THE BÉCANCOUR LITHIUM REFINERY

DEFINITIVE FEASIBILITY STUDY

Lithium Universe LIMITED

FEBRUARY 2025

HIGHLIGHTS

The Lithium Universe Strategy

- Positive, robust Bécancour Refinery DFS even in low pricing environment
- LU7 Board has made Financial Investment Decision (FID) and proceeding to funding
- LU7 has a counter cyclical strategy – develop project, ready for price recovery
- Closing the Lithium Conversion Gap – growth in resource and end market projects

The Financial Modelling

- Economically viable with excellent pre-tax $NPV_{8\%}$ of approximately US$718M
- IRR (pre-tax) of approximately 21.0% and payback of 3.9 years based on;
- Price forecast of US$1,170/t SC6 and US$20,970/t for battery grade Li_2CO_3
- Current spot price is approx. US$775/t SC6 and US$10,680/t for battery grade LC
- Operating costs at around US$3,931/tonne;
- Capital cost estimate of US$549 million
- 11% increase from PFS mainly due to Zero Liquid Discharge (ZLD) system and escalation
- Expected annual revenue of approx US$383 million and EBITDA of around US$148 million
- Project break even at around US$740 /t (SC6) and around US$14,000 per tonne LC

The Design

- LU7 offers a solution to worldwide lithium conversion failures and startup problems
- Using proven Jiangsu Refinery operating technology and lithium industry experience
- Producing up to 18,270 tonnes/year of green battery-grade lithium carbonate
- Smaller off-the-shelf style plant rather than large difficult-to-operate facilities
- Initial focus on lithium carbonate production – feed for LFP batteries
- Assumptions based on real operating data and experience – not new aspirant

The Location

- Québec ideal trans-Atlantic lithium conversion centre, comparable to China
- Feedstock from Canada, Brazil and Africa – end market North America
- Critical cost benefits – cheap green power, transport mine/end market savings, US/Canada tariffs
- 95% GHG emission reduction with Hydro Québec's green energy

Next Steps

- Offtake discussions with interested OEMs underway
- LU7 to embark on the funding stage of the project

Lithium Universe Limited ASX:LU7
ABN 22 148 878 782

Suite 9, 295 Rokeby Road
Subiaco WA 6008 Australia

www.lithiumuniverse.com
investorhub.lithiumuniverse.com

Information Required by Listing Rules

The Bécancour Lithium Refinery Definitive Feasibility Study (DFS) does not rely upon estimated ore reserves / and or mineral resources. The spodumene concentrate feedstock for the proposed refinery has been assumed to have been purchased directly from spodumene miners currently producing spodumene concentrates or marketing agents or traders currently purchasing spodumene concentrate and selling to the downstream processors. Accordingly, the JORC Code is not relevant to this study nor are Listing Rules 5.16 and 5.17 to the extent to which they relate to matters concerning JORC.

Forward Looking Statements

This release contains "forward-looking information" that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to studies, the Company's business strategy, plan, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations. Generally, this forward looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely',' believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this news release are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information. Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current development activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of metals; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the chemical industry; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. This list is not exhaustive of the factors that may affect our forward-looking information. These and other factors should be considered carefully, and readers should not place undue reliance on such forward-looking information. Neither the Company, nor any other person, gives any representation, warranty, assurance or guarantee that the occurrence of the events expressed or implied in any forward-looking statement will actually occur. Except as required by law, and only to the extent so required, none of the Company, its subsidiaries or its or their directors, officers, employees, advisors or agents or any other person shall in any way be liable to any person or body for any loss, claim, demand, damages, costs or expenses of whatever nature arising in any way out of, or in connection with, the information contained in this document. The Company disclaims any intent or obligations to or revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law.

Cautionary Statement

The DFS is based on the material assumptions outlined including that it has been completed to a Class 3 level with a nominal level of accuracy of -15% and +20%, that the financial forecasts rely upon the purchase of third party spodumene concentrate as the feedstock for the plant. The DFS referred to in this announcement has been undertaken to assess the potential technical feasibility and economic viability of constructing and operating facilities capable of producing battery grade lithium carbonate for use in lithium-ion batteries from those units of operations and provide baseline financial metrics to consider future investment decisions.

The Definitive Feasibility Study (DFS) is based on the material assumptions outlined below. These include assumptions about the availability of funding. While Lithium Universe considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the DFS will be achieved. To achieve the range of outcomes indicated in the DFS, funding of in the order of US$550 million will likely be required. Investors should note that there is no certainty that Lithium Universe will be able to raise that amount of funding when needed. It is also likely that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Lithium Universe's existing shares. It is also possible that Lithium Universe could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce the Company's proportionate ownership of the project. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the DFS.

CONTENTS

EXECUTIVE SUMMARY

Lithium Universe Limited ("Lithium Universe" or the "Company," ASX: "LU7") is pleased to announce the results of its Definitive Feasibility Study (DFS) for the Bécancour Lithium Carbonate Refinery in Québec, Canada. The Company previously released a Preliminary Feasibility Study in October 2024. The follow-up DFS confirms the viability of a strong lithium conversion project, even within a below-average pricing environment. The Company plans to build a reliable, low-risk lithium conversion refinery with an annual capacity of up to 18,270 tonnes, utilizing proven expertise from the Jiangsu processing model. The facility will produce environmentally friendly, battery-grade lithium carbonate. The Company aims to establish a Canadian-based lithium chemicals business, purchasing spodumene feedstock from both domestic suppliers and international markets, including Brazil and Africa and producing a battery grade lithium carbonate product. This aligns with the Company's broader vision of contributing to the North Atlantic lithium supply chain and closing the Lithium Conversion Gap.

The project's economics continues to be highly favourable, even with conservative price assumptions. The refinery is economically viable with a pre-tax Net Present Value (NPV) of approximately US$718 million, using an 8% discount rate, and a pre-tax Internal Rate of Return (IRR) of around 21.0%. The full rate payback period is estimated at 3.9 years. The financial model is built on cautious price forecasts of US$1,170 per tonne for spodumene concentrate (SC6) and US$20,970 per tonne for battery-grade lithium carbonate equivalent (LCE). LU7's directors believe they have a reasonable basis for using the assumed price in the study of US$20,970 per tonne for battery grade lithium carbonate. Key operational assumptions include 86% plant availability and 88% lithium recovery. At full production capacity, the project is expected to generate approximately US$383 million in annual revenue, with costs totalling around US$236 million, leading to an annual EBITDA of approximately US$148 million and a gross margin of in the region of 39%. Post-tax, the NPV at an 8% discount rate is estimated at approximately US$449 million. The capital cost for the project is estimated at US$549 million, which includes a contingency of US$51 million. The capital cost has risen by 11% compared to the PFS, primarily driven by the inclusion of a Zero Liquid Discharge (ZLD) system (US$30 million) to enable the recycling and reuse of all process water on-site. Additional factors, such as escalation and updated pricing quotes, also contributed to this modest increase. The capital costs estimate is based on advanced design specifications from the Jiangsu Lithium Refinery model, ensuring robust financial planning and projection. These factors highlight the project's strong financial viability, even under conservative pricing conditions.

Chairman's Comment

Lithium Universe Chairman, Iggy Tan said "The strong NPV and returns for the project indicate an economically viable project and the Board has made the Financial Investment Decision (FID), and the project is now proceeding to the funding stage. An equity and debt adviser will be engaged to lead the funding outreach program, aimed at securing strategic partners at the project level to support project financing. Initial discussions with various banks and debt providers have been encouraging.

The Company will continue discussions with interested OEMs with spodumene offtake supply seeking conversion outside of China. We are confident that the Bécancour lithium refinery, with an annual capacity of 18,270 tonnes, will emerge as a leader in producing green, battery-grade lithium carbonate. We recognized that bridging the lithium conversion gap in North America, leveraging our accumulated lithium expertise and the proven technology from Jiangsu, is a clear strategy."

"Our counter-cyclical strategy is centered on advancing projects during market downturns, allowing us to strategically position ourselves for growth as the market rebounds. We are dedicated to funding and constructing a proven, low-risk lithium conversion refinery in Québec, marking the first step toward establishing Québec as the lithium conversion hub for the Transatlantic region."

WATCH:
Members of the Lithium Universe and Hatch Engineering team discuss the Definitive Feasibility Study (14min)

COUNTER CYCLICAL STRATEGY

Leveraging experience with cyclical movements in the lithium market, Lithium Universe utilizes a counter-cyclical strategy focused on developing projects during market downturns to strategically position itself as the market recovers. Although the recent oversupply of lithium has resulted in price declines, the Company remains confident in the strong long-term demand for lithium, driven by the growing electric vehicle (EV) and energy storage sectors. This ongoing demand underscores the need for continued investment in lithium mining and refining projects. LU7 believes that the current market conditions provide an optimal window for project development. With falling and depressed prices, less viable projects and weaker players have been cleared out of the market, leaving space for more robust and well-prepared companies. By advancing its Bécancour Lithium Carbonate Refinery during this downturn, LU7 aims to be ready for a price recovery and capitalize on future growth, ensuring its place in the evolving lithium market.

Over the past four years, lithium prices have experienced significant fluctuations due to the expanding electric vehicle (EV) market and increased demand for energy storage. From 2020 to early 2022, prices surged as supply struggled to keep pace with demand driven by the global shift towards cleaner energy. By 2022, lithium carbonate and hydroxide prices had risen over 400%, influenced by COVID-19-related supply disruptions. As of late 2023, prices have begun to stabilize due to new mining and refining projects. Although recent oversupply has led to price declines, long-term demand for lithium remains strong, necessitating continued investment in mining and refining.

COMPANY'S COMMENTARY ON SUPPLY DEMAND OUTLOOK

The lithium market is currently experiencing a rebalancing phase driven by oversupply and strategic production curtailments by major producers. In response to recent price declines, several key players have either reduced output or temporarily halted operations. Companies such as Core Lithium, the Greenbushes JV, Mineral Resources, and Albemarle's Kemerton facility have all implemented measures to manage supply. More recently, CATL's Yichun mine and Arcadium's Mt Cattlin operation have also scaled back production. Additionally, the Tianqi Kwinana lithium hydroxide plant has been placed under care and maintenance, reflecting broader industry trends aimed at stabilizing the market. These strategic adjustments highlight the industry's efforts to balance supply with demand dynamics, potentially paving the way for a healthier market recovery in the future.

The Company believes that in the next 12 to 18 months, the lithium supply-demand balance is poised for significant re-balancing. LU7 believes that lithium prices will correct faster than expected due to supply-side pressures. Historically, the lithium market tends to over-correct when prices decline, largely due to the dynamics of oversupply and the purchasing behaviour of the Chinese lithium industry. The prevailing mindset during periods of price reduction is, "Why buy today when you can buy later at a cheaper price?" This leads to significant cuts in inventory levels, which can drop to unsustainable lows.

However, when prices begin to recover, the opposite behaviour occurs. Anticipating further price increases, Chinese buyers rush to secure lithium and stockpile inventory. This reaction drives demand beyond the natural market requirements, causing prices to rise even further. This cycle of price-driven buying perpetuates further price hikes, as companies continue to purchase more in anticipation of future shortages, fuelling even greater upward momentum in lithium prices.

The Company believes the impact of lithium supply cuts is being significantly underestimated. Analysts project a 17% reduction this year and a 21% next year in annual reduction in supply, based on announced shutdowns. Additionally, low lithium prices have delayed or slowed the start of new projects and existing ramp-ups. Anecdotal evidence indicates that many Chinese lithium conversion plants, built during the boom, are now reducing operations or shutting down entirely due to a lack of spodumene feedstock. The Company anticipates that this will trigger another supply shortage. There's also a risk that companies may cut back too aggressively in response to low prices, further tilting the balance into a dramatic supply deficit.

On the demand side, the Company believes that the underlying demand for lithium is being underestimated. Analysts tend to focus on EV sales growth, sometimes just Europe and USA, as it is readily available data, but often overlook key trends. Notably, the growth of EVs in China has been underestimated. The penetration rate of EVs in China surged from 6% in 2020 to 40% in just four years, a pace that caught many Western analysts off guard. China's EV exports have also skyrocketed, rising from $3 billion in 2020 to $35 billion per annum today.

In addition, the production of electric buses and trucks by Chinese companies is not sufficiently tracked. Most Tier 1 Chinese cities now run predominantly electric buses, and 85% of taxi fleets in China are EVs. Importantly, an electric bus can use 5 to 6 times more battery capacity than a passenger EV. Another area with significant demand potential is electric trucks. A projected penetration rate of 0.5 million electric trucks by 2030 would equate to the battery capacity of 5 million EVs, as electric trucks require roughly 10 times more battery capacity than passenger EVs. This hidden demand is expected to put additional strain on lithium supply.

A major factor often overlooked in demand forecasts is the rapid expansion of battery energy storage systems (BESS), which is emerging as a "dark horse" in the market. Two significant changes have reshaped the industry. First, the price of solar panels has plummeted due to production overcapacity, reaching rock-bottom levels. Second, with the surge in renewable energy generation, particularly solar power, electricity prices often turn negative during daylight hours due to the excess supply. This year alone, 600 GW of solar farms were installed, and this number is expected to increase to 800 GW annually. To make these solar farms economically viable, BESS is essential to store the excess energy generated during the day and shift it to the night-time peak period. Based on new capacity installations, around 1.6 TWh of BESS will be required annually to support the growing solar infrastructure. This growing demand for BESS adds another layer of pressure to the lithium supply, further amplifying the supply-demand imbalance.

The Company believes that as lithium supply continues to diminish and demand from both EVs and BESS accelerates, the market is on the verge of a severe shortage. This shortage will likely drive prices up even more sharply. With supply already constrained by shutdowns and delays in new projects, coupled with growing demand across multiple sectors, the anticipated supply-demand imbalance could materialize sooner than expected. This imbalance may lead to a more dramatic and intense price correction, as the market struggles to meet the rapidly increasing need for lithium across both the EV and energy storage sectors.

LU7's counter-cyclical strategy focuses on developing projects during market downturns, allowing the company to capitalize when the market rebounds. By advancing projects when others are scaling back due to low prices, LU7 positions itself to benefit from a tighter supply market and rising prices when demand recovers. This approach helps the company stay ahead of competitors, secure favourable terms for project development, and ensure readiness to meet future demand when the market conditions improve.

CLOSING THE LITHIUM CONVERSION GAP

Currently, over 90% of global LFP battery manufacturing is concentrated in China, but North America is rapidly expanding its capacity. Ford plans to build a $3.5 billion factory in Michigan with an annual capacity of 35 gigawatt-hours (GWh) by 2026, while Tesla is developing a facility in Nevada with a 10 GWh capacity focused on improving charging speed and energy density. LG Energy Solutions is investing $5.6 billion in Arizona to produce LFPs for energy storage systems and EVs.

By 2028, North America is expected to add nearly 1,000 GWh of battery manufacturing capacity, supporting the production of 10 to 13 million electric vehicles annually. Key states like Georgia, Kentucky, and Michigan will lead this growth. Canada is also investing in the sector, with partnerships from Volkswagen, Stellantis, and others, helping to secure its position in the global automotive market and meet the rising demand for EVs. 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 development in the region by 2028. It is unsure how many of them will be successful. 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.

The Company believes that there is a shift in the Canadian government's stance concerning the export of critical lithium spodumene concentrate to other countries, particularly China, for downstream processing of battery-grade lithium carbonate and lithium hydroxide. In late 2022, the government ordered Sinomine, a Chinese state-owned company, to divest from Canadian company Power Metals Corp to relinquish its spodumene concentrate off-take contract. The government stated that the decision was made following a comprehensive "multi-step security review" conducted under the Investment Canada Act. Canadian lithium developers must now provide a downstream solution.

In 2024, the U.S. is set to significantly increase tariffs on key Chinese exports, aiming to reduce dependency on Chinese supply chains and enhance domestic production capabilities. Among the targeted materials are lithium carbonate (Li_2CO_3) and lithium hydroxide (LiOH), critical inputs for battery production, with tariffs rising to 25%. This marks a significant escalation from the previous rates, reflecting the focus of the US on securing strategic resources. These measures are part of a broader effort to address supply chain vulnerabilities and bolster local industries.

QUÉBEC TRANS ATLANTIC LITHIUM CONVERSION CENTRE

The Company believes Québec is emerging as an ideal trans-Atlantic hub for lithium conversion, offering a strategic alternative to China. With feedstock readily available from Canada, Brazil and Africa, Québec is well-positioned to supply the growing North American market. Its competitive edge lies in access to low-cost, green energy priced at just US$0.04 per kWh, making the lithium refining process both cost-effective and sustainable.

The US Inflation Reduction Act (IRA), European Battery Passport, and Canadian critical minerals mandates are expected to reshape the North American battery market by encouraging domestic production and reducing reliance on Chinese suppliers. Québec's close proximity to lithium-rich regions such as James Bay, home to 500Mt of +1% Li_2O deposits, and major spodumene producers in Latin America and Africa, enhances its competitive position in the global market.

The shift towards Canadian domestic production is also driven by the need for compliance with Canadian Security regulations, which strengthens supply chain security and market competitiveness. Additionally, Québec's location near major electric vehicle (EV) and energy storage manufacturers in Canada reduces transportation costs and carbon emissions, making it a critical player in the lithium supply chain. As North American demand for EVs and energy storage systems continues to rise, ensuring a reliable domestic lithium supply is essential. Expanding lithium conversion capabilities in Canada not only enhances supply chain security but also supports regional battery manufacturing, economic growth, and global clean energy goals, while reducing the environmental impact associated with long-distance material transportation.

