerous battery supply chain projects scheduled for construction over the next four years in Canada.



LU7 and Hatch Meeting in Shanghai

## Bécancour Lithium Refinery 3D Layout Completed

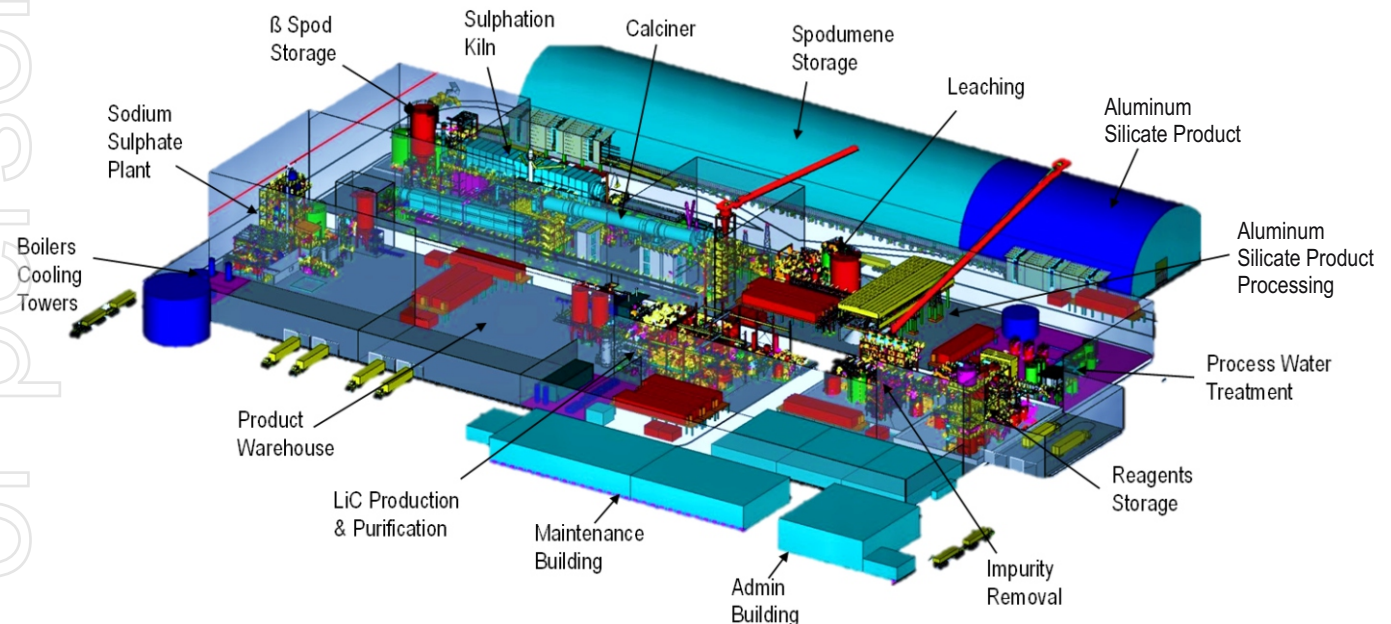
Lithium Universe Limited provided an update on the Definitive Feasibility Study (DFS) engineering work associated with the Company's Bécancour Lithium Refinery project.

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.

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.

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.



Lithium Universe Bécancour Lithium Refinery 3D Model

## COMPANY SNAPSHOT

### 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 in 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.



**Iggy Tan,**  
Chairman  
Ex Galaxy MD



**Patrick Scallan**  
Non-Executive Director  
EX GM Talison Lithium



**Dr Jingyuan Liu**  
Non-Executive Director  
Ex Galaxy GM Technology



**Terry Stark**  
Head of Mining  
Ex Galaxy GM Ops



**Roger Pover**  
Head of Li Processing  
Ex Galaxy Plant Manager



**John Loxton**  
Head of Li Refinery  
Ex Hatch Li Carb Plant



**John Sobolewski**  
Chief Financial Officer  
Ex Galaxy CFO & Company Secretary

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# QUARTERLY REPORT

## June 2024

**Lithium Universe Limited**  
**ASX: LU7**

ABN: 22 148 878 782

### Forward-looking

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.

