

# Lake Resources NL: Kachi Project Phase One Definitive Feasibility Study Results

18.12.2023 | [ABN Newswire](#)

Sydney, Australia - [Lake Resources NL](#) (ASX:LKE) (FRA:LK1) (OTCMKTS:LLKKF) is pleased to announce the results of its Definitive Feasibility Study ("DFS") for Phase One of the globally significant Kachi lithium brine project in Argentina.

The Kachi Project ("Kachi", "Kachi Project" or "Project") Phase One DFS demonstrates that Kachi is a tier one project, backed by a significant resource and strong economics positioning it competitively within the growing lithium market.

## Kachi Project Phase One Financial Highlights

- The Project boasts a post-tax NPV8 of US\$2.3 billion and an internal rate of return ("IRR") of 21%.
- Targets battery grade lithium carbonate revenue of US\$21 billion and US\$16 billion EBITDA for the 25-year life of mine ("LoM").
- Targets annual average EBITDA of US\$635 million and EBITDA margin of 76%.
- US\$1.38 billion estimated initial Capex for Phase One is within the range provided in the previous operational update.
- US \$6.05 / kg of lithium carbonate equivalent ("LCE") estimated run rate Opex for Phase One is within the range provided in the previous operational update.

"Kachi commands an NPV8 of US\$2.3 billion and an IRR of 21% with targeted \$21 billion revenue and \$16 billion EBITDA for Phase One. These are very strong and competitive economics," Lake Resources CEO David Dickson said.

Mr. Dickson added: "Demand growth is expected to continue with strong forecasts for the next two decades - at the time our top tier Project comes into production. Kachi will be producing a high-quality, high-specification battery grade product to match this increasing demand."

This Project will bring much needed lithium into the expanding electric vehicle automotive and energy storage systems markets. Currently, lithium demand is on pace to grow from less than one million tonnes LCE in 2023 to over four million tonnes LCE in 2040, a 9% compound annual growth rate ("CAGR").

Kachi has taken an innovative approach to lithium brine extraction to advance sustainable and responsible lithium production through the application of ion exchange Direct Lithium Extraction ("DLE"). The process design for Kachi has been developed in partnership with Lilac Solutions ("Lilac") and is supported by a rigorous field-testing program.

## Project and Resource Highlights

- Total resource is estimated at 10.6 Mt LCE, a globally significant resource.
- 25-year mine life supported by maiden Ore Reserve statement.
- Phase One targets a production of 25 thousand tonnes per annum (ktpa) over the LoM to meet the growing demand and specifications of the battery market.
- DLE process tailored to mitigate impact on the local community with minimal disruption to land, freshwater table, and water usage.
- The Project targets production of consistent battery grade lithium carbonate (greater than 99.5% purity) at site without the need for further refining or processing.
- Kachi is targeting first lithium in 2027 with ramp-up to full capacity by the end of 2028, which is forecast to coincide with the start of a prolonged period of structural deficit for battery grade lithium chemicals.

- Long-term pricing forecasts used in the DFS are reflective of the forecasted lithium supply deficit.

#### Proven Process from Brine Extraction to Battery Grade Lithium Carbonate

- The Project operated two campaigns at the demonstration plant at site from October 2022 to November 2023, processing 5.2 million litres of brine and producing over 200,000 litres of lithium chloride eluate while also allowing for increased operational experience and optimization of Lilac's DLE technology.
- Additionally, the Project has produced in excess of 1,300 kilograms of greater than 99.5% purity lithium carbonate at Saltworks demonstration facility to ensure that the commercial flowsheet will meet expectations and to have in place product samples for potential offtake parties.
- Utilizing Lilac's proprietary ion-exchange DLE technology eliminates the need for upstream or downstream evaporation ponds for lithium concentration, reducing the footprint of a traditional brine evaporation operation by greater than 90%.
- The demonstration plant vessels, which hold the ion-exchange material, are approximately one-third the size of commercial-scale vessels. This significantly reduces scale-up risk and increases process uptime.
- The extraction plant is conservatively designed for 80% lithium recovery within the DLE process and an overall plant recovery of lithium greater than 75%. This is significantly higher than traditional evaporation pond recoveries (40%-60%).
- The Project is designed to inject the de-lithiated (spent) brine directly back into the salar, minimizing the risk of subsidence and impact to the reservoir in this semi-desert ecology.