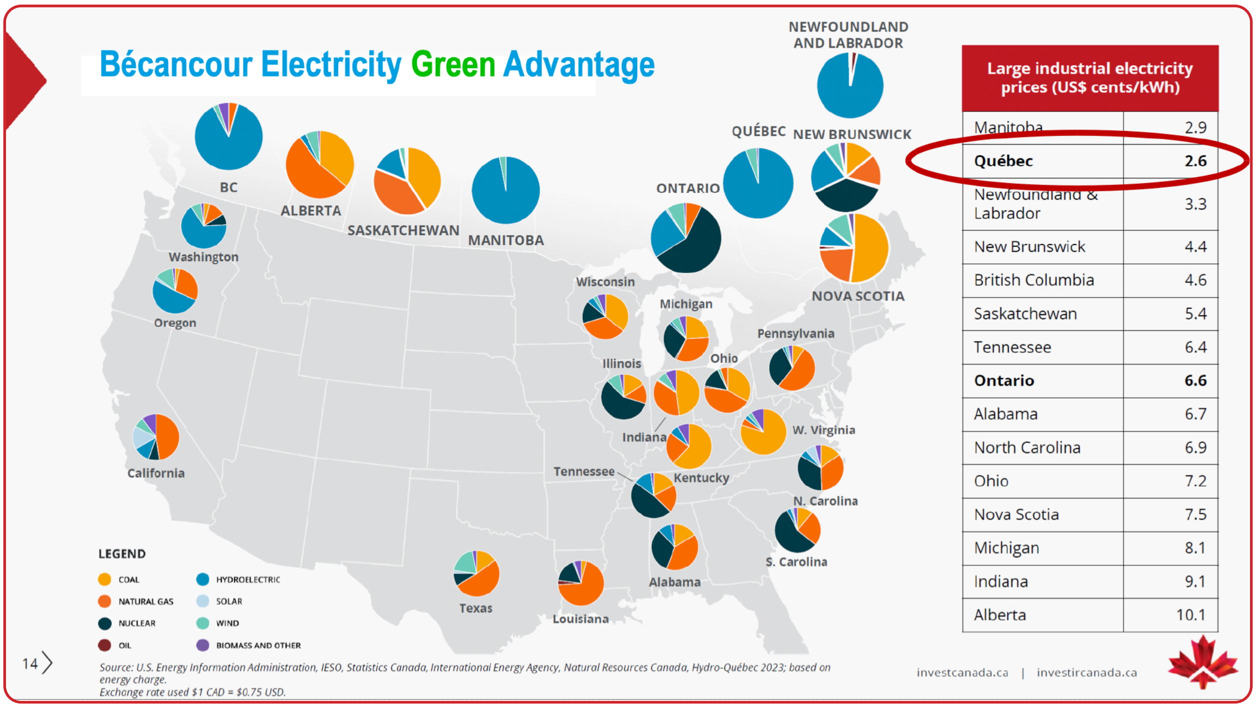


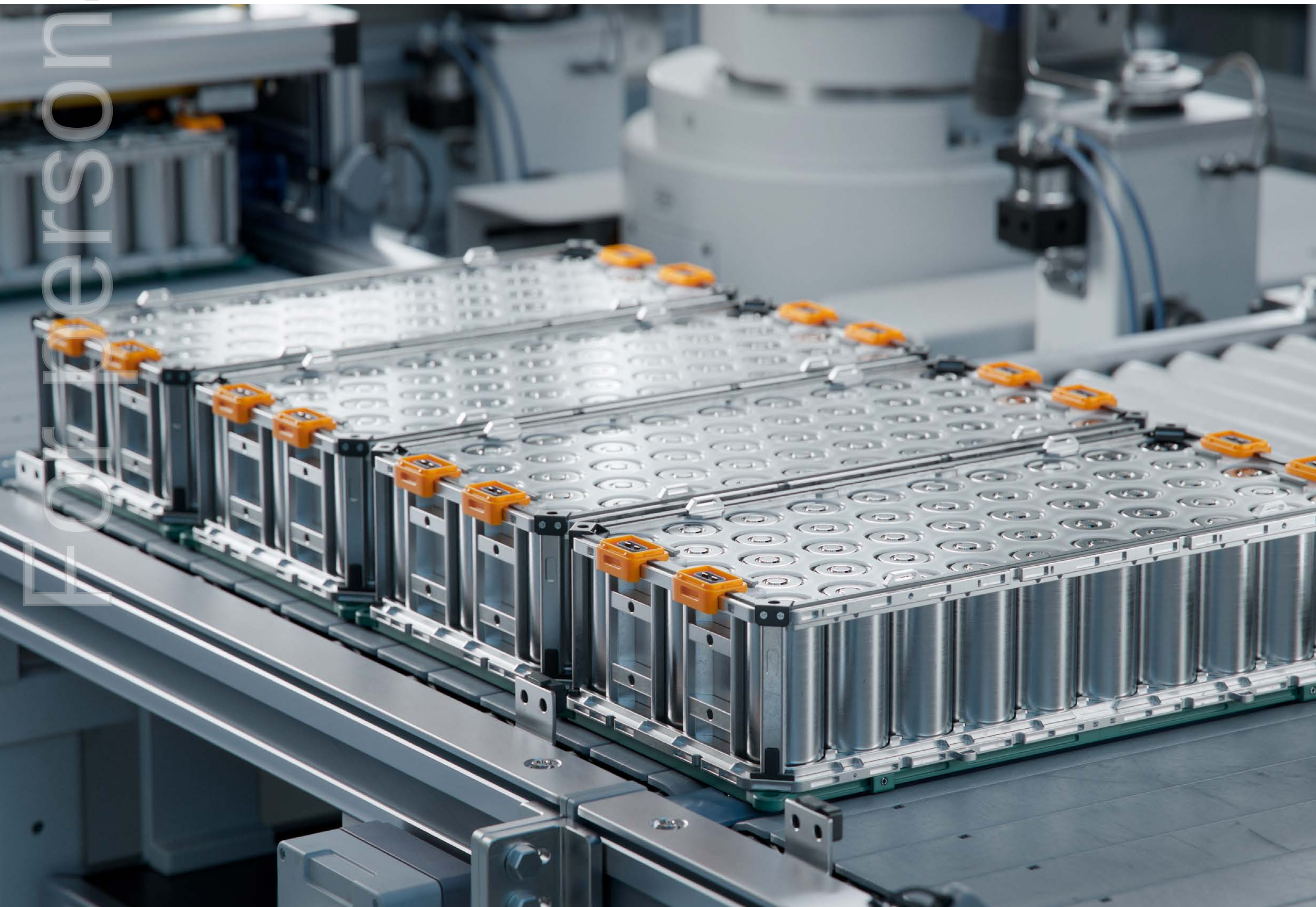
Figure 1: Electricity prices in Trans-Atlantic Region

MARGINS OF CONVERTERS VS CONCENTRATE

There is often a misconception on the profit margins received by converters compared to spodumene producers. The company contends that due to the challenges in establishing successful lithium operations and limited capacity to produce battery-grade lithium, converters also experience similar margins as miners. A prime example showcasing this is Tianqi Corp, which owns the Jiangsu Lithium Carbonate plant and procures spodumene from the market. Tianqi's ownership of 25% in Greenbushes also reports similar margin levels for both their converter and concentrate businesses in 2021 and 2022, as illustrated in the table below. In both years, the reported margins for their chemical business are very similar to those of their spodumene business. This indicates that the profitability of lithium conversion is just as attractive as mining and processing spodumene.

Table 1: Tianqi Corp 2022 Annual Report Excerpt

	Gross Margin 2021	Gross Margin 2022
Lithium Concentrates	62.0%	83.9%
Lithium Compounds	61.5%	85.7%



GLOBAL LITHIUM CONVERSION FAILURES & CHALLENGES

LU7 addresses the recurring issues faced by western lithium conversion projects worldwide, offering a robust solution to the industry's common startup problems. Some examples of conversion technology challenges include:

North American Lithium Failure

The North American Lithium project, initiated in 2014, was a significant effort to establish a robust lithium production facility in Canada. Despite an investment of approximately CAD 250 million, the project struggled to achieve its goals, producing only 109 tonnes of lithium carbonate (Li_2CO_3) before encountering severe financial difficulties. Just a year after starting, in 2015, the project declared bankruptcy, highlighting the challenges of launching new lithium ventures in Canada. This failure is a reminder of the risks involved in the lithium refining technology.

Nemaska Lithium Failure

Nemaska Lithium, a Canadian lithium project, aimed to revolutionize lithium production using new electrolysis technology. After completing its Definitive Feasibility Study (DFS) in 2018, the project garnered significant attention and investment, with CAD 411 million spent on development. However, despite these efforts, Nemaska Lithium failed to successfully start up in 2019, leading to its collapse. This failure underscores the risks of relying on unproven technologies in lithium processing.

Tianqi Kwinana Lithium Hydroxide Failure

The Tianqi Kwinana Lithium Hydroxide plant in Western Australia, launched 8 years ago, in October 2016, has faced significant setbacks as reported in global media. Initially anticipated as a major advance in lithium hydroxide production outside China, the project has struggled with numerous delays and is now in care and maintenance. Key issues include the choice of an engineering firm lacking experience in lithium conversion. The project led to substantial development problems and a capital cost overrun from A$400 million to over well over A$1 billion. As of Fiscal Year 2024, the plant operates at less than 20% of its capacity, with only one of its two planned production trains functioning. The difficulties also stem from the problematic transfer of Chinese lithium technology (batch process), which was altered and poorly implemented in the Australian context (continuous process). The lack of operational oversight and design modifications further complicated the project's execution.

Albemarle Kemerton Problems

The Albemarle Kemerton Lithium Hydroxide plant in Western Australia, which began construction in 2019, has struggled significantly over six years. The plant has faced a 24-month commissioning period and ongoing operational issues, resulting in it operating at less than 20% of its designed capacity. Challenges include the involvement of an engineering firm which lacked key lithium conversion experience, and difficulties in adapting Chinese batch processing technology to Australian continuous processes. With only one of four planned production trains operational, the plant has experienced a US$1.5 billion financial write-down. Once again, the transfer of Chinese batch-processing lithium technology to Western-style continuous processing was problematic.

Alkaline Pressure Leach Process Plants

Several new conversion refineries have recently been announced that utilize the alkaline pressure leach process, a technology the Company regards as unproven. A 1995 attempt by Greenbushes to establish a 5,000 tpa facility using a similar process failed due to severe scaling and operational issues. LU7 Chairman, Iggy Tan commissioned that plant for Greenbushes and believes that the process is susceptible to extensive scaling and blockages, which makes operation very difficult. The chemistry is more difficult to control compared to a conventional lithium carbonate or lithium hydroxide sulphuric acid process. Today, there is no commercial conversion plant that uses this technology.

JIANGSU USES A CONVENTIONAL PROCESS FROM 1950's

The production of lithium carbonate from spodumene ore through processes like calcination and sulphation has a history dating back to the mid-20th century. Spodumene, a lithium-bearing mineral, became an important source of lithium as demand for the metal increased, particularly during the post-World War II industrial boom. This period saw rising interest in lithium for applications in grease production, ceramics, glass, and later for its use in batteries. In the 1950s and 1960s, advancements were made to extract lithium more efficiently from spodumene, which was more abundant compared to other lithium sources like brines.

The core of the traditional method involved thermal treatment or "calcination" of spodumene ore. Spodumene exists naturally in an alpha phase, which is chemically stable and less reactive. To make it amenable to chemical processing, it is heated to temperatures above 1,000°C, transforming it into the beta phase. This high-temperature calcination is crucial, as beta-spodumene is far more reactive and can then undergo further chemical treatment. Once calcined, the spodumene is subjected to sulphation roasting, a process that involves treating it with concentrated sulfuric acid at elevated temperatures. This step breaks down the mineral matrix, allowing lithium to be converted into lithium sulphate, which is soluble in water. The next step in the production process involves leaching the roasted ore with water to dissolve the lithium sulphate. Following this, a precipitation reaction is carried out using sodium carbonate (soda ash) to recover lithium in the form of lithium carbonate. This process works because lithium carbonate has low solubility in water, causing it to precipitate out of solution. The lithium carbonate produced is then filtered, washed, and dried to obtain a high-purity product suitable for industrial applications.

While the fundamental principles of this method have remained consistent, the technology has seen incremental improvements over the decades to increase efficiency and reduce environmental impact. Initially, the process was highly labour-intensive, energy-consuming, and involved handling large amounts of corrosive chemicals. However, by the late 20th century, technological advancements (at Jiangsu) led to more automated systems, improved heat recovery methods, and better controls over emissions. Modern refinements also include optimizing the roasting conditions and the use of additives to reduce energy consumption and enhance lithium yield. At Jiangsu, better impurity removal and a purification plant at the end of the plant was added to guarantee battery grade specs.

Today, despite the emergence of alternative lithium sources like brines and direct lithium extraction technologies, calcination and sulphation of spodumene remain critical, especially in regions where hard rock resources are predominant. The method continues to be an essential part of the global lithium supply chain, particularly in Australia and parts of Canada, where significant spodumene deposits are mined and processed.

Figure 2A: Galaxy Jiangsu Lithium Carbonate Plant

USE OF PROVEN JIANGSU TECHNOLOGY

In 2012, under the leadership of Iggy Tan and Dr. Jingyuan Liu, Hatch Ltd. engineered and constructed the 17,000 tpa Jiangsu Lithium Carbonate Plant for Galaxy Resources Limited. As the world's largest lithium refinery of its kind, the Jiangsu facility exceeded its design capacity and set new standards in process control, design, and product quality. Its innovations have been widely adopted across Chinese converters and continue to influence new projects around the world.

The lithium refinery in Jiangsu was designed and constructed following strict Australian and international standards, making it the largest continuous processing lithium refinery of its time. With an initial production capacity of 17,000 tonnes per annum (tpa) of battery-grade lithium carbonate, this refinery was built to cater to the growing demand in the global market. At the time, the lithium carbonate equivalent (LCE) market in China was around 35,000 tpa, making this refinery a significant player in the industry.

The facility quickly became a benchmark for lithium refineries worldwide, setting new standards in both production capacity and process technology. Hatch, a global leader in engineering and project management, served as the Engineering, Procurement, and Construction Management (EPCM) contractor for the project. Over the years, the facility has been updated with minor process improvements ensuring that operations are both efficient and reliable. All these improvements have been incorporated in the Bécancour design making it an established and proven process. Today, the refinery operates at a capacity of 20,000 tpa and produces some of the best quality battery grade lithium carbonate in the world.

The refinery employs an advanced Allen-Bradley control system, capable of managing over 6,000 control inputs. This system allows for real-time monitoring as well as the analysis of historical trends, ensuring that the refinery operates at peak efficiency. A state-of-the-art laboratory is integrated into the facility for both process control and final product testing, ensuring that the quality of the lithium carbonate produced is consistent and meets stringent standards. The use of Statistical Process Control (SPC) techniques further contributes to maintaining low standard deviations in product quality, making this refinery a model of consistency and excellence in the lithium production industry.

Figure 2B: Galaxy Jiangsu Lithium Carbonate Plant

Figure 2C: Galaxy Jiangsu Lithium Carbonate Plant

LU7 has focused on addressing key challenges that have hindered previous lithium refinery projects: a lack of operational expertise and the absence of proven, continuous process refining technology in the West. The company's solution is straightforward: leverage the proven success at the Jiangsu Refinery and assemble a team of lithium experts who successfully built and operated the Jiangsu Lithium Refinery for Galaxy Resources. Hatch Engineering, the firm responsible for constructing the Jiangsu plant, has been selected as the engineering partner for this project.

To mitigate technology risks, LU7 will model the Jiangsu plant strategy, utilizing the same process, equipment, and supplier strategy. By employing proven equipment designs, the engineering work required for the Preliminary and Definitive Feasibility Studies is significantly reduced. Additionally, with the same supplier strategy, LU7 can benefit from the original supplier's design and construction experience, minimizing costs and time associated with repeated detailed engineering. All lessons learned modifications from Jiangsu have been integrated into the proposed Bécancour plant design.

The Bécancour lithium refinery is designed to produce up to 18,270 tonnes per annum (tpa) of lithium carbonate, processing spodumene concentrate from global sources. Initially aimed at 16,000 tpa, updated recovery rates and design optimisation have increased this target to a more realistic 18,270 tpa. The facility will feature a purification unit to ensure high-quality, battery-grade lithium carbonate, optimized for use in lithium-ion batteries. This focus on lithium carbonate, rather than lithium hydroxide, aligns with Lithium Universe's expertise and its application in Lithium Iron Phosphate (LFP) cathodes, which are valued for their stability and extended shelf life.

PROVEN EXPERTISE

The Company is comprised of lithium industry leaders who are known for rapidly developing and operating Australian hard rock lithium extraction and downstream operations in China. In an industry such as lithium, which is still relatively emerging compared to more established sectors, and in a context where retaining experienced personnel is increasingly challenging, Lithium Universe has assembled a team with an exceptionally high level of lithium expertise.

Mr Iggy Tan
Executive Chairman

Mr Tan ran Greenbushes lithium operation in 1995 and commissioned the first lithium refining project in Australia. The process employed was an alkaline pressure leach process. Mr Tan was one of the first Australian mining executives to identify the significant opportunity within the emerging lithium-ion battery sector when he spearheaded Galaxy Resources Limited (Galaxy). Mr Tan is looking to replicate the success with Galaxy, having built Galaxy's Mt Catlin Spodumene Project (137,000 tpa of spodumene product) and the downstream Jiangsu Lithium Carbonate project (capacity of 17,000 tpa). Mr Tan also acquired the James Bay Spodumene Project in Canada and the Sal de Vida Brine Project in Argentina for Galaxy. Subsequently, the Jiangsu Lithium Carbonate plant was sold to Tianqi Lithium Corp for US$260 million in 2014. The north portion of the Sal de Vida project was sold to POSCO for US$280 million in 2018.

Mr Patrick Scallan
Non-Executive Director

Mr Scallan's extensive experience in the lithium industry offers a valuable addition to the Lithium Universe Board. With over 25 years of management experience at the world-class Greenbushes Mine, he is a seasoned veteran of the lithium industry. Greenbushes is the largest lithium hard rock mine globally, also hosting the highest-grade orebody in the world. Mr Scallan oversaw the mine's many expansions, increasing annual output from 200,000 in 1997 to over 1,400,000 tpa today, and navigated numerous ownership changes during his tenure. He is a specialist in hard rock exploration, mining and spodumene concentrating, with downstream relationships with major spodumene converters worldwide.

Mr Scallan is also highly skilled in managing local community relationships, having acted as shire councillor for nearly 20 years during his time at Greenbushes receiving his Order of Australia Medal (OAM) for his community and local government contribution.

PROVEN EXPERTISE

Dr Jingyuan Liu
Non-Executive Director

Dr Liu is widely regarded as a leading technical expert in the lithium industry. Dr Liu has acted as an expert technical consultant on over 20 different lithium converters worldwide from due diligence to commissioning. He previously held the position of General Manager of Development and Technologies at Galaxy Resources Limited, where he was responsible for overseeing the construction and commissioning of the Mt Cattlin Spodumene Project and the world-renowned Jiangsu Lithium Carbonate plant. Jingyuan also played a key role in designing the flow sheet for the Sal de Vida brine project in Argentina. Following his work with Galaxy Resources, he has acted as a special adviser to various lithium carbonate and lithium hydroxide projects globally, including the Lithium Hydroxide Plant operated by Tianqi in Kwinana, WA.

Mr John Loxton
Head of Lithium Refinery

Mr Loxton's lithium experience commenced in 2010 with work on the Jiangsu Lithium Carbonate Plant EPCM for Galaxy Resources in China where his responsibilities initially were at a Sponsor level, and further into the project he was Project Manager, managing the final stages of construction and commissioning. In 2019, John was engaged by Tianqi Lithium as Head of Projects for the completion of execution of their investment in a lithium hydroxide processing plant in Kwinana, Western Australia. John managed the commissioning of the first train achieving first product in 2021 and undertook execution planning and establishing a project team for an identical second train in 2022.

Mr Terry Stark
Head of Mining

Mr Stark was previously Managing Director of the Resources Division for Galaxy Resources Limited. Mr Stark was responsible for all of Galaxy Resources' mineral resources assets including exploration and mine operations. He oversaw the Mt Cattlin construction and successful start-up. Mr Stark has an extensive mining career and has led the development operation of numerous Australian projects.

Mr Roger Pover
Head of Processing

Mr Pover has 48 years of experience in mining and mineral processing, with a strong focus on lithium. Previously, Roger was the Processing Manager at Galaxy Lithium Australia, managing operations at Mt Cattlin, and he also played a key role at the Greenbushes Lithium Mine as Production and Engineering Manager.

INITIAL FOCUS ON LITHIUM CARBONATE PRODUCTION

By replicating the success of Jiangsu, the Company intends to produce an output of up to 18,270 tpa of battery-grade lithium carbonate instead of lithium hydroxide. Lithium carbonate is the feedstock to Lithium Iron Phosphate (LFP) batteries and mid-range nickel-based lithium batteries.

LFP batteries are projected to dominate the global battery market, with an anticipated 87% market share by 2033. This growth is driven by their applications in electric vehicles (EVs), energy storage systems (ESSs), and consumer electronics (CEs). Fastmarkets analysts highlight that LFP batteries are favoured for their stability, safety, and affordability. In China, LFP batteries currently lead the EV market, accounting for over 67% of installations in 2023, despite having lower energy density compared to Nickel Cobalt Manganese (NCM) batteries.

This dominance is bolstered by their benefits over NCM batteries, particularly as global economies accelerate EV and ESS adoption to facilitate the energy transition. LFP batteries are critical for large-scale energy storage applications due to their reliance on lithium carbonate and iron phosphate. The ESS market is expected to experience substantial growth, with LFP batteries forecasted to capture 86% of the market share by 2024, thanks to their cost-effectiveness and reliability. Additionally, while NCM batteries will continue to dominate in the passenger EV sector due to OEM preferences in the US and Europe, the adoption of LFP cathodes by more OEMs is increasing.

In a visit to China in 2024, LU7 noted that lithium producers that the Company met with, were expanding or modifying existing plants to have the ability to produce battery-grade lithium carbonate as opposed to expansion into lithium hydroxide. The significant increase in demand for lithium carbonate in China is due to the popularity of Lithium Iron Phosphate (LFP) batteries.

SS Battery Chemistry Forecast

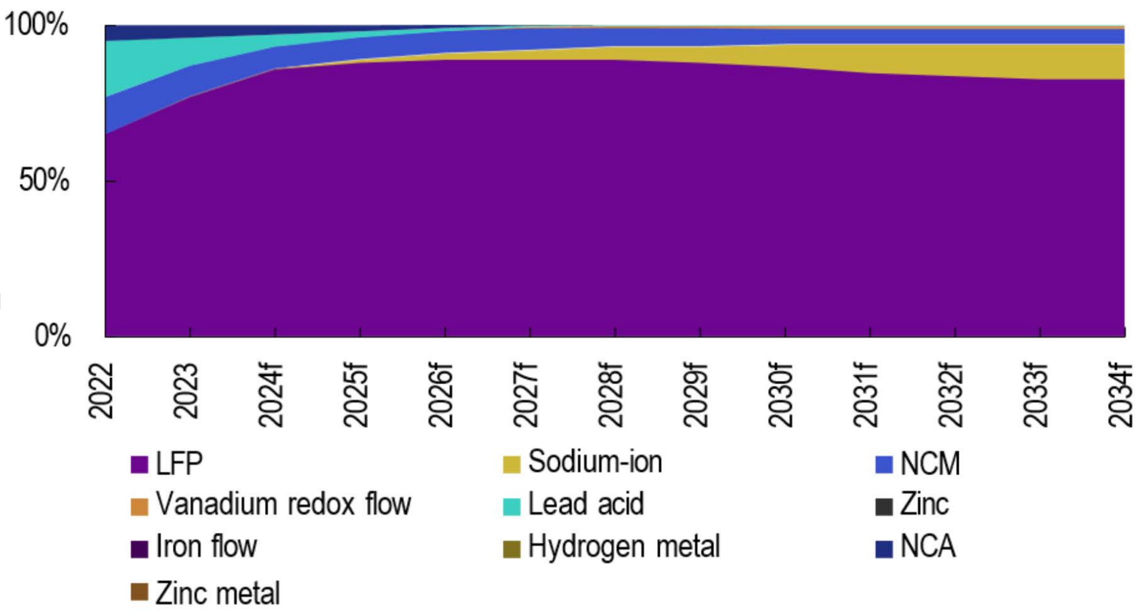


Figure 3: LFP batteries are poised to dominate the global battery market, with a projected 48% EV market share by 2024. [Source: Fastmarkets, August 2024]

Global demand for lithium remains strong, driven primarily by the electric vehicle (EV) sector. In the first half of 2024, global EV sales grew by 20%, with market share rising to 17.8% in 2023 and projected to reach 20% by 2024 for both BEV and PHEV passenger cars. Energy storage systems (ESS) and consumer electronics also contribute significantly to demand. In 2024, lithium demand for ESS is expected to reach 200,000 US tonnes globally, a threefold increase over four years, matching the EV demand levels of 2019. The United States, now the second-largest battery storage market, doubled its capacity in 2023.