### Financial Information

(as at 30 June 2024)

Share Price:	\$0.014
Shares:	819M
Options:	119M
Performance Rights:	61M
Market Cap:	\$11.5M
Cash:	\$1.6M

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T: +61 2 8046 2799  
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[www.lithiumuniverse.com](http://www.lithiumuniverse.com)

### Directors

Iggy Tan	Chairman
Gernot Abl	Executive Director
Pat Scallan	Non-Executive Director
Dr. Jingyuan Liu	Non-Executive Director

### Lithium Universe Interactive Investor Hub

Engage with Lithium Universe directly by asking questions, watch video summaries and see what other shareholders have to say, as well as past announcements.

<https://investorhub.lithiumuniverse.com/>



## ASX Additional Information

The Company provides the following information pursuant to ASX Listing Rule requirements:

**(a) ASX Listing Rule 5.3.1:**

Exploration and Evaluation Expenditure spend during the quarter was \$108,399. Full details of the exploration activity that had been conducted by the Company during the quarter has been set out within this report.

**(b) ASX Listing Rule 5.3.2:**

The Company confirms that there was no mine production and development activities for the quarter.

**(c) ASX Listing Rule 5.3.5:**

Payments to related parties of the entity and their associates outlined in the Company's Appendix 5B for the quarter related to directors' fees (and inclusive of superannuation entitlements) of \$261,209.

**(d) ASX Listing Rule 5.4.4**

The Company provides the following comparison of its actual expenditure on the individual items in the "use of funds" statement in its IPO Prospectus since the date of its admission to the ASX against the estimate expenditure on those items in the "use of funds" statement in the IPO Prospectus and an explanation of any material variances.

The material variances are due to the Company only recently being admitted to the Official List of the ASX on 14 August 2023. Additionally, the Company has incurred expenditures in respect to its "Lithium Processing Hub" strategy.

Use of Funds	Estimate of the first 2 years after ASX admission <sup>1</sup> (\$)	Actual Use since admission to the ASX (\$)	Balance Remaining (\$) <sup>3,4</sup>
Exploration and Development	4,842,092	2,319,943	2,522,149
Lead Manager Fees	270,000	275,683	(5,683)
Transaction costs	311,482	330,317	(18,835)
Working capital <sup>2</sup>	1,490,000	3,987,631	(2,497,631)
<b>Total</b>	<b>6,913,574</b>	<b>6,913,574</b>	<b>-</b>

Notes to ASX Listing Rule 5.4.4 table

<sup>1</sup> Lithium Universe Limited's (ASX:LU7) Use of Funds – ASX Prospectus 21 June 2023 Item 2.3 'Proposed use of funds'

<sup>2</sup> Includes expenditures incurred in respect to the Company's "Lithium Processing Hub" strategy.

<sup>3</sup> The difference between the Company's bank balance at 30 June 2024 and the closing balance per the table above is represented by expenditures that were incurred prior to the Company's compliance listing (June 2023).

<sup>4</sup> The Company's funds raised from its IPO were depleted during the quarter. Accordingly, no further responses to ASX Listing Rule 5.4.4 will be provided in subsequent quarters.

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**(e) ASX Listing Rule 5.3.3**

In accordance with Listing Rule 5.3.3, LU7 provides the following information concerning its exploration licences. No applications were made during the quarter by the Company to acquire further licences or surrender its existing licences.

The following table lists the Company's exploration licences held at the end of the quarter, and their location:

(f) Project	(g) Exploration Licence	(h) Location	(i) Status	(j) Ownership
Apollo <sup>1</sup>		Quebec, Canada	Granted	80%
Adina South <sup>2</sup>		Quebec, Canada	Granted	80%
Adina West <sup>3</sup>		Quebec, Canada	Granted	80%
Margot Lake <sup>4</sup>		Quebec, Canada	Granted	80%
Voyager	EL32/2022	Tasmania, Australia	Granted	80%
Voyager	EL40/2022	Tasmania, Australia	Granted	80%
Lefroy	E15/1876	Western Australia, Australia	Granted	100%
Lefroy	E15/1877	Western Australia, Australia	Granted	100%

**Notes**

<sup>1</sup> The Apollo Project comprises of 464 claims/licences, all of which are held 80% by Lithium Universe Limited. A detailed list of the claims can be found within the Company's Prospectus dated 21 June 2023.