This would be the first application of brine reinjection in an Argentinian lithium brine project and the extensive project field work in 2023 has demonstrated that this plan can be deployed.

This Phase One DFS marks the next important milestone in the development of the Kachi Project, building on the field, test and engineering work performed over the past two years and represents a credible, de-risked execution plan to support delivery of the Project.

#### Next Steps

The critical next steps of the Kachi Project involve:

- Initiation of a strategic partnering process for the Kachi Project, led by Goldman Sachs.
- Commencement of negotiations with potential offtake partners to secure binding offtake agreements, in tandem with strategic partnering process.
- The submission of the Environmental and Social Impact Assessment ("EIA") in early 2024, in support of the Catamarca Province development permit application.
- Selection of a Front-End Engineering Design ("FEED") / Engineering, Procurement and Construction Management ("EPCM") contractor for the Process Plant.
- Selection of an Independent Power Producer ("IPP") for design, permitting, regulatory approvals, construction and operation in accordance with the Power Purchase Agreement ("PPA"), which is to be negotiated.
- Continued engagement with Export Credit Agencies and the supporting commercial banks for project financing.
- Opportunities to further improve overall project Capex and Opex.
- Final Investment Decision ("FID") is targeted for Q1 2025.

\*To view the detailed Summary Report of the Kachi Project DFS, please visit:  
<https://abnnewswire.net/Ink/E97STS59>

#### About Lake Resources NL:

[Lake Resources NL](#) (ASX:LKE) (OTCMKTS:LLKKF) is a clean lithium developer utilising state-of-the-art ion

exchange extraction technology for production of sustainable, high purity lithium from its flagship Kachi Project in Catamarca Province within the Lithium Triangle in Argentina among three other projects covering 220,000 ha.

This ion exchange extraction technology delivers a solution for two rising demands - high purity battery materials to avoid performance issues, and more sustainable, responsibly sourced materials with low carbon footprint and significant ESG benefits.

Source:

[Lake Resources NL](#)

Contact:

Nigel Kassulke at Teneo M: +61-407-904-874 E: Nigel.Kassulke@teneo.com Global: Karen Greene SVP, Investor Relations karen.greene@lakeresources.com.au

---

Dieser Artikel stammt von [Rohstoff-Welt.de](#)

Die URL für diesen Artikel lautet:

<https://www.rohstoff-welt.de/news/460046--Lake-Resources-NL--Kachi-Project-Phase-One-Definitive-Feasibility-Study-Results.html>

Für den Inhalt des Beitrages ist allein der Autor verantwortlich bzw. die aufgeführte Quelle. Bild- oder Filmrechte liegen beim Autor/Quelle bzw. bei der vom ihm benannten Quelle. Bei Übersetzungen können Fehler nicht ausgeschlossen werden. Der vertretene Standpunkt eines Autors spiegelt generell nicht die Meinung des Webseiten-Betreibers wieder. Mittels der Veröffentlichung will dieser lediglich ein pluralistisches Meinungsbild darstellen. Direkte oder indirekte Aussagen in einem Beitrag stellen keinerlei Aufforderung zum Kauf-/Verkauf von Wertpapieren dar. Wir wehren uns gegen jede Form von Hass, Diskriminierung und Verletzung der Menschenwürde. Beachten Sie bitte auch unsere [AGB/Disclaimer!](#)

---

Die Reproduktion, Modifikation oder Verwendung der Inhalte ganz oder teilweise ohne schriftliche Genehmigung ist untersagt!  
Alle Angaben ohne Gewähr! Copyright © by Rohstoff-Welt.de -1999-2026. Es gelten unsere [AGB](#) und [Datenschutzrichtlinien](#).