While China has sufficient chemical capacity to support its domestic and export markets, refining limitations in Western markets could impact the availability of battery-grade lithium products compliant with frameworks like the IRA and the European Battery Passport. This presents a strategic opportunity for LU7 to play a pivotal role in the ex-China lithium conversion battery supply chain.

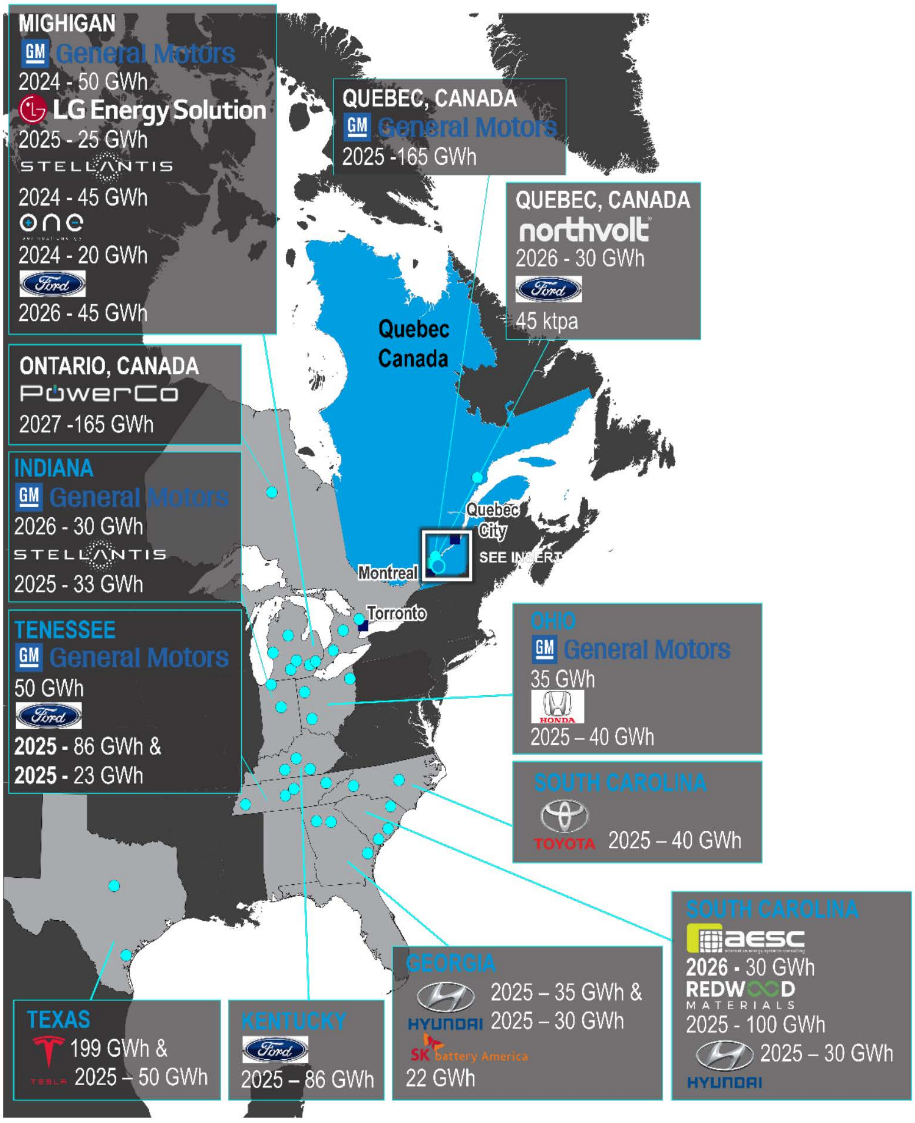


Figure 4: Rapidly expanding North American battery factories [Source: Company Research]

LITHIUM PRICE FORECAST

In recent years, lithium prices have experienced significant volatility, influenced by the rapid growth of the electric vehicle (EV) industry and increased demand for energy storage solutions. From 2020 to early 2022, lithium prices surged dramatically due to supply constraints and heightened demand, driven by the global shift towards cleaner energy, particularly in Europe, the U.S., and China. The COVID-19 pandemic exacerbated supply chain disruptions, contributing to a competitive market. By 2022, prices had skyrocketed, with some prices as high as US$70,000 per tonne of lithium chemicals.

By late 2023, lithium prices began to stabilize as new mining projects came online, leading to market corrections. The influx of supply from Latin America, Africa and Australia, combined with advancements in battery technology that may reduce lithium dependence, is expected to prevent a return to the extreme price highs of 2021–2022. However, current low prices due to oversupply are likely unsustainable in the long term. As demand from EVs and energy storage systems continues to rise, existing supply will be insufficient to meet future needs. Expanding lithium mining and refining operations is crucial to address this demand and avoid potential future shortages and price spikes. Despite the current price dip, the long-term demand for lithium remains strong. Projects like Bécancour can still be economically viable by focusing on efficient production and leveraging localized supply chains to reduce costs and enhance competitiveness in the clean energy market.

LONG TERM SPODUMENE AND LITHIUM CARBONATE PRICE ASSUMPTIONS

Lithium Universe has taken a conservative approach to long-term price forecasting, estimating US$1,170 per tonne for spodumene concentrate (SC6 Bécancour Port) and US$20,970 per tonne for battery-grade lithium carbonate. These projections are based on recent market forecasts from independent reporting agencies, banking commodities analysts, company disclosures, and technical reports. Table 2 provides a comparative analysis of long-term price forecasts sourced by the Company. As shown, the industry average forecast for SC6 is approximately US$1,234 per tonne, while lithium carbonate equivalent (LCE) prices are expected to average around US$21,933 per tonne. To maintain a conservative outlook and account for current market conditions, Lithium Universe has adjusted its forecast to 5% below the consensus figures.

Table 2: Company sourced comparative analysis of long-term pricing forecast

Company	Published Report	SC6	LCE
Avalon Advanced Materials[1]	Preliminary Economic Assessment	$1,000	$26,000
Fastmarkets	10 Year Forecast	$1,812	$22,700
Goldman Sachs[2]	Lithium Price Forecast	$1,150	$15,500
Sibanye Stillwater (NYSE: SBSW)[3]	Technical Report Summary	$1,042	$15,195
Alkemy Capital (LSE: ALK)[4]	Feasibility Study	$1,500	$25,000
Sayona Mining Ltd (ASX: SYA)[5]	Standalone Refinery	$1,167	$25,585
Rocktech Lithium (TSX: RCK)[6]	Bankable Project Study	$1,532	$25,038
Piedmont Lithium (ASX: PLL)[7]	Preliminary Economic Assessment - LHP2	$1,200	$22,000
Liontown Resources (ASX: LTR)[8]	Downstream Scoping	$1,289	$29,401
Piedmont Lithium (ASX: PLL)[9]	Preliminary Economic Assessment - Carolina	$651	$12,910
	Average	*$1,234*	*$21,933*
Lithium Universe	**Definitive Feasibility Study**	**$1,170**	**$20,970**

[1] Avalon Advanced Materials, titled "Avalon Completes PEA: Post-Tax C$4.1 Billion NPV (8%) and 48% IRR at its Thunder Bay Lithium Processing Facility, ON", dated 03 September 2024.
[2] MSN, titled "Here's the latest lithium price forecast through to 2027", dated 04 March 2024.
[3] Sibanye Stillwater Limited, titled "Keliber Lithium Project, Finland - Technical Report Summary", dated 13 December 2023.
[4] Alkemy Capital Investments PLC, titled "Completion of Feasibility Study for Australia's first independent Lithium Sulphate processing facility in Port Hedland", dated 23 August 2023.
[5] Sayona Mining Limited, titled "Standalone lithium carbonate plant NPV of A$3.2B at NAL produces a combined NAL NPV of A$5.4B", dated 21 June 2023.
[6] Rock Tech Lithium Inc., titled "Rock Tech Lithium completes Bankable Project Study for its Guben Converter Project", dated 04 November 2022
[7] Piedmont Lithium Limited, titled "Piedmont completes preliminary economic assessment for second U.S. lithium hydroxide plant", dated 09 March 2022.
[8] Liontown Resources Limited, titled "Updated Downstream Scoping Study Highlights Next Growth Horizon for Kathleen Valley Project", dated 11 November 2021.
[9] Piedmont Lithium Limited, titled "Chemical plant PFS demonstrates exceptional economics and optionality of USA location", dated 26 May 2020.

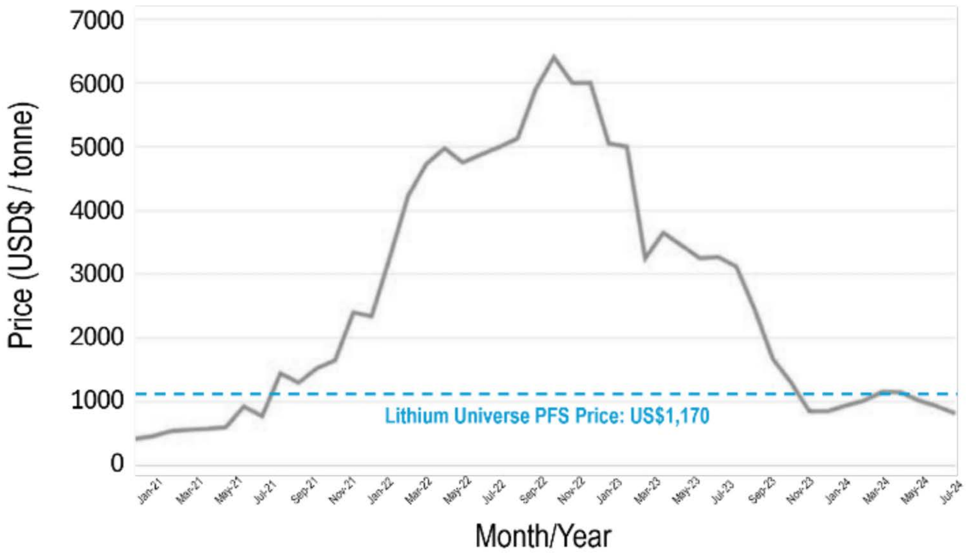


Figure 5: Spodumene SC6 historical prices vs LU7 Forecast

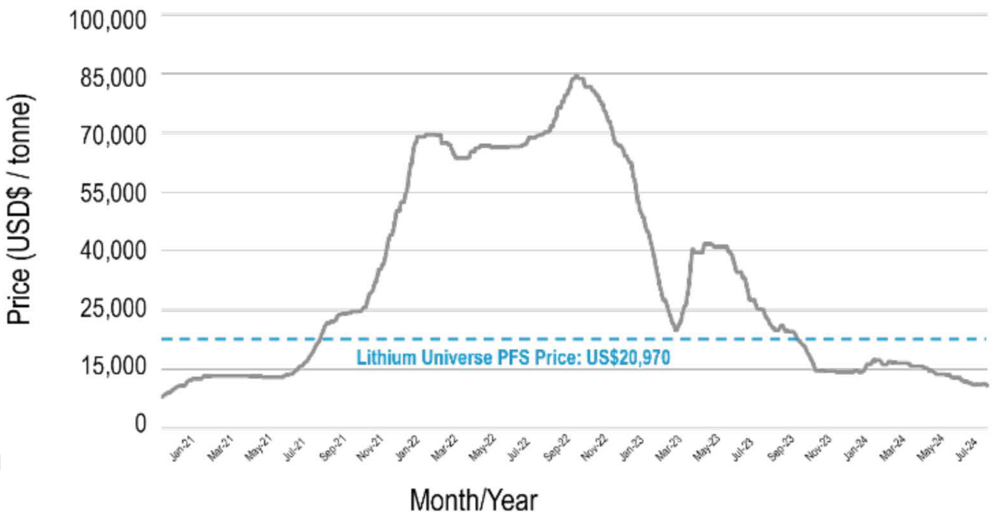


Figure 6: BG Lithium Carbonate historical prices vs LU7 Forecast

Figures 5 and 6 illustrates the long-term price assumptions used by LU7 compared to historical pricing over the past 4-5 years, showing highly conservative assumptions used in the financial model. This cautious outlook suggests significant potential for upside as market conditions improves. *See Figure 5 and 6.*

BÉCANCOUR SITE LOCATION

Lithium Universe has executed an option agreement on a key property within the Bécancour Waterfront Industrial Park (BWIP). Bécancour, situated on the southern side of the St Lawrence River, equispaced between Montreal and Québec City. The address is Boulevard Bécancour (Highway 30 / Route 132), in the Bécancour Industrial Park in Bécancour, Québec. The Option Agreement relates to an area of 27 hectares or 270,000sq.m, at current market prices in the region. The option term lasts 36 months from signing, with an initial monthly option fee of CAD $46,376 for 24 months starting March 2025, which will be deducted from the final purchase price.

The site is generally flat, with an elevation of approximately 5-6 meters, slightly lower in the northern portion. Regionally, the topography slopes gently towards the St. Lawrence River. Surface water drains by infiltration into previously used agricultural ditches and the Décharge Lavigne water system to the northwest.

Positioned near a major highway, the site seamlessly connects to the extensive North American highway network. Additionally, the facility benefits from daily service by the Canadian National Railway (CN), enabling cross-continental transportation from east to west and north to south, linking key ports on the Atlantic and Pacific coasts. The Port of Bécancour, operational all year-round, boasts a water depth of 10.67 meters, accommodating vessels of varying sizes. It features a pier extending 1,130 meters into the St. Lawrence River, equipped with 5 berths and a roll-on/roll-off ramp, further solidifying its strategic fit as the location for the Company's proposed Lithium Carbonate Refinery due to its ability to easily access international spodumene supply whilst the Canadian internal spodumene supply develops. Highway access is available via the smaller boulevard Bécancour, ending at the southwestern tip of the lot.

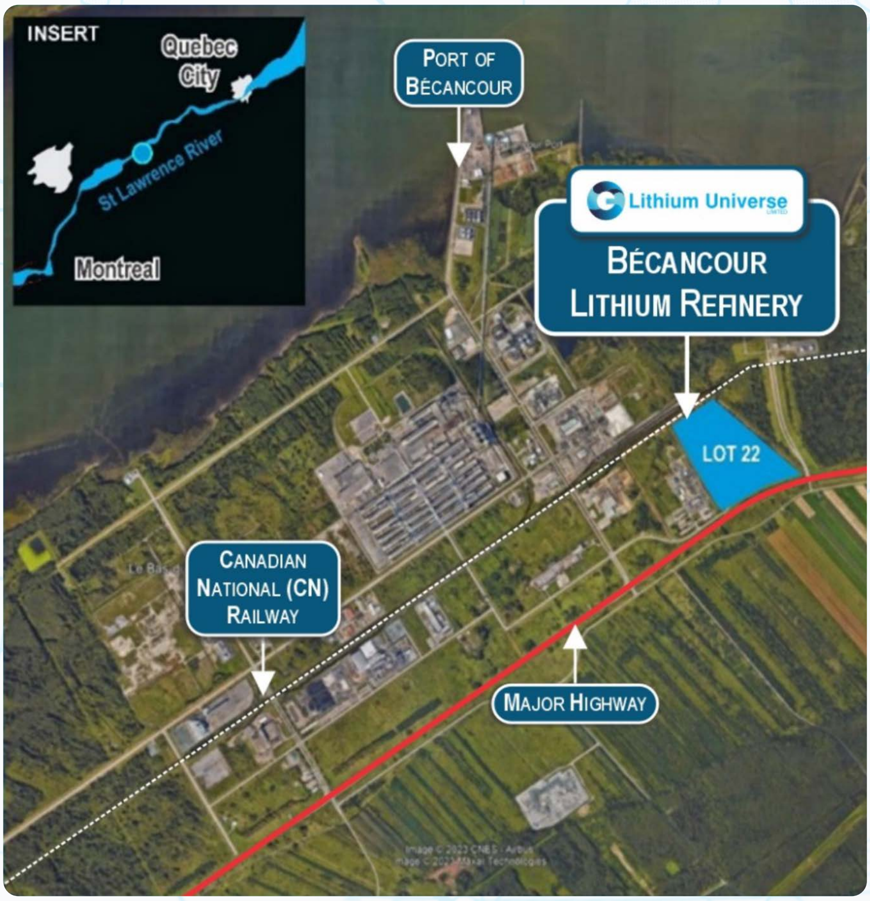


Figure 7: The Company's refinery site within the Bécancour Industrial Facility situated between Montreal and Québec City.

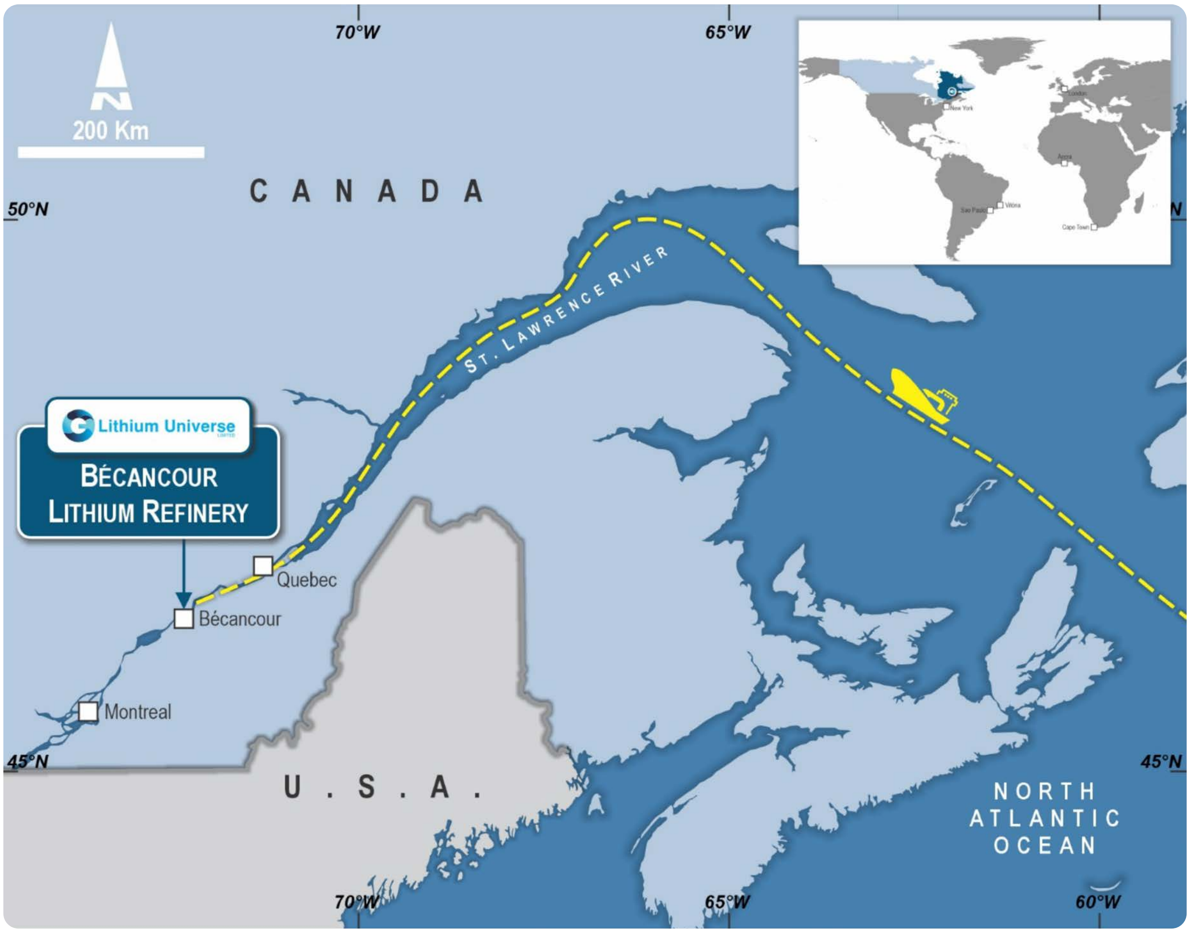


Figure 8: The Company's refinery site within the Bécancour Industrial Facility situated between Montreal and Québec City.