<sup>2</sup> The Adina South Project comprises of 40 claims/licences, all of which are held 80% by Lithium Universe Limited. A detailed list of the claims can be found within the Company's Prospectus dated 21 June 2023.

<sup>3</sup> The Admina West Project comprises of 49 claims/licences, all of which are held 80% by Lithium Universe Limited. A detailed list of the claims can be found within the Company's Prospectus dated 21 June 2023.

<sup>4</sup> The Margot Lake Project comprises of 32 claims/licences, all of which are held 80% by Lithium Universe Limited. A detailed list of the claims can be found within the Company's Prospectus dated 21 June 2023.

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## Appendix 5B

### Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

**LITHIUM UNIVERSE LIMITED**

ABN

Quarter ended ("current quarter")

**22 148 878 782**

**30 June 2024**

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers		
1.2 Payments for		
(a) exploration & evaluation		
(b) development		
(c) production		
(d) staff costs (including directors)	(684)	(787)
(e) administration and corporate costs	(477)	(1,172)
1.3 Dividends received (see note 3)		
1.4 Interest received	1	9
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Government grants and tax incentives		
1.8 Other (provide details if material)		
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(1,160)</b>	<b>(1,950)</b>
<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire or for:		
(a) entities		
(b) tenements (including transaction costs)		
(c) property, plant and equipment	-	(3)
(d) exploration & evaluation	(108)	(171)
(e) investments		

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<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
	(f) other non-current assets	(953)	(1,457)
2.2	Proceeds from the disposal of:		
	(a) entities		
	(b) tenements		
	(c) property, plant and equipment		
	(d) investments		
	(e) other non-current assets		
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other		
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>(1,061)</b>	<b>(1,631)</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	4,107	4,107
3.2	Proceeds from issue of convertible debt securities		
3.3	Proceeds from exercise of options		
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(280)	(280)
3.5	Proceeds from borrowings		
3.6	Repayment of borrowings		
3.7	Transaction costs related to loans and borrowings		
3.8	Dividends paid		
3.9	Other		
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>3,827</b>	<b>3,827</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	1	1,361
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,160)	(1,950)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(1,061)	(1,631)

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<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
4.4	Net cash from / (used in) financing activities (item 3.10 above)	3,827	3,827
4.5	Effect of movement in exchange rates on cash held	-	-
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>1,607</b>	<b>1,607</b>

<b>5.</b>	<b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1	Bank balances	1,607	1
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>1,607</b>	<b>1</b>

<b>6.</b>	<b>Payments to related parties of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1	Aggregate amount of payments to related parties and their associates included in item 1	261
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

*Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.*

More information concerning the breakdown of the above payments to directors and their related parties can be found within the accompanying Quarterly Activities Report.

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7.	<b>Financing facilities</b>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
	<i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>		
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	<b>Total financing facilities</b>	-	-
7.5	<b>Unused financing facilities available at quarter end</b>		-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

8.	<b>Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1	Net cash from / (used in) operating activities (item 1.9)	(1,160)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(108)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(1,268)
8.4	Cash and cash equivalents at quarter end (item 4.6)	1,607
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	1,607
8.7	<b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	1.26
	<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>	

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer:

No. Outflows are expected to reduce significantly for the following quarter as the current quarter included numerous one off outgoings such as:

- (A) costs associated with the Company's various capital raising initiatives during the June 2024 quarter;
- (B) a higher than normal amount of outgoings which were incurred during the March 2024 quarter, and paid during the June 2024 quarter;
- (C) the Company has undertaken several budgeting measures which are expected to result in a reduction of outgoings from the following quarter.

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer:

The Company continues to monitor its funding position. The Company is considering its fund-raising options, including the identification of strategic investors. No specific proposals are available at this stage and such options will be pursued over the next quarter. In the meantime, the Company's budgeting initiatives described in 8.8.1 above are expected to result in substantial reductions in the Company's cash outgoings, which allow it to capitalise on the most viable funding model. Failing the identification of suitable strategic investors, other fund-raising activities will be considered over the next quarter.

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: Yes, refer to the Company's response provided under item 8.8.2 above.

*Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.*

## Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: **31 July 2024**

Authorised by: **The Board of Lithium Universe Limited**

(Name of body or officer authorising release – see note 4)

## Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the *[name of board committee – eg Audit and Risk Committee]*". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.