Access to Green Energy

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 Company has officially applied for up to 22.5 MW of green electricity (Train 1) to Hydro-Québec. The application process with Hydro-Québec, outlines the power needs for construction, commissioning, start-up, and the gradual ramp-up to full production. With a proposed annual energy consumption of 118,260,000 MWh, the Company projects that switching to Hydro Québec's green energy will reduce greenhouse gas emissions from plant operations by 95% compared to conventional energy sources.

Utilities (Power, Water, Natural Gas)

The Site stands at the intersection of hydro-electrical distribution networks, making the BWIP a highly reliable centre for low-cost hydroelectric power in Québec. In addition, the park features a co-generation plant generating 550 MW, reinforcing its appeal to the Company. Additionally, the BWIP benefits from a robust infrastructure, including a 2,400 kPa high-pressure line and an underground distribution network, ensuring a seamless supply to user companies. The Site's filtered and treated water is supplied by the City of Bécancour's filtration plant. The municipal network includes reservoirs with a combined total capacity of 15,910 cubic meters, plus an additional 5,600 cubic meters of reservoir capacity linked to the municipal network. This additional reservoir features a diesel-powered emergency pumping system, which ensures a flow rate of 16 cubic meters per minute. A drinking water pumping station, part of the SPIPB infrastructure, is located to the northwest of the Site, outside its boundaries, while the associated drinking water aquifer is situated along Bécancour Boulevard. Sanitary wastewater generated by businesses in the area is managed through a network operated by SPIPB.

LOT 22, BÉCANCOUR INDUSTRIAL PARK

The design of the Bécancour Lithium Carbonate Plant will be modelled after the proven Jiangsu facility, with targeted operational enhancements. The Jiangsu plant has historically processed various third party spodumene feedstock including Mt Cattlin and Greenbushes ore among others, and grades ranging from 5% to 6% Li_2O. The primary objective of this engineering study is to develop a comprehensive design and cost estimation for a standalone battery-grade lithium carbonate plant with an annual capacity of up to 18,270 tonnes per annum (tpa). The product will be battery grade specification with better than 99.5% Li_2CO_3. The specification is shown in Table 4 on the following page.

This facility will be engineered to process spodumene concentrate sourced globally. The required feedstock for the plant will be approximately 140,000 tpa at 6% Li_2O grade however, the plant has been designed to receive grades as low as 5% Li_2O. Typically, industry-supplied spodumene averages around 5.5% Li_2O. The design of Bécancour is based on the successful Jiangsu Lithium Carbonate Plant, the Bécancour plant will uniquely integrate renewable electricity, enhancing the sustainability of the process and product. Hatch, which was responsible for building the Jiangsu plant, has been selected as the engineering partner for this project.

Figure 9: Model of the Lithium Universe Bécancour Lithium Refinery.

Initially, the projected output was approximately 16,000 tpa based on a 5.5% spodumene feed. However, following recent test results, revised recovery rates, and the current production capacity of the Jiangsu plant at 20,000 tpa, the target output for the Bécancour refinery has been adjusted to around 18,270 tpa. The Company remains confident that this revised target is both realistic and achievable.

The final battery-grade product will be packaged in bulk bags and shipped in sea containers to the North American markets.

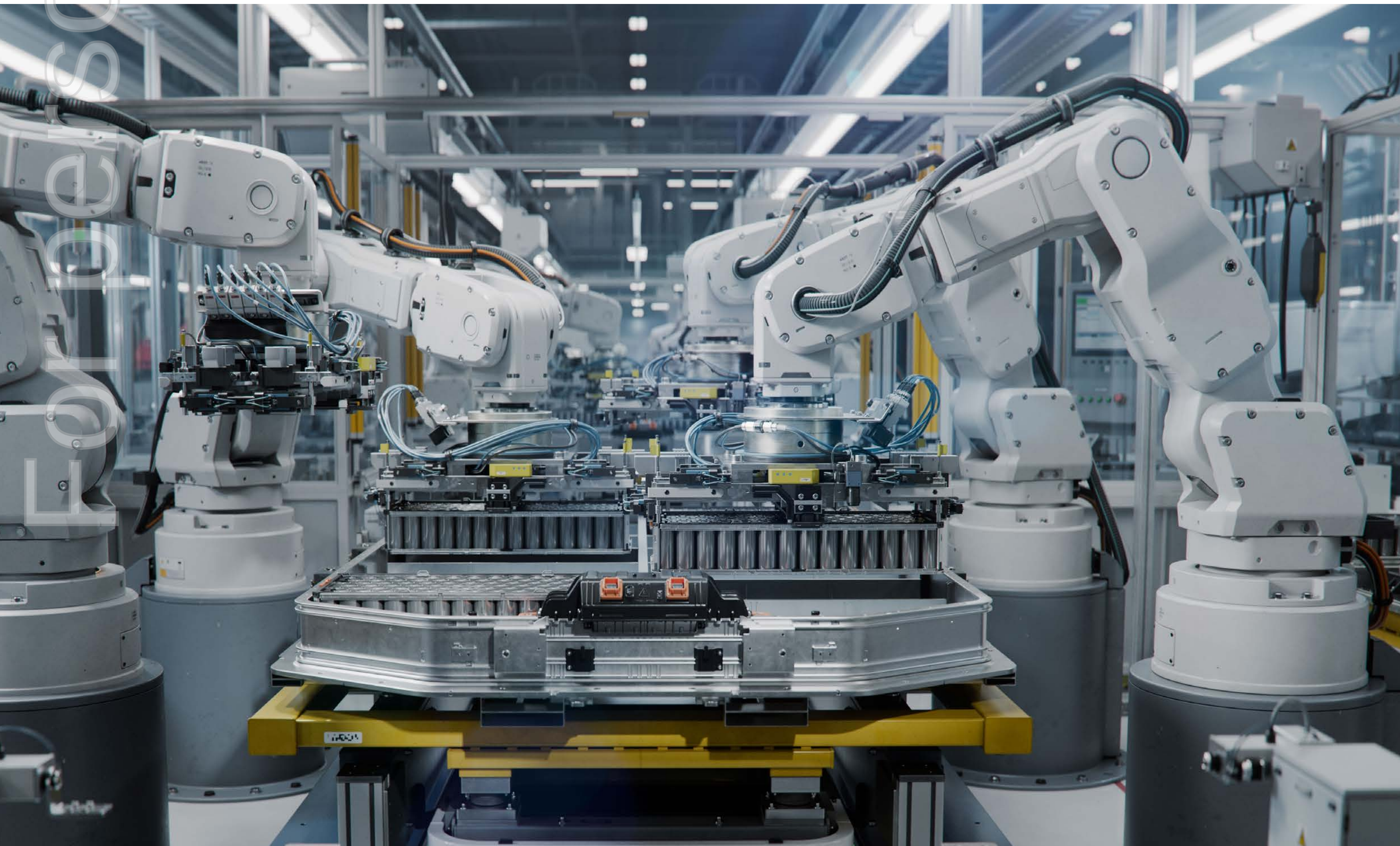
WATCH:
Bécancour Lithium Refinery 3D Model Video Flythrough (1min)

Table 3: Bécancour Lithium Refinery Key Criteria

Inputs	Approx Volume (t/year)
Estimated Production Battery Grade Lithium Carbonate	16,748 (5.5% Feed) - 18,270 (6% Feed)
Assumed Spodumene Feedstock at 5.5% to 6% Li_2O	140,000
Steady State Recovery	88%
Steady State Availability (inc annual shutdowns)	86%
Ramp up to full rate	3 years

Table 4: Specification for Battery Grade Lithium Carbonate

Elements	LC Content	SO_4^{2-}	Cl^-	Ca	Na	K	Al	Zn	Ni	Fe	Mn	Mg	Cu	B
LC CN Standard YS/T582-2013	≥99.5	800	30	50	250	10	10	3	10	10	3	80	3	NS



BÉCANCOUR FLOW SHEET

The flow sheet is based upon the proven reference plant. The concentrate is calcined at 1080°C in a direct-fired rotary kiln, with cyclone pre-heaters, to convert the alpha spodumene to the leachable beta spodumene. The calcining kiln off-gases will pass through a cyclone and an electrostatic precipitator to comply with environmental emissions limits. The hot calcine is indirectly cooled and dry-milled to less than 300 µm. After storage in a surge bin, the beta spodumene is mixed with concentrated sulphuric acid and roasted at 250°C in an indirectly heated kiln. The sulphating kiln off-gases will be cleaned with a wet scrubber to meet site environmental emissions limits. The sulphated spodumene is cooled and fed to the leach circuit. The combined leached solids and precipitated impurities are thickened before being filtered in a belt filter. The alumina silicate by-product will be sold to the cement industry as a cement additive. The filtrate is combined with the thickener overflow and passed through a polishing sand filter and an ion exchange column to remove residual calcium, magnesium, and other multivalent cations before the lithium carbonate area.

The solution entering the lithium carbonate production area is heated and then reacted with a hot sodium carbonate solution in a single crystalliser operating at 95°C. The coarse crystals from the crystalliser are thickened before passing to the centrifuge circuit. Raw lithium carbonate is further purified to battery grade using the carbonation process. After slurried in demin water, soluble lithium bi-carbonate is formed from the bubbling of carbon dioxide gas. The solution is filtered, and lithium carbonate is re-crystalised when the solution is heated using injected steam. Carbon dioxide gas is re-generated which is recycled to the front end of the purification process. Battery-grade lithium carbonate is centrifuged and dried in an indirect-fired kiln at 120°C. The dry coarse lithium carbonate is air-milled to less than 6 µm in a microniser and then pneumatically conveyed to the storage bins and bagging stations. Anhydrous sodium sulphate is produced from the vacuum evaporative crystallisation, dried, packaged and sold to the textile industry as a by-product.

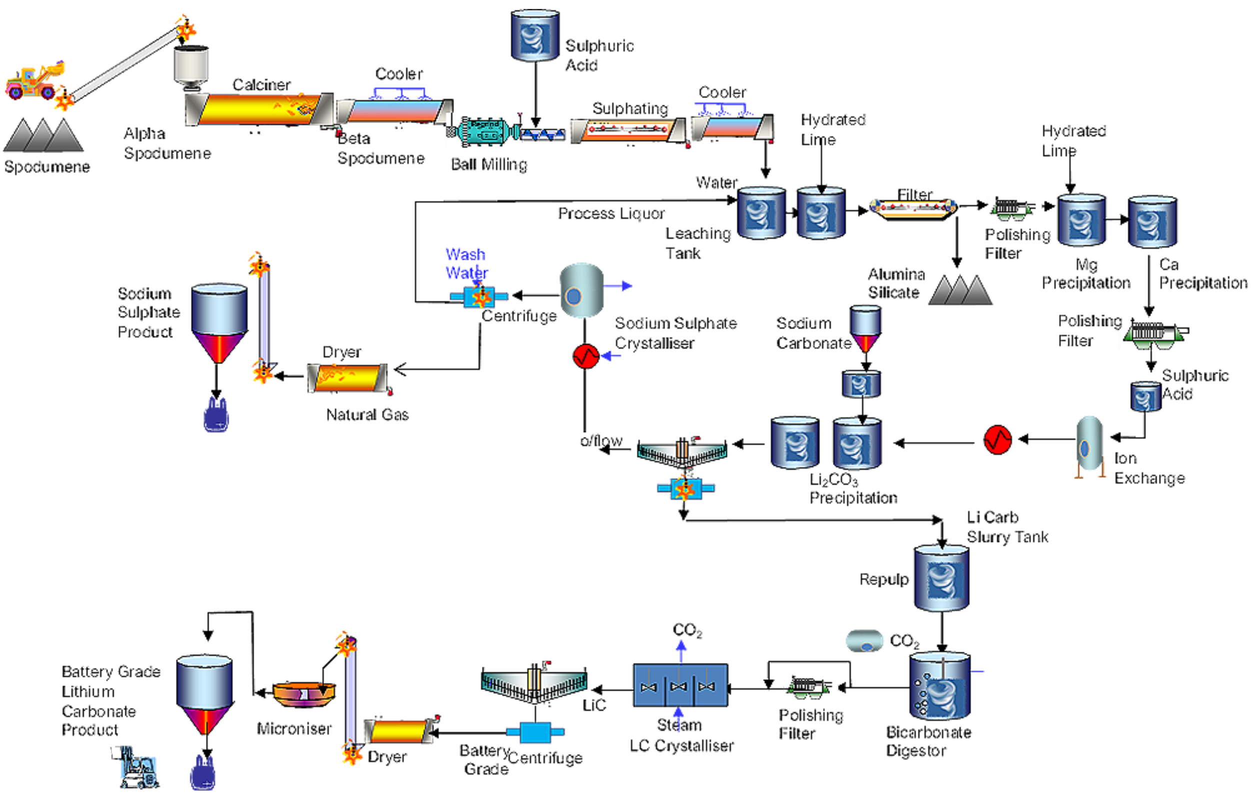


Figure 10: Lithium Universe Bécancour Process Flow Sheet

PATENT APPLICATION PROCESS

The design of the Bécancour Lithium Refinery will integrate cutting-edge advancements and innovations that surpass existing technologies. The company is actively preparing to submit three potential patents to protect these novel lithium processing methods.

1. ***Impurity Removal Section:*** *Developing a method to eliminate the need for filtration pre-coat materials. This will facilitate the removal of fine impurity residues without lithium loss and also enable the use of smaller filtration equipment.*

2. ***Purification Section:*** *Optimizing target process conditions to reduce steam consumption and enhance lithium recovery. This is achieved by pre-heating the process liquor prior to steam heating without scaling problems.*

3. ***Sodium Sulphate Section:*** *Introducing a cooling step after crystallization. This reduces the sulphate content in recycled liquor returned to the leaching process, thereby improving both lithium recovery rates and leach throughput.*

These innovations have been independently developed by Lithium Universe, leveraging its in-house expertise. To safeguard these advancements, the company is collaborating with its patent lawyers to draft three patents, collectively known as the Bécancour Patents.

PLANT LAYOUT

An overall site layout plan was developed where the main facilities and major pieces of equipment are identified, i.e. the spodumene feed stockpile, kilns, driers, cooler, ball mill, belt filters, process tanks and bins, reagent tanks and bins, thickeners, non-process buildings including amenities, laboratory and office, lithium product storage, sodium sulphate storage, main substation, air compressor building and maintenance and stores. The layout defines the roads required for delivery of raw materials and shipment of products and co-products. The main piping racks for the reticulation of utilities, reagents, process piping and electrical cable trays have been defined on the layout. All gas fired equipment such as kilns and driers are located outside of buildings to reduce risks associated with use of natural gas. Most of the plant areas are in heated buildings as part of a winterization of the plant.

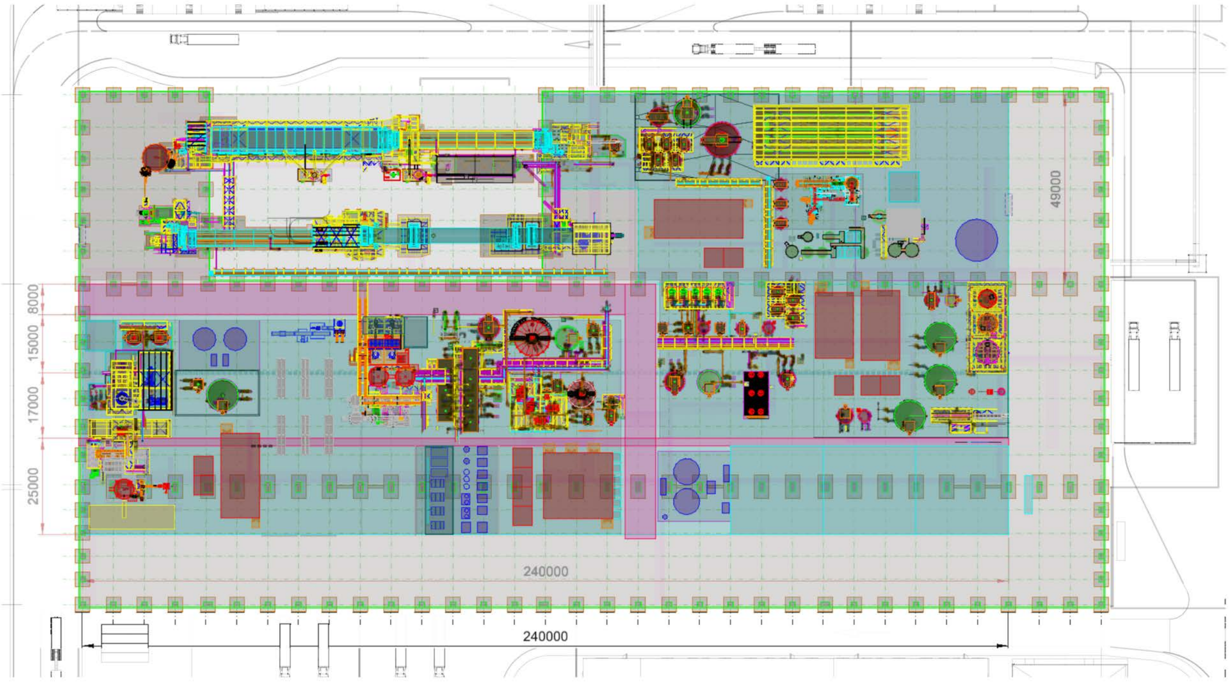


Figure 11 Lithium Universe Bécancour Refinery Plant Internal Layout

The plant layout has incorporated new plant areas such as the boiler plant and process effluent treatment facilities. Optimization efforts on the optimal location and number of plant switch rooms have been completed. Additionally, enhancements in spodumene and residue storage have been optimised with a focus on improving materials handling and increasing capacity.

The layout design on-site is being carefully developed with consideration of environmental constraints to ensure compliance with regulations and sustainability standards. These developments are aimed at improving the overall efficiency and effectiveness of the project.

WATCH:
Members of the Lithium Universe and Hatch Engineering team discuss some of the design changes made in the DFS (4min)

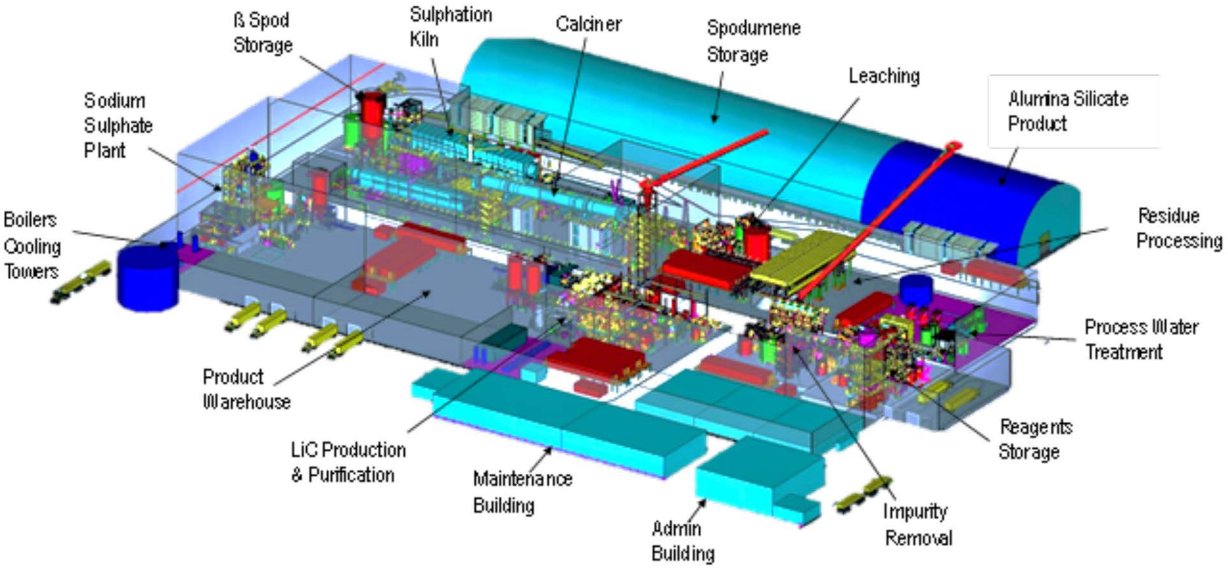


Figure 12 (A-D): Lithium Universe Bécancour Refinery Plant Layout

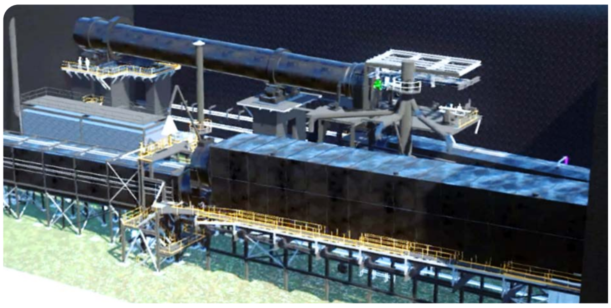


Figure 12B

Figure 12C

Figure 12D

Figure 12E: Lithium Universe Bécancour Refinery Plant Layout

Figure 12F: Lithium Universe Bécancour Refinery Plant Layout

PROCESS REAGENTS AND BY-PRODUCT PRODUCTION

The chemical handling systems at the production facility are designed to manage a variety of substances essential to the operation. These include sodium carbonate, flocculant, sulphuric acid, and sodium hydroxide, each playing a distinct role in the process. Following the management of these chemicals, the facility produces notable secondary products such as sodium sulphate and alumina silicate. Sodium sulphate, with its diverse industrial uses, is primarily sold to the textile and detergent industries, while alumina silicate, an effective cement additive, is aimed at enhancing the strength and sustainability of cement production.

Process Reagents

The sodium carbonate system includes a storage bin, feeding and weighing systems, a make-up tank, a distribution pump, and a media filter. Sodium carbonate is delivered by truck, pneumatically discharged into the storage tank, mixed with hot water in the make-up tank, and then distributed throughout the plant. It is used mainly for calcium precipitation and in the lithium carbonate crystalliser, with piping included in the 3D model and piping Material take-offs (MTOs). The flocculant system features a make-up tank and distribution pump. Flocculant is delivered in bags, mixed with water, and then pumped to the thickener. This system's piping is also incorporated into the 3D model and piping MTOs. Sulphuric acid is transported by truck, stored in a bunded tank, and distributed through two duty/standby pumps. It is used primarily for the beta spodumene in the pug mixer. Sodium hydroxide is delivered to the site, stored in a bunded tank, and distributed via two duty/standby pumps. It is used for precipitating impurities and pH control, with its piping detailed in the 3D model and piping MTOs.

Table 5: Raw material supply specifications and volume

Inputs	Approx Volume (t/year)
Spodumene concentrate (6%)	**140,000**
H_2SO_4 (93 %w/w)	**55,000**
$CaCO_3$ (98.2 %w/w)	**14,800**
Na_2CO_3 (58% dense, active at 99.8 %w/w)	**39,800**
NaOH (50 %w/w)	**3,600**
H_2O_2 (50 %w/w)	**2,010**
HCl (31 %w/w)	**3,930**
Diatomaceous Earth (100 % w/w)	**880**

Sodium Sulphate by-product

As a secondary product of the process, the production facility generates around 54,000 tonnes of sodium sulphate anhydrate (Na_2SO_4) annually. Sodium sulphate is considered non-toxic and is integral to various industrial processes. It is predominantly used in detergent manufacturing, where it acts as a filler in powdered home laundry detergents, constituting about 50% of its global production. Additionally, it is crucial in glassmaking as a fining agent that removes air bubbles from molten glass, fluxes the glass, and prevents scum formation during refining. In the textile industry, sodium sulphate increases the ionic strength of dyeing solutions, aiding in the even penetration of dyes. At the Jiangsu Lithium Refinery, all sodium sulphate by-product was sold to the textile and detergent industries.

Sodium Sulphate by-product MOU

Advanced discussions with a global distributor of sodium sulphate products are ongoing for the supply of sodium sulphate by-products from Bécancour for distribution to established markets in Africa. Given Bécancour's closer proximity to these markets, this is a more cost-effective supply source than China. This arrangement will eliminate disposal costs for the project and is expected to generate a modest net revenue stream.

Alumina Silicate Cement Product

The process also yields in the region of 130,000 tonnes of alumina silicate by-product annually and will be marketed as a cement additive. This product comprises silica (SiO_2), aluminium oxide (Al_2O_3), and ferric oxide (Fe_2O_3). It features a fine particle size and large specific surface area, enhancing its reactivity and utility in cement production. The Jiangsu Lithium Refinery successfully sold this by-product to local cement industries. Alumina silicate can improve cement strength and durability by absorbing $Ca(OH)_2$ produced during hydration, filling gaps, and reducing heat generation. It also helps to resist cracking in large-volume concrete by mitigating temperature-induced stress. The effectiveness of alumina silicate in cement is well-established, with cement containing 30% alumina silicate showing a 132% increase in 28-day compressive strength compared to Portland cement. Additionally, using the fly ash activity determination method, cement with 30% alumina silicate demonstrates a 174% increase in 3-month compressive strength compared to cement with 30% finely ground quartz sand. By replacing some cement raw materials, alumina silicate can reduce production costs, improve efficiency, and enhance cement quality and durability. Lithium Universe will focus on establishing sales of the alumina silicate additive to local cement manufacturers, providing significant cost-saving benefits.

Alumina Silicate Product MOU

Lithium Universe Limited and Lafarge Canada Inc. have entered into a strategic partnership aimed at advancing lithium processing technologies and strengthening the local supply chain for critical battery materials in Canada. Our primary goal within this partnership is to provide Lafarge with Aluminosilicate product material, which they will analyze for its potential use in their cement and concrete products. We are committed to supporting Lafarge in their assessments to ensure the material meets their stringent quality standards. This partnership underscores our dedication to finding innovative applications for our by-products, thereby contributing to sustainability in the construction sector.

The objective of establishing a downstream standalone lithium refinery is to design it with the robust capability to process spodumene feedstock from any part of the world. Samples from Australia, Brazil, and Africa, featuring various lithium grades, were sourced and are currently undergoing process testing at Linyi University, one of the world's leading lithium research institutes. It is critical that the proposed refinery has the capability to efficiently process spodumene feedstock from diverse sources worldwide. This adaptability ensures that the lithium production operation remains robust and flexible, offering optionality in spodumene feedstock while the Canadian supply chain continues to develop. This strategic approach positions the Bécancour Lithium Refinery to navigate fluctuations in the global spodumene market, maintaining operational continuity and stability.

All completed batches of lithium carbonate tested at the Linyi have successfully aligned with battery-grade specifications. Furthermore, all streams involved in the testing process have been fully analysed, ensuring a comprehensive understanding of the lithium extraction processes.

In general, more and more spodumene concentrates worldwide are becoming finer in particle sizing and more diverse in gangue materials. This is due to the increased use of flotation techniques in the concentrator plants, often employed to improve overall recovery and grade. The Bécancour Lithium Refinery needs to be able to handle these finer spodumene ore types. Test work indicates that the Bécancour Lithium Refinery design has the ability to handle most types of spodumene concentrate. The design has cyclone preheaters at the feed to the calcination kiln which will allow the process to handle these finer ore types. Cyclone preheating, like Jiangsu, will improve the calcination of fine spodumene feed, enhancing the efficiency of the extraction process.

Figure 13: Various Spodumene Concentrates from around the world showing various particle sizing and grades

In addition to the spodumene samples displaying different particle sizing, the samples also presented varying levels of key impurities including magnesium, potassium, calcium, and iron. The Jiangsu plant was the first plant to implement ion exchange technology for the removal of calcium impurities, a groundbreaking achievement that has set new standards in lithium purification. Additionally, the utilisation of a CO_2 purification circuit has resulted in remarkably low levels of sodium and sulphate impurities, well below industry cutoff thresholds. Metallurgical studies so far, have demonstrated that the Bécancour process is highly robust, capable of handling various spodumene ore types from around the world.

Figure 14: Lithium Universe is using world-class lithium test facilities for all test work

The primary concern in battery-grade lithium carbonate is sodium and sulphate, with a specification of less than 250 ppm and 800 ppm respectively. The Bécancour process demonstrates its capability to yield an even higher quality product, boasting sodium levels below 100 ppm. Additionally, calcium content is notably low, below 13 ppm compared to the 50 ppm specification. Another significant advantage of lithium carbonate derived from hard rock sources over brine-based alternatives is its remarkably low chloride levels, measuring less than 2 ppm as opposed to the 200 ppm found in brine grades.

Table 6: Four completed test program results in comparison to industry standard

Elements	LC Content	Na	Mg	Ca	K	Fe	Zn	Cu	Pb	Si	Al	Mn	Ni	SO_4^{2-}	Cl^-	B
Unit	%	ppm														
Concentrate Sample 1	99.7	70	2	13	1	ND	2	ND	ND	2	2	1	ND	170	1	1
Concentrate Sample 1	99.7	34	1	6	2	3	1	ND	ND	7	2	ND	ND	214	2	1
Concentrate Sample 1	99.6	8	1	7	1	ND	ND	ND	ND	ND	1	1	ND	174	6	2
Concentrate Sample 1	99.6	26	1	13	1	ND	ND	ND	ND	6	ND	ND	ND	145	4	ND
LC CN Standard YS/T582-2013	≥99.5	≥250	≥80	≥50	≥10	≥10	≥3	≥3	≥3	≥30	≥10	≥3	≥10	≥800	≥30	NS
Brine LC CN Standard GB/T2385-2022, Type 1	≥99.5	≥300	≥50	≥50	≥20	≥10	NS	≥50	NS	≥20	NS	≥10	NS	≥100	≥200	50

See Table 1 and 2 JORC Code at the end of the announcement

The James Bay region of Québec, located near the Bécancour Lithium Refinery, hosts over 40 lithium exploration companies. Collectively, these projects hold an estimated lithium resource of over 500 million tonnes (Mt) at grades exceeding 1% lithium oxide (Li_2O), spread across eight key projects. This represents a 100% increase in resources over the past year. The rapid growth of lithium resources in the area suggests significant potential for future mining development. Should any of these projects advance into operational mines, they could sell their supply of spodumene, to the nearby Bécancour Lithium Refinery. This proximity positions the refinery as a viable customer for future spodumene output, potentially enhancing Québec's position as a major hub for lithium production.

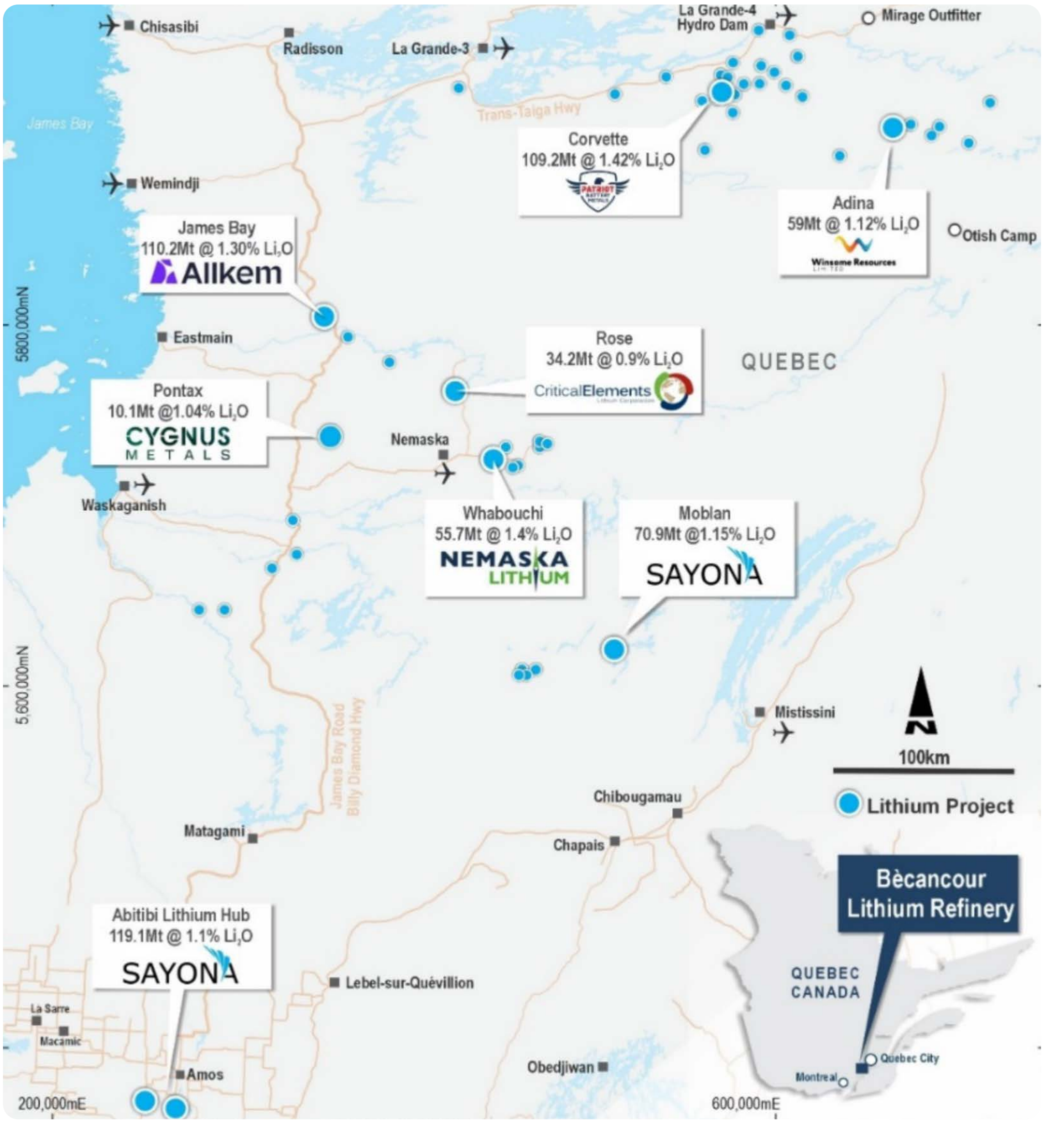


Figure 15: Key lithium projects in James Bay, Québec, a global resource of over 500Mt at +1% Li_2O [Source: Company Research]

The Transatlantic region is making significant advancements in lithium production, with Brazil, West Africa, and Southern Africa leading the way. In Brazil, Sigma Lithium's Groto Do Cirilo Project has proven that the country can be a competitive force in the global lithium market, rivalling established producers like Australia. This project underscores Brazil's potential to become a key player in the lithium supply chain. West Africa, with its vast lithium reserves, and Southern Africa, known for its significant spodumene deposits, are also gaining attention for their increasing contributions to the global lithium market. As these regions continue to develop their lithium resources, they are positioned to diversify the global supply and challenge Western Australia's long-standing dominance. The emergence of these large spodumene resources in the Transatlantic region highlights the need for a regional conversion capacity with low operational costs in a technologically advanced area like Québec. This could pave the way for future spodumene sales from these regions, supporting the growing demand for lithium in energy storage and electric vehicle markets.

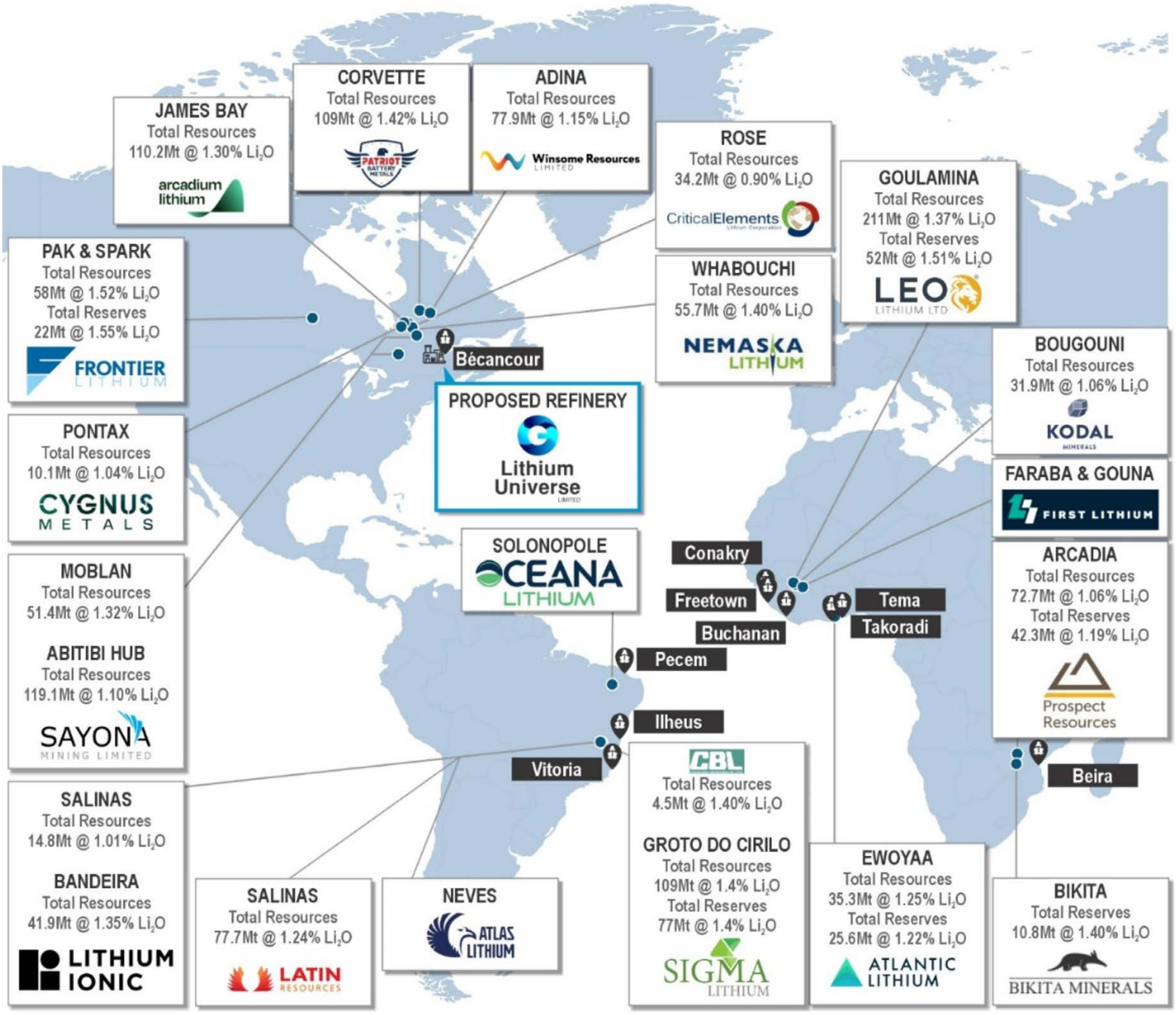


Figure 16: Transatlantic Spodumene resources and Lithium Universe Bécancour Lithium Refinery [Source: Company Research]

OFFTAKE DISCUSSIONS

Automotive and battery companies have secured spodumene supply contracts from mines globally to ensure a steady provision of lithium chemicals for their cathode/battery plants. 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 significant issues by way of government funding support eligibility (ie. IRA) and an increasing tariff rate imposed on the Chinese dependent supply chain in addition to a significant hurdle in establishing a dependable supply chain, particularly due to limited lithium converters in North America.

As the North American region aims to reduce reliance on Chinese suppliers, aligning with both commercial and national security objectives. The business model of Lithium Universe is straightforward: the company will seek to convert essential spodumene supply for these OEMs in Québec and ensure the availability of critical units for the North American supply chain. Pricing is likely to be based on “take or pay” agreements with the OEMs, incorporating certain risk-reducing mechanisms such as floor and ceiling prices to protect Lithium Universe. Assuming there is an established margin to guarantee Lithium Universe refinery’s payback, the OEMs gain assurance and sustainability in conversion supply without Lithium Universe being exposed to price and market volatility risks.

Lithium Universe has commenced discussions with OEMs, focused on establishing strategic partnerships with customers for battery-grade lithium carbonate with an emphasis on a customer base which is focused on EV demand growth in North America and Europe. Lithium Universe will concentrate this effort on these growing EV supply chains, particularly considering the growing commitments of battery manufacturing by groups such as Ford, General Motors, Stellantis, Toyota, LGES, SK Innovation, Samsung SDI, and others.

CAPITAL COST ESTIMATE

Hatch was selected to design the Bécancour Lithium Refinery, drawing from experience with multiple reference designs (including the Jiangsu project), in-house Hatch knowledge, public information and global experience in metallurgical plants. Their work includes developing mass balance, process flow diagrams, and single-line diagrams, with key components being sent to previous and new suppliers for full quotations. Hatch has prepared a capital cost estimate for the project, based on ongoing studies with multiple similar refineries across Canada and reference project data. Where available, recent pricing for the Bécancour plant has been incorporated. Lithium Universe has utilised the estimate for Direct and Indirect costs in financial modelling. The estimate is compiled to achieve a target accuracy range of -15% and +20% and includes allowances for various project indirects. These indirects cover temporary facilities and services, freight, travel and accommodation, vendor support, spares, and first fills, in addition to engineering, procurement, construction management (EPCM), and owners' costs.

Site development covers clearing, earthworks, building pads, road pavements, drainage, and fencing, with quantities derived from preliminary designs and pricing. Buildings are classified into process, non-process, and bulk storage categories, with specifications and pricing based on preliminary Bécancour designs. Process equipment costs are derived from process flow diagrams and single line diagrams, with high-value items quoted by the Jiangsu and other suppliers and remaining costs adjusted using database references. Process plant quantities including structural steel, piping, valves, bins, tanks, cables, and cable trays have been estimated using reference plant information and priced based on recent Quebec projects. Installation costs are based on labour cost databases, productivity metrics, and estimated labour hours. Other construction costs cover off-site infrastructure and utility connections. Indirect costs are calculated as a percentage of direct costs, encompassing temporary facilities, heavy crane, equipment freight, travel, accommodation, vendor support, spares, first fills, and EPCM expenses. Owner's costs are estimated similarly and compared with the Jiangsu project. The contingency was assessed through a quantitative risk assessment addressing uncertainty in each cost element during the DFS.

The capital expenditure (Capex) estimate is based on the following procurement pricing approaches:

Fixed Price: Offers were obtained from suppliers using a complete set of commercial documents, including terms and conditions, as well as "Issued for Tender" technical documentation. Pricing and schedule validity are mostly set to expire in Q4 2024. Final contract terms and conditions, along with conformance, will be addressed during the bridging phase.

Request for Quotation (RFQ): Offers were received based on comprehensive commercial documents, terms, and conditions. The technical information referenced corresponds to data from the Galaxy project executed in 2011. Contract conformance and final terms negotiations will be completed during the bridging phase.

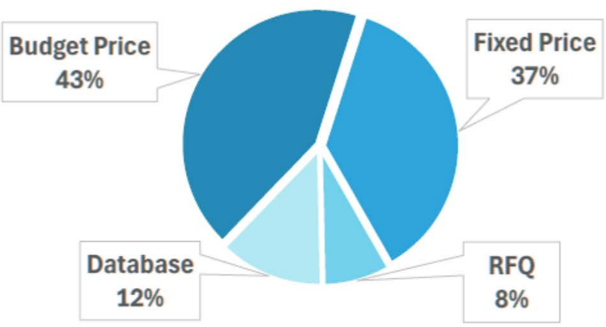
Budget Price Request: Offers were based on preliminary or conceptual technical data. Pricing and schedule estimates are subject to revision upon the release of formal tenders.

WATCH:
Members of the Lithium Universe and Hatch Engineering team discuss the Capex (5min)

The main fixed price packages which consist of 37% of the equipment estimate is as follows:

Fixed Price Packages

PM001	Kilns & Coolers	SCSCT-Daming (China)
PM002	Na_2SO_4 Crystallisers	GEA (China)
PM003	Belt Filters	Takraf (India)
PM005	Centrefuges	Andritz (Germany)
PM007	Burners	Fives Pillard (China)
PM011	Ball Mill	Shenye (China)
PM032	Pneumatic Conv	Nanjing Xiangrui (China)
PM038	Electric Boilers	Thermotech Combustn. (USA)
PM039	Fluid Bed Dryers	GEA (China)
PE001	Switchrooms	Voltam (Canada)
PE004	HV Switchboards	Schneider (Mexico)
PE005	LV MCC's	Schneider (Canada)
PE008	Dist'n Transformers	Techno Contact (Canada)
PE009	Power Transformers	WEG (Mexico)



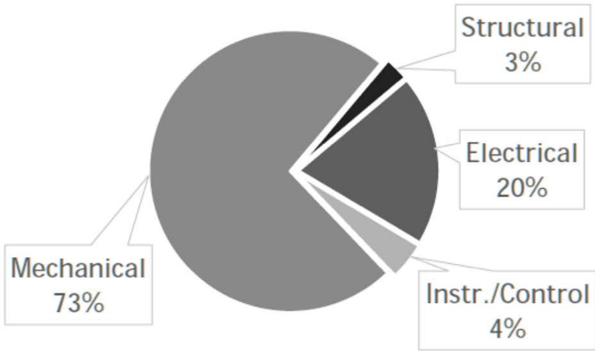


Figure 17: Pricing equipment supply packages

Mechanical

The mechanical equipment list is based on the reference plant, incorporating improvements implemented after the original construction. The reference plant is considered a valid foundation for mechanical take-offs. Allowances have been included for additional or higher-capacity equipment, such as Zero Liquid Discharge (ZLD) systems, process water treatment, demineralized water treatment, boiler room enhancements, stockpile shelters, spodumene feed conveyors, HVAC systems, sodium sulphate loading equipment, fluid bed and flash dryers, pneumatic conveyors, air compression, and sulfuric acid tanks. Pump sizes not included in the reference plant have been estimated using comparable services. Supply pricing is based on market rates obtained for this study, and installation costs have been calculated using unit hours per equipment piece multiplied by project labour rates.

Earthworks

The earthworks scope is based on a material take-off (MTO) generated from the 3D model developed for the study, with surveys relying on publicly available data. Geotechnical parameters assume a California Bearing Ratio (CBR) of 3. The design assumes a cut-to-fill balance with provisions for unsuitable material. Unit rates have been calculated from first principles, using project labour rates and current construction equipment rates.

Structural Concrete and Steel

The structural scope for concrete and steel is based on quantities extracted from reference plant documents and models for areas that remain unchanged. Preliminary designs have been developed for the main process building, while quantities for other structures, such as non-process buildings and pipe racks, have been estimated using metrics-based calculations. Piling requirements follow the reference plant layout, assuming a pile length of 10 meters. Unit rates have been derived from comparable ongoing projects in the region.

Piping

The piping scope is primarily based on quantities extracted from reference plant lists for intra-area piping. Inter-area piping quantities include allowances for 30 meters at both ends, in addition to rack lengths. Manual take-offs have been used to estimate allowances for new equipment. Valve requirements are derived from preliminary P&IDs for the Bécancour Refinery Piping and Instrumentation Diagrams (P&IDs), with added allowances for new equipment. Similarly, special piping (SP) is based on reference plant lists with adjustments for additional equipment. Unit rates have been developed based on complexity, utilizing data from comparable ongoing projects in the region.

Electrical

The electrical scope is developed to align with the mechanical equipment list and electrical load list, adjusted as needed to reflect vendor data. Switchrooms are designed based on preliminary arrangements adhering to CSA standards, with initial sizing of switchboards and equipment. High-voltage (HV) cable requirements are determined through preliminary sizing and manual take-offs from the plant layout, while low-voltage (LV) cables, minor ladders, and conduits are included based on preliminary sizing and metric calculations (quantity × average length). Major cable ladders are estimated through manual take-offs from the layout. Lighting allowances for high-bay buildings and general plant areas are calculated using typical spacing and metric-based estimates. Earthing and lightning protection designs are at the preliminary stage, with minor earthing estimated using metrics (quantity × average length). Major equipment costs are based on budget quotes obtained during the study, supplemented with historical data for minor equipment and bulk materials. Installation costs have been calculated using unit norms and project labor rates.

Control and Instrumentation

The control and instrumentation scope is based on the reference plant's I/O list, with allowances made for new equipment. Instrumentation is determined using the reference plant's Instrument Index, also with allowances for new equipment. Quantities for instrumentation cabling, trays, and conduits are estimated using typical metrics (I&C count × average length). Supply budget quotes have been sourced for the PCS (PJ001), PMS (PJ002), and Balance of Plant Instrumentation (PJ003), with additional historical data used for field enclosures, cabling, and bulk materials. Installation costs are calculated using unit norms and project labour rates.

Table 8: Project Quantities

Description	UOM	LU7
Earthworks	m^3	398,000
Piles	ea	3,300
Concrete	m^3	24,000
Steel	t	5,000
Mech Tagged Items	ea	830
Pipe	m	47,000
Valves	ea	2,900
Cables	m	405,000
Tray Conduit	m	61,000
Instruments	ea	2,900

Indirect costs

Temporary facilities and services are calculated at 5% of direct costs. A heavy lift crane allowance has been included for two 400t lifts for the kiln and other equipment. Freight costs are calculated at 7% of equipment supply, with bulk material freight included in material supply costs. Travel and accommodation expenses have been estimated, assuming 50% non-local project workforce. Vendor support is calculated at 1.5% of equipment supply, and spares are estimated at 5% of equipment supply. The preliminary list for first fills is also accounted for. EPCM costs are calculated at 17% of direct costs, with owner costs calculated at 2% and operational readiness at 1% of direct costs.

Table 9: Capital Expenditure Cost Estimate Summary (US$)

Initial CAPEX	Approx US$
Direct costs	362 million
Project Indirects & EPCM	125 million
Owner's Cost & Land	11 million
Contingency	51 million
Total	**549 million**

The base date for the estimate is Q3 2024. The estimate includes an allowance associated with land acquisition but not for leasing, environmental permitting or other approvals. Québec's regulated system for the payment of travel and accommodation considering a worker's principal place of residence and travel distance has been used in the estimate. Consequently it can be assumed that a construction camp is not necessary. The estimate assumes all required utilities/ services are available at the plant boundary. Lithium Universe has applied a provision for contingency calculated at 10% of the sum of direct and indirect costs.

CAPITAL COSTS INTENSITY

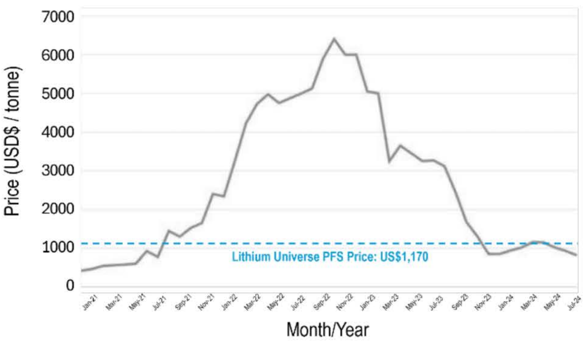
CAPEX per unit of lithium production capacity (typically in terms of Lithium Carbonate Equivalent, LCE, per tonne), can vary depending on factors such as location, technology, plant scale, conversion methods, and the project's stage of development. A review of recently published DFS-level studies was conducted to benchmark the capital intensity of the Bécancour project against its peers. The analysis, based on a limited number of recent studies, indicates an average capital intensity of US$29,833 per tonne of LCE production capacity. The Bécancour project's capital intensity of US$29,995 per tonne aligns closely with this peer average.

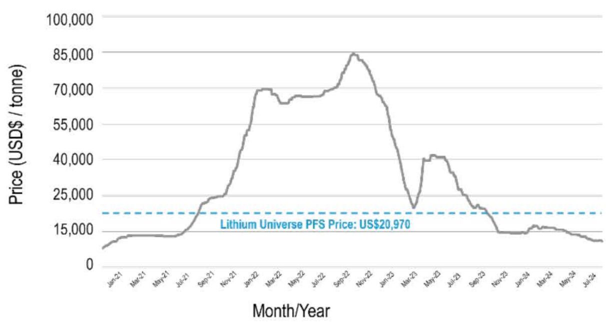
Table 10 – Capital Intensity Comparison

Company	Project	Study	Date	Type	Tpa	Process	Capex	LCE Units	Capacity
Piedmont	Tennesse Li Project	DFS	Mar-23	LiOH	30.000	APL	809	26,400	30,644
Piedmont	Carolina Li Project	DFS	Dec-21	LiOH	30.000	API	867	26,400	32,841
Savona	NAL Project	PFS	Jun-23	Li_2CO_3	23.610	Sulp	555	23,610	23,507
Rocktech	Guben Converter	DFS	Nov-22	LiOH	24,000	API	683	12,120	32,339
								Average	*29,833*
Lithium Universe	**Becancour Li Project**	**DFS**	**Feb-25**	**Li_2CO_3**	**18,270**	**Sulp**	**548**	**18,270**	**29,995**

ECONOMIC ANALYSIS

The project economics are positive and robust even at the proposed conservative price forecasts. The project is expected to deliver a pre-tax Net Present Value (NPV) of approximately US$718 million at a discount rate of 8%, with a pre-tax Internal Rate of Return (IRR) of approximately 21.0% and a steady state payback period of around 3.9 years. The financial model is based on conservative price forecasts: US$1,170 per tonne for spodumene concentrate (SC6) and US$20,970 per tonne for battery grade lithium carbonate. According to the section titled "Long-Term Spodumene and Lithium Carbonate Price Assumptions," the Company's directors consider the assumed prices of US$1,170 per tonne for spodumene concentrate (SC6) and US$20,970 per tonne for battery-grade lithium carbonate to be reasonable for the study. These prices are 5% lower than the consensus forecast provided by independent reporting agencies, banking commodities analysts, company disclosures, and technical reports. As demonstrated below in comparison to historical trends, the Company believes these long-term price assumptions are appropriate.





Plant availability and lithium recovery are assumed at 86% and 88% respectively. The plant financial model has a realistic ramp up rate with full production being achieved after three years.

At full production capacity, the project is expected to generate annual revenues of approximately US$383 million, with annual costs of in the region of US$236 million, including spodumene costs. This results in an annual EBITDA of around US$148 million, at an estimated gross margin of 39%. Post-tax, the NPV is estimated at around US$449 million at a discount rate of 8%. The capital cost of the project is estimated at around US$549 million, including a contingency of US$51 million or 10%. The detailed cost estimate is derived from engineering deliverables based on prelminary design of the Bécancour Refinery and mature engineering from multiple reference projects, ensuring a well-founded and reliable projection for the project's financial planning.

Table 11: Lithium Universe Bécancour DFS Summary

Economics	Unit	Approx Value
Operation Life	years	20
Estimated Li_2CO_3 production	tpa	18,270
Total Estimated Capital Costs	US$mm	$549
Estimated Sustaining Capital per annum	US$mm	$5
Estimated Before-tax Net Present Value @ 8% discount rate	US$mm	$718
Estimated Annual Revenue	US$mm	$383
Estimated Annual Costs inc Spodumene	US$mm	$236
Estimated Post-tax Net Present Value @ 8% discount rate	US$mm	$449
Estimated Before-tax Internal Rate of Return	%	21%
Steady state Li_2CO_3 conversion estimated all-in sustaining costs	$/t	$3,931
Steady state spodumene estimated purchase costs	$/t Li_2CO_3	$8,965
Estimated Annual steady state EBITDA	$mm/y	$148
Steady state estimated payback	years	3.9

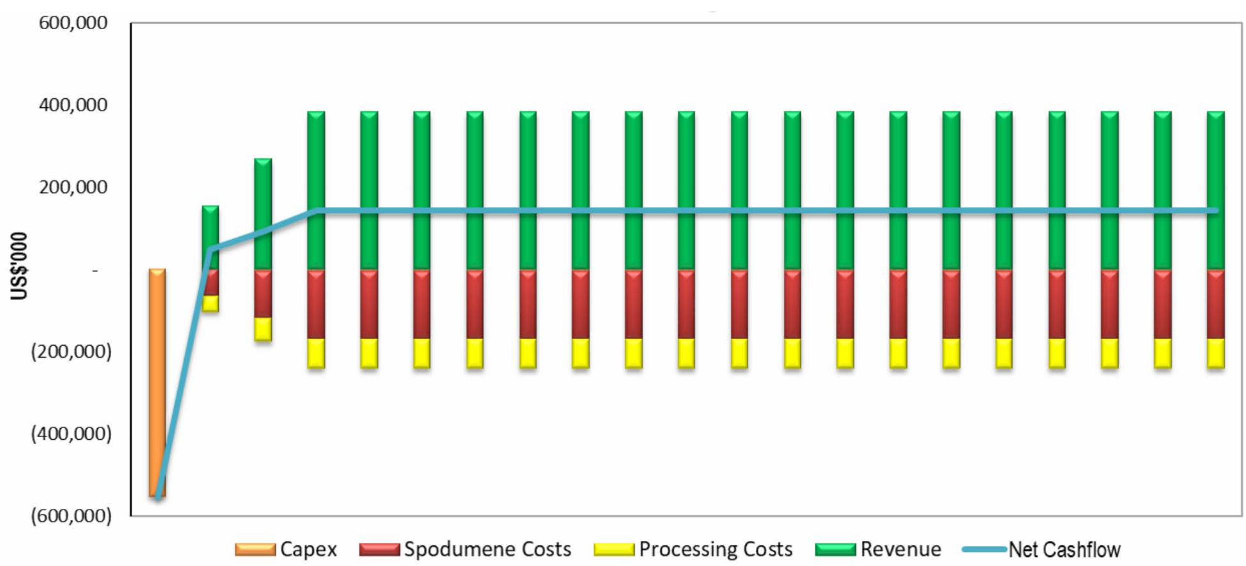


Figure 18: Lithium Universe Bécancour Refinery Estimated Pre-tax Cashflows

BREAK EVEN SCENARIO, CURRENT LITHIUM PRICES

The NPV break even scenario of the project (where the NPV is slightly positive) is estimated at around US$740 per tonne for spodumene concentrate (SC6) and around US$14,000 per tonne for battery-grade lithium carbonate. The company believes that the current lithium prices of around US$12,000 per tonne battery grade lithium carbonate are unsustainable. The oversupply situation has lead to corrections and higher-cost operations are being forced to close. The Company believes lithium prices have historically recovered and will do so again. Demand driven by electric vehicles (EVs) and battery energy storage systems (BESS) continues to grow strongly, necessitating new, efficient lithium production capacity to come onstream to meet this demand.

The Company believes that when lithium prices eventually rebound, the market is likely to experience a shortage again. Therefore, it's essential to develop projects based on the pricing environment expected three years from now, rather than today's depressed prices. Assuming funding of the project is possible, the steady state production would be around 2028.

OPERATING COST ESTIMATE

The operating cost is based on the mass balance usage of electricity. natural gas, sulphuric acid, sodium carbonate, neutralising agents, and various reagents and consumables extracted from Jiangsu operating experience. Input prices are shown in Table 8.

Table 13: Bécancour Estimated Operating Unit Costs

Cost Area	Unit	Approx Value
Spodumene ore	US$/t Li_2CO_3	8,965
Natural Gas	US$/t Li_2CO_3	150
Electricity	US$/t Li_2CO_3	343
Sulphuric acid	US$/t Li_2CO_3	446
Sodium carbonate	US$/t Li_2CO_3	1,049
Caustic soda	US$/t Li_2CO_3	58
Limestone	US$/t Li_2CO_3	180
Labour and Overheads	US$/t Li_2CO_3	872
Other	US$/t Li_2CO_3	833
Total Estimated Conversion Costs	**US$/t Li_2CO_3**	**3,931**
Total Estimated Operating Costs incl. SC6	**US$/t Li_2CO_3**	**12,896**

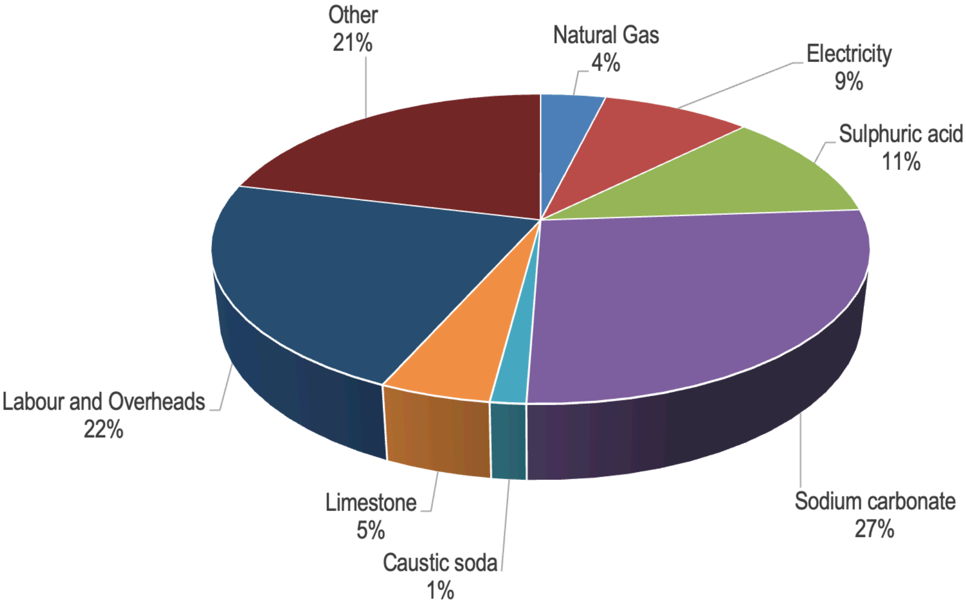


Figure 18: Lithium Universe Bécancour DFS Summary Estimated OPEX Summary not inc spodumene

The operating costs at the Bécancour site are approximately US$3,931 per tonne of lithium carbonate (Li_2CO_3) benefiting from inexpensive renewable power from Hydro Québec, costing approximately US$0.04 per kWh. In comparison, the average operating costs in China are around US$3,250 per tonne of Li_2CO_3, with more efficient plants often having slightly lower costs.

If you were a spodumene producer in Canada, the transportation costs to China for conversion, including port charges, ocean freight, and internal trucking, amount to approximately US$150 per tonne of ore. This translates to about US$1,275 per tonne of final lithium carbonate (LC) product, which means that the cost of converting in China stands at around US$4,520 per tonne of LC, compared to approximately US$3,931 per tonne in Bécancour. This cost advantage underscores why the company believes Québec has the potential to emerge as a key conversion hub for Canada.

Table 14: Bécancour Costs vs Chinese Conversion for Canadian-sourced Spodumene

Cost Item	Bécancour	China
Average Estimated Operating Costs	US$3,931/t	US$3,250/t
Estimated Transport Impact (+US$1,275)	–	US$1,275/t
Total Estimated Cost	**US$3,931/t**	**US$4,525/t**

Working Capital

Working capital in a project refers to the funds required to cover the day-to-day operational expenses of the project during its early stages, before it generates sufficient revenue to sustain itself. It typically includes cash needed for purchasing materials, paying salaries, covering utility costs, and managing short-term liabilities like accounts payable and receivable. Working Capital is assumed at US$3.7m.

Royalties, Taxes, Depreciation and Depletion

The financial modelling has been completed on both a pre-tax and post-tax basis, assuming a company tax rate of 26.5%. Refundable tax credits and government financing initiatives have not been factored in. A royalty agreement with the parent company will enable the operating subsidiary to use the technology IP throughout the project's lifespan. Additionally, the capital costs will be depreciated over the life of the project.

The Company has conducted a preliminary evaluation of the tax credits and government incentives. Under Chapter 17 of Bill C-59, specifically subsection (j), businesses investing in clean technology manufacturing assets are eligible for a significant financial incentive through a refundable investment tax credit. This credit, set at 30% of the cost associated with new machinery, equipment, and custom buildings designed to house such assets, provides a direct reduction in the capital expenditure required for these investments. Importantly, the refundable nature of this tax credit means that if the credit amount exceeds the company's tax liability, the government will issue a cash refund for the excess, effectively converting the surplus credit into immediate financial benefits. This incentive not only reduces the effective cost of investment but also enhances cash flow, making it a compelling factor in evaluating the financial feasibility of expanding clean technology operations.

At a provincial level, and in addition to the federal refundable investment tax credit, Lithium Universe stands to gain substantial provincial-level incentives if it initiates a large investment project in Québec after March 21, 2023. Under the provincial program, the company could qualify for a 20% income tax holiday on total eligible investment expenditures related to the project. To qualify, the investment must meet a minimum threshold of $100 million, which includes all capital expenditures incurred during the investment period for acquiring new property essential to the project's execution. This tax holiday is applicable for a period of 10 years, offering significant long-term financial advantages.

The combination of these provincial benefits with the federal credits provides a highly attractive opportunity for Lithium Universe to optimize its clean technology investments and strengthen the financial feasibility of major projects in Québec. The DFS financial model does not account for any tax credits.

SENSITIVITY ANALYSIS

A detailed sensitivity analysis was performed to evaluate how fluctuations in key variables—lithium carbonate prices, spodumene prices, operating expenses (OPEX), and capital expenditure (CAPEX)—affect the project's overall economic performance. The analysis revealed that the project is most sensitive to changes in lithium carbonate pricing, meaning any increase or decrease in the price of lithium carbonate has the largest impact on profitability. Spodumene pricing follows as the second most influential factor, with variations in the cost of raw material directly affecting the project's margins. Operating costs also play a significant role, though their impact is slightly less than that of raw material prices. CAPEX is the least sensitive of these variables, suggesting that while initial capital costs are important, they have a relatively smaller influence on the project's long-term economic viability. Overall, the analysis highlights the importance of favourable market conditions, particularly with rising lithium carbonate prices, to maximize the project's profitability.

Sensitivity - Pre-Tax NPV (+/- 15%)

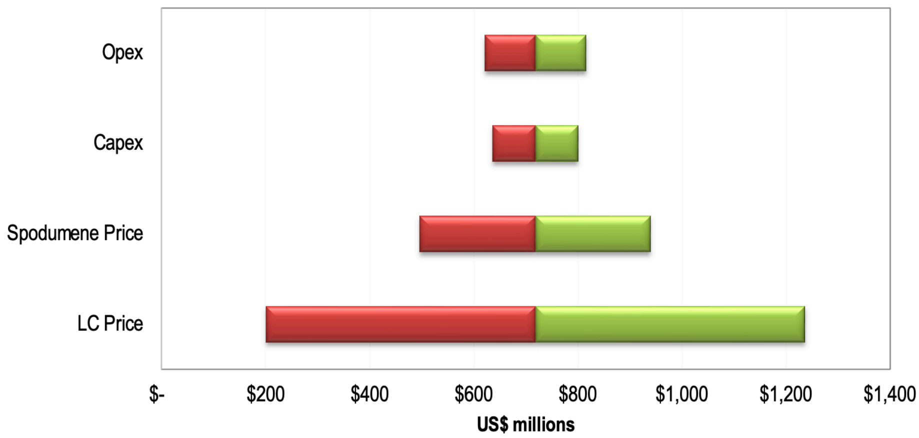


Figure 19: Pre-Tax NPV Sensitivity Analysis

Lithium Universe has adopted a conservative approach to long-term price forecasting, estimating US$1,170 per tonne for spodumene concentrate (SC6 at Bécancour Port) and US$20,970 per tonne for battery-grade lithium carbonate. The company acknowledges that while lithium chemical prices are unlikely to return to the 2022 highs, which reached up to US$70,000 per tonne, growing demand in the electric vehicle (EV) and energy storage system (ESS) sectors suggests prices may exceed their current forecast. If prices rise above the company's estimates, the potential for EBITDA growth at higher lithium prices is illustrated in the figure below.

EBITDA Sensitivity to Lithium Carbonate Price

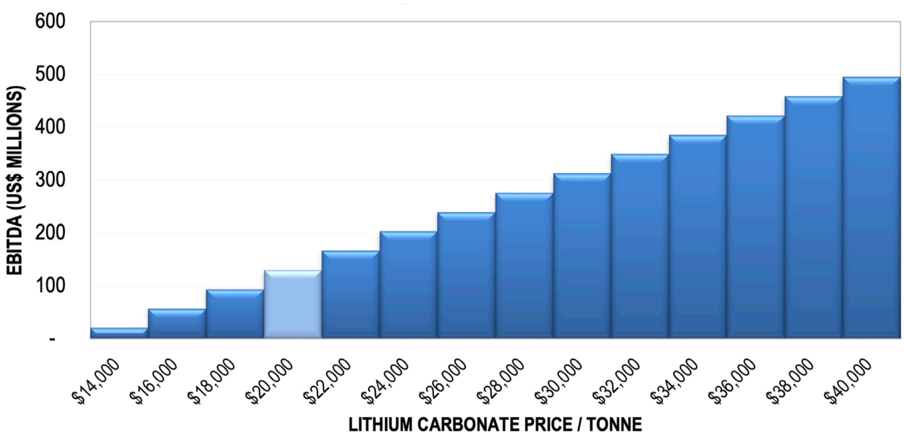


Figure 20: EBITDA to Lithium Carbonate Price Sensitivity Analysis

PROJECT FINANCE

Following the completion of the Definitive Feasibility Study (DFS), Lithium Universe is advancing its financing strategy for the lithium carbonate refinery. The company is focusing on grant applications, debt and equity financing, and regulatory compliance, with a detailed financing framework to be developed for the Definitive Feasibility Study (DFS). Given the company's current market capitalization and the significant capital costs associated with the project, the company plans to seek strategic investors at the project level to support funding efforts. Bringing in such investors will not only provide the necessary financial resources but also help mitigate risks and enhance the project's overall viability.

Grant Applications

Lithium Universe is evaluating federal and provincial grant programs to secure non-dilutive funding. This will support initial project phases and mitigate early-stage financial risks, with applications to be refined as project details evolve.

Debt Financing Strategy

Lithium Universe is actively exploring debt financing options, including traditional bank loans and bond issuances. Preliminary discussions are already underway with financial institutions across North America and Europe, leveraging the Definitive Feasibility Study (DFS) as a key foundation for securing funding. Additionally, both federal and provincial governments have demonstrated strong financial support for battery-focused projects over the past year, highlighting a significant opportunity for project-based financing. Lithium Universe intends to capitalize on these government-backed funding programs to strengthen its financial position and reduce overall capital costs. The company remains committed to securing the most advantageous debt financing structure, balancing cost efficiency with long-term project stability. Detailed financing terms will be finalized upon appointment of a debt advisor.

Equity Financing Strategy

Lithium Universe is actively seeking equity financing by offering up to a 49% stake in its project to a select group of strategic investors. These investors will primarily be companies that either already have secured spodumene offtake agreements or are currently producing spodumene and require conversion capacity for lithium chemicals within North America. By partnering with industry players that have an existing supply of spodumene, Lithium Universe aims to create a vertically integrated value chain, ensuring a reliable feedstock for its refining operations.

Discussions with multiple potential investors are already underway, with a focus on securing partners that bring not only financial support but also operational synergies, technical expertise, and long-term supply agreements. This equity financing strategy aligns with Lithium Universe's broader vision of establishing a competitive lithium chemical production hub in North America, capitalizing on growing demand for battery-grade lithium products.

Regulatory and Due Diligence

The company has initiated due diligence with the provincial government of Québec and has proactively notified under the National Security Review of Investments Regulations. This demonstrates Lithium Universe's commitment to regulatory compliance and prepares for a thorough review as project details are finalized.

ENVIRONMENTAL, SUSTAINABILITY AND GOVERNANCE

Environmental

The land, previously used for agriculture, is now vacant and zoned for heavy industry. Pre-project ambient noise measurements have been conducted to establish baseline noise levels, which will help in assessing any potential impact once construction and operations commence. Additionally, a comprehensive surface water hydrology study has been finalized. This study assesses the potential impacts on local water resources, ensuring that the project will not adversely affect surface water flows and quality. A soil contamination desk study has also been completed, which involves reviewing historical data and records to determine the likelihood of soil contamination on the project site. This preliminary assessment provides insight into potential soil issues and helps guide future environmental management practices. Collectively, these advancements demonstrate the project's commitment to environmental stewardship and regulatory compliance as it progresses toward the next phases of development.

Economy

The project is expected to create 170-200 full-time jobs during operations and up to 600 full-time equivalent positions during construction, with training programs enhancing local workers' skills and employability. Investments in local infrastructure and increased tax revenues will improve residents' quality of life and public services, while potential partnerships with educational institutions and community organizations will enrich the local educational and social landscape.

Key Stakeholders

Lithium Universe Limited has established a Joint Committee with the Abenaki Council of Odanak and the Abenaki Council of Wôlinak (W8banaki), representing their ancestral territory in southern Québec and parts of the U.S. The W8banaki Nation, historically known as the "People of the Dawn," has over 3,000 members today and are the traditional landowners of the Bécancour Waterfront Industrial Park (BWIP), the proposed site for a new lithium refinery. This committee, composed of two representatives from each party, will facilitate structured discussions, ensure culturally sensitive collaboration, manage project schedules, and oversee compliance.

Regulatory and Permitting

In preparation for the permit application of the project, the Company has completed a comprehensive preliminary review of all relevant regulatory and permitting requirements for its proposed operations at Bécancour. This review encompasses both federal and provincial regulations, ensuring compliance with environmental, safety, and operational standards. The Company has taken steps to align its operations with the mandates set forth by local authorities and relevant agencies. As part of this effort, consultations with stakeholders, environmental impact assessments, and risk mitigation strategies have been incorporated into the project planning process. The completion of this review marks a significant milestone in advancing the project towards successful execution. Below is a summary of the key regulatory and permitting requirements that have been identified, and the steps the Company intends to take to ensure timely and effective compliance throughout the project's lifecycle.

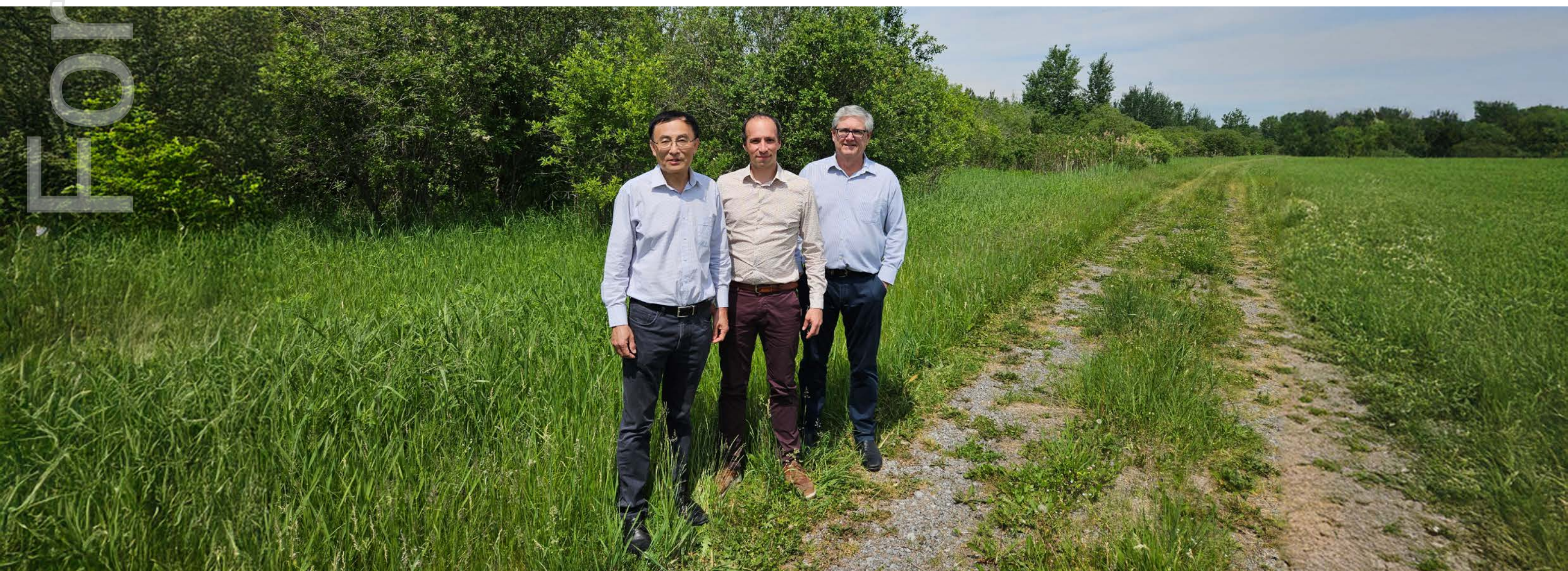


Table 15: Preliminary evaluation of regulatory and permitting requirements

Category	Regulation/Act	Details
Federal Legal Framework	Impact Assessment Act (S.C. 2019, c.28, s. 1)	Physical Activities Regulations (SOR/2019-285)
		Project is not expected to trigger a federal EIA (no designated activities as per Physical Activities Regulations)
	Fisheries Act (R.S.C., 1985, c. F-14)	
	Migratory Birds Convention Act, 1994	Migratory Birds Regulations, 2022 (SOR/2022-105)
	Environmental Emergency Regulation, 2019 (SOR/2019-51)	
Provincial Legal Framework	Environment Quality Act (Q-2)	Section 22 lists activities subject to permits (see next slide)
		Provincial permits are named "Ministerial Authorization" (MA)
		MA are typically broken into Project phases to de-risk schedule (e.g., site preparation, construction, operation)
	Relevant Provincial Regulations (non-exhaustive list)	Q-2, r. 17.1 - Regulation respecting the regulatory scheme applying to activities based on environmental impact
		Q-2, r. 9.1 - Regulation respecting compensation for adverse effects on wetlands and bodies of water
		Q-2, r. 0.1 - Regulation respecting activities in wetlands, bodies of water, and sensitive areas
		Q-2, r. 4.1 - Clean Air Regulation
		Q-2, r. 15 - Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere
		Notice 1080629 - Note d'instructions 98-01 sur le bruit
City and Municipal Permits	Relevant MRC* Regulations	Regulation 345
		Regulation 350
		Regulation 229
	Relevant City Regulations	Regulation 332
		Zoning 334
		Regulation 554

Note: MRC represents a group of cities located in the same region

Ministry of Economics, Innovation, and Energy

The Company recently held productive discussions in Québec City with the Honourable Pierre Fitzgibbon, Minister of Economics, Innovation, and Energy. Minister Fitzgibbon expressed enthusiasm for the Company's engineering advancements, the acquisition of the Option agreement in the Bécancour Industrial Park, and the Hydro-Québec application for a 22.5MW energy allocation for the Bécancour Lithium Refinery. He reiterated his support for LU7's vision to position Québec as a hub for lithium conversion in the transatlantic region.

Municipality of Bécancour

The Company met with the Mayoress of Bécancour to discuss its goals of boosting the local economy by creating hundreds of jobs and fostering economic growth. LU7 reaffirmed its commitment to Bécancour and the broader Trois-Rivières region, pledging to support various social, community, and environmental initiatives in the coming years. The Mayoress welcomed the Company's plans for the SPIPB, recognizing the development of a reliable design aligned with international standards.

Meeting at Bécancour Industrial Park with LU7 CEO, Alex Hanly, Bécancour Mayoress, Lucy Allard and LU7 Chairman, Iggy Tan

Provincial Government – Québec

In Montreal, the Company engaged with key representatives from Investissement Québec (IQ), the Ministry of Natural Resources and Forests (MRNF), the Energy Transition Valley Innovation Zone, and the Ministry of the Environment, the Fight Against Climate Change, Wildlife and Parks. Québec's long-standing support for the lithium battery supply chain is backed by substantial provincial and federal incentives.

Canadian Federal Government – Ottawa

The Company met with federal stakeholders from Invest in Canada (IIC), Natural Resources Canada (NRCan), Innovation, Science and Economic Development (ISED), and Export Development Canada (EDC). During the meetings, the Company presented its strategy to address North America's Lithium Conversion Gap and provided updates on progress. Stakeholders praised the Company's proactive alignment with the federal strategy to diversify supply chains away from China. The Company's initiatives align with the March 2024 Cooperation on Critical Minerals agreement between Australia and Canada, emphasizing a commitment to responsibly expanding the global supply of critical minerals.

PARTNERSHIP WITH LOCAL UNIVERSITY

The Polytechnique Montréal

Lithium Universe Limited and Polytechnique Montréal have entered into a strategic partnership aimed at advancing lithium processing technologies and strengthening the local supply chain for critical battery materials in Canada. The primary aim of the partnership is to enhance local expertise and innovation in Canada. This involves developing and strengthening capabilities in lithium processing through various initiatives such as joint research, innovation projects, and educational programs. Specifically, the focus will be on building local expertise in lithium processing tailored for the battery industry and conducting research to innovate in lithium processing technologies. The partnership seeks to foster educational growth by offering numerous opportunities including internships, fellowships, co-ops, and joint academic projects. Furthermore, strategic educational partnerships will be established to facilitate collaboration in the development and delivery of postgraduate and short courses.

LOGISTICS AGREEMENT

Chemical Logistics Supply Company

The Company executed a non-binding Memorandum of Understanding (MOU) with Servitank, a subsidiary of Groupe Somavrac to partner on logistics of essential chemical products for Lithium Universe's Bécancour Lithium Refinery operations. Servitank, a local, Québec-based Company, specializes in optimizing supply chain processes and logistics solutions across various industries, including chemicals and raw materials. With a strong focus on multimodal handling, The parent company has extensive experience in the Bécancour and Trois-Rivières areas, having successfully managed logistics and moisture control for key players in the lithium sector in North America.

Under the MOU, Servitank will seek to leverage its expertise in supply chain management and multimodal logistics to support Lithium Universe's project: the development of the Bécancour Lithium Refinery. Servitank is currently evaluating various storage solutions at their Bécancour Port terminal, which may facilitate the efficient trucking logistics required to deliver key liquid chemicals directly to Lithium Universe's operational site. Additionally, Servitank will investigate the process of constructing dedicated storage tanks for specific process reagents, positioning itself to supply critical chemicals directly to Lithium Universe and others within the Bécancour Industrial Park. Additionally, Servitank will actively assist in exploring procurement options within the local areas for other dry bulk reagents to meet Lithium Universe's specific operational requirements.

Alumina Silica Secondary Product Management

Both parties will investigate storage opportunities and potential partnerships with cement companies within sister companies of Servitank in Groupe Somavrac's client base. This investigation aims to effectively utilize Lithium Universe's alumina silicate by-products, enhancing sustainability and resource management. Furthermore, the two companies will assess storage requirements for sodium sulphate, considering its potential placement within the pulp and paper industry in North America.

Logistics and Storage Solutions

Servitank's facilities in Bécancour will play a crucial role in the storage and transportation of spodumene. The partnership will ensure the logistics and handling of spodumene sourced from transatlantic suppliers is managed efficiently. Servitank's sister company, Somavrac, will also provide access to advanced bagging machinery and bulk storage solutions at its Trois-Rivières location, optimizing operational efficiency and supporting the needs of the refinery.

PROJECT RISK MANAGEMENT

Regulatory and Compliance Risks

Licensing and Permits: Risks related to obtaining and maintaining permits and licenses for the Bécancour Lithium Refinery from local, provincial, and federal authorities. Failure to secure these could delay or halt operations. Lithium Universe will engage with regulatory bodies early in the process and maintain proactive communication to ensure timely approval of permits and licenses.

Environmental Regulations: Risks of non-compliance with Canadian environmental laws, including emissions regulations and waste management requirements. The project needs to adhere to stringent environmental regulations in Québec. The company will implement comprehensive environmental management systems and conduct regular audits to ensure compliance with all regulations.

Safety Standards: Risks of non-compliance with occupational health and safety standards, which could lead to fines, legal liabilities, or project delays. Ensuring safety protocols are in place for the construction and operational phases is critical. Lithium Universe will establish rigorous safety protocols and provide ongoing training to ensure adherence to health and safety standards.

Market Risks

Commodity Price Fluctuations: Lithium prices are highly volatile. Significant drops in the price of lithium carbonate or spodumene concentrate could impact the project's profitability, despite conservative pricing forecasts. The company will seek to employ hedging strategies to manage price volatility and protect profit margins.

Demand and Supply Dynamics: Risks associated with fluctuations in EV demand or oversupply of lithium products. The project is heavily reliant on demand from EV manufacturers and automotive OEMs. Lithium Universe will seek to diversify its customer base and secure long-term contracts to mitigate demand fluctuations.

Competitive Landscape: Risks from established and emerging competitors in the lithium market. New entrants or improvements in competitor technologies could impact Lithium Universe's market share and pricing power. The company will focus on innovation and cost efficiency to maintain a competitive edge in the market.

Operational Risks

Construction and Development Delays: Risks of delays in constructing the Bécancour Refinery due to issues like supply chain disruptions, labour shortages, or unforeseen site conditions. This could affect the project's timeline and cost. Lithium Universe will develop contingency plans and work with reliable contractors to minimize construction delays.

Technology and Equipment: Risks related to the performance and reliability of technology and equipment used in the refinery, including potential issues with the technology adapted from the reference project. The company will conduct thorough testing and quality assurance for all technology and equipment.

Operational Efficiency: Risks of inefficiencies in the refining processes that could lead to higher operating costs or lower output. The accuracy of mass balance and process flow diagrams is critical to operational efficiency. Lithium Universe will implement continuous process optimization and closely monitor operational performance.

WATCH:
Members of the Lithium Universe and Hatch Engineering team discuss the ongoing project risks (4min)

Financial Risks

Cost Overruns: Risks of exceeding the capital expenditure budget due to unexpected costs in materials, labour, or construction. The estimate includes a 10% contingency, but unforeseen factors could still cause overruns. The company will maintain strict budget controls and regularly review project expenditures.

Funding and Financing: Risks related to securing the necessary funding and financing for the project. This includes potential challenges in obtaining investment or managing debt. Lithium Universe will seek to secure multiple funding sources and establish a robust financial plan to support the project.

Exchange Rate Fluctuations: Risks from changes in exchange rates if the company has international operations or funding. This could impact the cost of imported materials and financial returns. The company will seek to use financial instruments to hedge against exchange rate risks.

Environmental and Social Risks

Environmental Impact: Risks related to potential environmental damage from the refinery operations in Bécancour, such as impacts on local ecosystems and adherence to environmental regulations. Lithium Universe will implement effective environmental management practices and engage with local stakeholders.

Community Relations: Risks of opposition from local communities or stakeholders in Québec. Negative perceptions or community resistance could affect project approval and operations. The company will actively engage with the community and address concerns to build positive relationships.

Technical and Innovation Risks

Technological Advancements: Risks that advancements in lithium processing technology could make the refinery's technology less competitive or obsolete. Staying updated with technological innovations is crucial. Lithium Universe will invest in research and development to stay ahead of technological advancements.

R&D and Innovation: Risks related to failures in research and development efforts, which could impact future product offerings or efficiency improvements. Effective R&D is necessary for maintaining competitive advantage. The company will focus on robust R&D programs and partnerships to drive innovation.

Legal and Contractual Risks

Contractual Obligations: Risks associated with failing to meet contractual obligations or disputes with OEMs, suppliers, or partners. This includes risks from "take or pay" agreements and other contractual terms. Lithium Universe will ensure clear and comprehensive contracts and work closely with legal advisors to manage obligations.

Litigation Risks: Risks of legal challenges or lawsuits related to the project, including potential intellectual property disputes or regulatory compliance issues. The company will maintain a strong legal team to address and manage potential litigation risks.

Feedstock Sourcing Risks

Supply Risks: As the Bécancour Lithium Refinery operates as a standalone business, there is a potential risk that the company may face challenges in securing spodumene supply agreements from the market to sustain operations. To mitigate this risk, long-term spodumene supply agreements will be put in place to support the financing, construction, and eventual production of the refinery. The company is currently in discussions with several groups that have access to spodumene supply to ensure a stable feedstock for the project.

Logistical Issues: Risks include transportation delays or disruptions affecting spodumene imports to Canada, along with tariffs or changing trade policies that could increase costs and make feedstock sourcing less viable. The company will develop robust logistics and supply chain management strategies to address potential disruptions.

Competitive Pricing: The Bécancour refinery faces competition from Chinese converters with lower conversion costs due to their economies of scale and established infrastructure. This could affect the refinery's ability to secure cost-effective feedstock. Lithium Universe will focus on optimizing its cost structure and negotiating competitive supply contracts to counteract pricing pressures.

Geopolitical Risks

Political Stability: Risks from political instability in Canada or international regions affecting operations. Political changes could impact regulatory frameworks or trade policies. Lithium Universe will monitor political developments and adapt its strategies to mitigate geopolitical risks.

Trade Policies: Risks related to changes in trade policies or tariffs could affect the cost and competitiveness of the project. The company will explore alternative construction supply sources and adjust procurement strategies to manage trade policy risks.

Health and Safety Risks

Accidents and Incidents: Risks of accidents or incidents at the Bécancour Refinery that could lead to health and safety concerns, legal liabilities, or operational interruptions. Lithium Universe will implement comprehensive safety management systems and emergency response plans.

Pandemics and Health Crises: Risks from global health crises, such as pandemics, that could disrupt supply chains, workforce availability, or operational continuity. The company will develop contingency plans for health crises and ensure workforce flexibility.

NEXT STEPS

The Company will actively engage with financial institutions and government agencies to secure project financing by presenting the findings from the Definitive Feasibility Study (DFS). Concurrently, LU7 will advance environmental assessments and the permitting process, ensuring regulatory compliance and addressing potential issues proactively. The due diligence process will be coordinated with federal and provincial authorities to obtain necessary approvals.

Discussions with strategic partners regarding offtake agreements and feedstock supply will continue to secure stable supply chains. Additionally, LU7 will conduct a comprehensive impact analysis in consultation with the local First Nation group to incorporate community feedback and promote sustainable development. These steps are essential to progressing the Bécancour project with thorough planning, strong financial backing, and robust stakeholder engagement.

ADDENDUM

COMPETENT PERSON STATEMENT

The technical test results in this report that relates to Metallurgical Testing is based on information compiled by Dr Jingyuan Liu and has supervised the testing program conducted by Linyi University Lithium Research Centre.

Dr Liu has sufficient experience in the processing and testing of lithium processes under consideration and in the activity which has been undertaken to qualify as a Competent Person (CP) as defined in the JORC, 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" and has read the definition of "qualified person" (QP). Dr Liu certifies that by reason of education, affiliation with a professional association, and past relevant work experience, fulfills the requirements to be a "qualified person". Dr Liu consents to the inclusion in this release of the matters based on the information in the form and context in which they appear.

Dr Liu has a PhD in chemical engineering and is widely regarded as a leading technical expert in the lithium industry. Dr Liu has acted as an expert technical consultant on over 20 different lithium converters worldwide from due diligence to commissioning. He previously held the position of General Manager of Development and Technologies at Galaxy Resources Limited, where he was responsible for overseeing the construction and commissioning of the Mt Cattlin Spodumene Project and the world-renowned Jiangsu Lithium Carbonate plant. Jingyuan also played a key role in designing the flow sheet for the Sal de Vida brine project in Argentina. Following his work with Galaxy Resources, he has acted as a special adviser to various lithium carbonate and lithium hydroxide projects globally, including the Lithium Hydroxide Plant operated by Tianqi in Kwinana, Western Australia. Dr Liu is a director of the Company and has performance incentives associated with the completion of a Definitive Feasibility Study for the Becancour Lithium Refinery.

Section 1: Sampling Techniques and Data – Metallurgical Testwork

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques		*Spodumene samples used in the laboratory testing were purchased from the market place to represent various industry spodumene supply.* *The Becancour Lithium Refinery Definitive Feasibility Study (DFS) does not rely upon estimated ore reserves / and or mineral resources. The spodumene concentrate feedstock for the proposed refinery has been assumed to have been purchased directly from spodumene miners currently producing spodumene concentrates or marketing agents or traders currently purchasing spodumene concentrate and selling to the downstream processors. Accordingly, the JORC Code is not relevant to this study nor are Listing Rules 5.16 and 5.17 to the extent to which they relate to matters concerning JORC.*
Drilling techniques		*Not applicable, as there was no resource drilling associated with the DFS. The spodumene samples for test were purchased from a supplier or agent*
Drill sample recovery		*Not applicable as there was no resource drilling associated with the DFS. The spodumene samples for test were purchased from a supplier or agent*
Logging		*Not applicable, as there was no resource logging associated with the DFS. The spodumene samples for test were purchased from a supplier or agent.*
Sub-sampling techniques and sample preparation		*The purchased spodumene sample was prepared by the following procedure:* *1. 10Kg sample was received and mixed uniformly in a barrel mixer to provide a representative sample* *2. The sample was split into 4 quarters using a splitter* *3. One sub sample was milled to less than 300 micron* *4. The lithium values were measured using Quantitative X-ray Diffraction (QXRD), a technique used in the lithium industry.* *5. Impurity values were measured using ICP* *6. Particle sizing was conducted on the sub sample* *7. The other sub sample was calcined at 1080 deg C to convert to alpha spodumene* *8. The beta spodumene was digested with sulphuric acid* *9. The slurried was filtered and analysis of the liquor and solids were conducted using Atomic Absorption (AA)* *10. Lithium carbonate was precipitated and the final analysis was conducted using AA for lithium and ICP for impurities*

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	*Laboratory tests used*	*All tests were conducted by Linyi University Lithium Research Centre and supervised by Dr Jingyuan Liu.* *The mineral species of the spodumene samples and subsequent process steps were conducted with Quantitative X-ray Diffraction (QXRD), a technique used in the lithium industry.* *Xray Defractometer technique was used in particle size analysis of the various process components. Atomic Absorption (AA) was used in the liquid process analysis, again common in the lithium industry.* *Inductively Coupled Emission Spectrometry (ICP-AES) and Dual System Ion Chromatography were used during various test procedures as well.*
Verification of sampling and assaying		*Several lithium laboratory cross-checks using ICP and QXRD were conducted to verify the lithium assaying technique. The sample preparation was designed by Dr Liu to ensure a representative sample was used for down stream testing.*
Location of data points		*Not Applicable as there were no resource data points associated with the DFS. The spodumene samples for test were purchased from a supplier or agent*
Data spacing and distribution		*Not Applicable as there was no resource drilling, there was no data spacing and distribution associated with the DFS. The spodumene samples for test were purchased from a supplier or agent*
Orientation of data in relation to geological structure		*No Applicable as there was no resource or geological structure associated with the DFS. The spodumene samples for test were purchased from a supplier or agent*
Sample security	*The measures taken to ensure sample security.*	*Purchase samples of spodumene were transported to Linyi University through reputable shipping companies. The company takes full responsibility on the custody of those purchased samples.*
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	*The laboratory sampling and laboratory test procedures were supervised and audited by Dr Liu and all procedures are consistent with with lithium industry standards. Linyi University is a leading lithium research centre.*

Section 2: Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status		*Not Applicable (DFS) does not rely upon a mineral tenement or land tenure status. The spodumene concentrate feedstock for the proposed refinery has been assumed to have been purchased directly from spodumene miners currently producing spodumene concentrates or marketing agents or traders currently purchasing spodumene concentrate and selling to the downstream processors*
Exploration done by other parties		*Not applicable, as there was no resource drilling associated with the Not Applicable (DFS) does not rely upon a resource hence exploration by other parties. The spodumene concentrate feedstock for the proposed refinery has been assumed to have been purchased directly from spodumene miners currently producing spodumene concentrates or marketing agents or traders currently purchasing spodumene concentrate and selling to the downstream processorsor agent*
Geology		*Not Applicable (DFS) does not rely upon geology of a resource. The spodumene concentrate feedstock for the proposed refinery has been assumed to have been purchased directly from spodumene miners currently producing spodumene concentrates or marketing agents or traders currently purchasing spodumene concentrate and selling to the downstream processors*
Drill hole Information		*Not Applicable – There were no drill holes associated with the DFS. The spodumene concentrate feedstock for the proposed refinery has been assumed to have been purchased directly from spodumene miners currently producing spodumene concentrates or marketing agents or traders currently purchasing spodumene concentrate and selling to the downstream processors*
Data aggregation methods		*Not Applicable - There were no data aggregation methods associated with the DFS. The spodumene concentrate feedstock for the proposed refinery has been assumed to have been purchased directly from spodumene miners currently producing spodumene concentrates or marketing agents or traders currently purchasing spodumene concentrate and selling to the downstream processors*
Relationship between mineralisation widths and intercept lengths		*Not Applicable - There were no mineralization associated with the DFS. The spodumene concentrate feedstock for the proposed refinery has been assumed to have been purchased directly from spodumene miners currently producing spodumene concentrates or marketing agents or traders currently purchasing spodumene concentrate and selling to the downstream processors*
Diagrams		*Not Applicable No diagrams are associated with the DFS. The spodumene concentrate feedstock for the proposed refinery has been assumed to have been purchased directly from spodumene miners currently producing spodumene concentrates or marketing agents or traders currently purchasing spodumene concentrate and selling to the downstream processors*

Criteria	JORC Code explanation	Commentary
Balanced reporting		*Not Applicable - The spodumene concentrate feedstock for the proposed refinery has been assumed to have been purchased directly from spodumene miners currently producing spodumene concentrates or marketing agents or traders currently purchasing spodumene concentrate and selling to the downstream processors*
Other substantive exploration data		*Not Applicable - The spodumene concentrate feedstock for the proposed refinery has been assumed to have been purchased directly from spodumene miners currently producing spodumene concentrates or marketing agents or traders currently purchasing spodumene concentrate and selling to the downstream processors*
Further work		*Not Applicable (DFS) does not rely upon geology of a resource. The spodumene concentrate feedstock for the proposed refinery has been assumed to have been No further work is planned for the completed testwork. The results are sufficient to form the view that the proposed process is sufficient to produce saleable lithium carbonate. directly from spodumene miners currently producing spodumene concentrates or marketing agents or traders currently purchasing spodumene concentrate and selling to the downstream processors*

Authorised by the 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**

For more information, please contact:

ALEX HANLY
Chief Executive Officer
Lithium Universe Limited
Email: info@lithiumuniverse.com

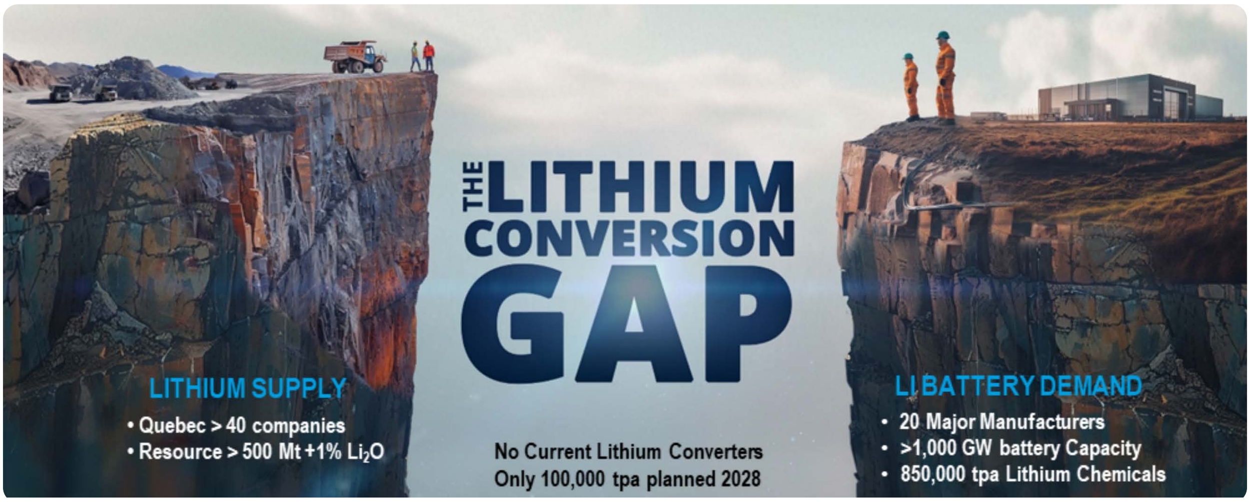
IGGY TAN
Chairman
Lithium Universe Limited
Email: info@lithiumuniverse.com

ABOUT LITHIUM UNIVERSE LIMITED

Lithium Universe is on a mission to close the 'Lithium Conversion Gap' in North America by developing a green battery-grade lithium carbonate refinery in Québec, Canada. Our primary focus is on supporting the supply chain needs of original equipment manufacturers (OEMs), particularly in the automotive sector, by converting spodumene supply into essential lithium chemicals for electric vehicle (EV) battery plants.

The Lithium Conversion Gap

As North America anticipates a significant increase in battery manufacturing—over 20 major manufacturers planning to deploy an estimated 1,000GW of battery capacity by 2028—the demand for lithium is projected to reach approximately 850,000 tonnes of lithium carbonate equivalent (LCE) per annum. Currently, there are no operational converters in North America, with only 100,000t of LCE hard rock converters slated for construction by 2028. Our strategic approach aligns with national security goals to reduce dependence on Chinese lithium converters and onshore the lithium battery supply chain.



Proven Lithium Technology

Our Bécancour refinery will utilize the proven technology developed at the Jiangsu Lithium Carbonate Plant, which has set a global benchmark for lithium refineries. By leveraging this established technology, we aim to produce up to 18,270 tonnes/year of green battery-grade lithium carbonate, focusing initially on lithium carbonate production for LFP batteries. Our design employs a smaller, off-the-shelf plant model, ensuring ease of operation and implementation.

Proven Lithium Expertise

Lithium Universe boasts a team of industry leaders known for expedient and quality lithium project delivery and operation. Chairman, Iggy Tan, a pioneer in the lithium industry, previously led Galaxy Resources to establish the first large-scale vertically integrated mine-to-refinery project. Other key figures include Patrick Scallan, who expanded production at the world-class Greenbushes Mine, and Dr. Jingyuan Liu, a technical expert in downstream lithium processing having worked on over 20 lithium converters worldwide. Their combined experience positions us to execute our strategy effectively.

The Lithium Universe Strategy

Our positive and robust Bécancour Refinery Pre-Feasibility Study (PFS) demonstrates economic viability even in a low pricing environment. We maintain a counter-cyclical strategy, building projects through the cycle. This positions us to effectively close the Lithium Conversion Gap while maintaining exposure to the inevitable lithium price recovery given the strong worldwide lithium demand.