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Benchmark – Cathodes Kachi Lithium Project & Direct Lithium Extraction

CLEANER LITHIUM FOR AN ELECTRIC WORLD



Steve Promnitz - Managing Director, Lake Resources



Disclaimer

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Forward Looking Statements

Certain statements contained in this presentation, including information as to the future financial performance of the projects, are forward-looking statements. Such forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by Lake Resources N.L. are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies; involve known and unknown risks and uncertainties and other factors that could cause actual events or results to differ materially from estimated or anticipated events or results, expressed or implied, reflected in such forward-looking statements; and may include, among other things, statements regarding targets, estimates and assumptions in respect of production and prices, operating costs and results, capital expenditures, reserves and resources and anticipated flow rates, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions and affected by the risk of further changes in government regulations, policies or legislation and that further funding may be required, but unavailable, for the ongoing development of Lake's projects. Lake Resources N.L. disclaims any intent or obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise. The words "believe", "expect", "anticipate", "indicate", "contemplate", "target", "plan", "intends", "continue", "budget", "estimate", "may", "will", "schedule" and similar expressions identify forward-looking statements. All forward-looking statements made in this presentation are qualified by the foregoing cautionary statements. Investors are cautioned that forward-looking statements are not guarantees of future performance and accordingly investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein. Lake does not undertake to update any forward-looking information, except in accordance with applicable securities laws.

Competent Person Statement

The information contained in this presentation relating to Exploration Results has been compiled by Mr Andrew Fulton. Mr Fulton is a Hydrogeologist and a Member of the Australian Institute of Geoscientists and the Association of Hydrogeologists. Mr Fulton has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a competent person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Andrew Fulton is an employee of Groundwater Exploration Services Pty Ltd and an independent consultant to Lake Resources NL. Mr Fulton consents to the inclusion in this presentation of this information in the form and context in which it appears. The information in this presentation is an accurate representation of the available data to date from initial exploration at the Kachi project and initial exploration at the Cauchari project.



Cathode Lithium Supply Issues

- **NEW LITHIUM SUPPLY:** 10x more supply needed in 10years. Need new entrants.
- SCALE OF NEW SUPPLY: New supply needs to scale up to be significant.
- HIGH BATTERY QUALITY QUALIFIED: End users prefer high quality inputs rigorous qualification process.
- CLEANER SUSTAINABLE SUPPLY: ESG becoming a key driver of consumers legislated in the EU.
- INDEPENDENT DIVERSIFIED SUPPLY: End users prefer diversified supply. Independence valued.



Lake Resources - Clean Lithium Solution for Cathodes.

99.97%

High Purity lithium carbonate. Confirmed in 622 batteries.

+ Significant ESG benefits.

- **CLEANER LITHIUM** Lake's 99.97% purity product high battery quality lithium carbonate= higher battery performance.
- CLEANER TECHNOLOGY: Lilac direct lithium extraction superior to traditional process. Supported by tech sector and battery/EV makers.
- CLEANER ENVIRONMENT: Lithium with ESG benefits. Small environmental footprint low CO₂, less water, low land use.
- CLEARER PATHWAY: Path to production; Successful pilot plant module; Large, scalable project, high margin. Indicative debt funding for 70% of Kachi project
- INDEPENDENT PRODUCER AT SCALE: New clean lithium from a scalable independent producer

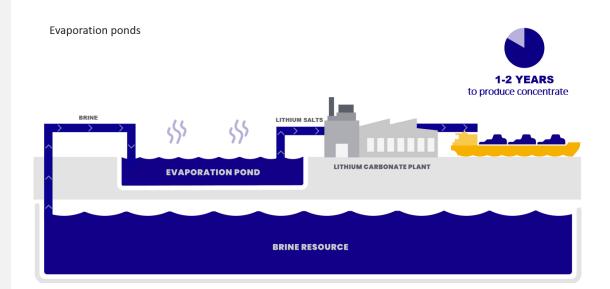


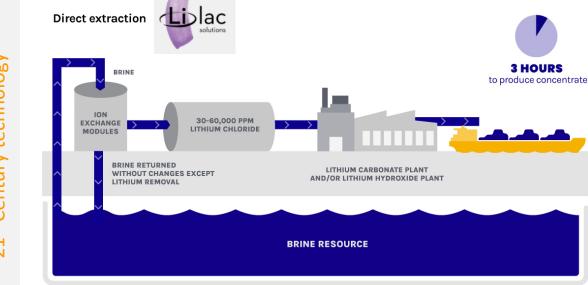
Direct Lithium Extraction Lilac Solutions -Cleaner technology

Lilac direct extraction displaces evaporation process

Brine in – Lithium chloride out

- High purity
- Faster process
- High recovery
- Sustainable No brine heating
- Cost competitive Durable beads
- Scalable
- Proven in pilot plant Extensive test work







Delivers a Cleaner Environment

Smaller environment footprint – Low Land use - Lower water use – No brine depletion

Atacama Projects – Brine evaporation (170km2)



Kachi Project – Lake/Lilac DLE (1km2)

Brine Returned to Source



Sustainable lithium

Lake / Lilac DLE method

- Low CO₂ footprint
- Low water usage
- Low land use

Bloomberg Green

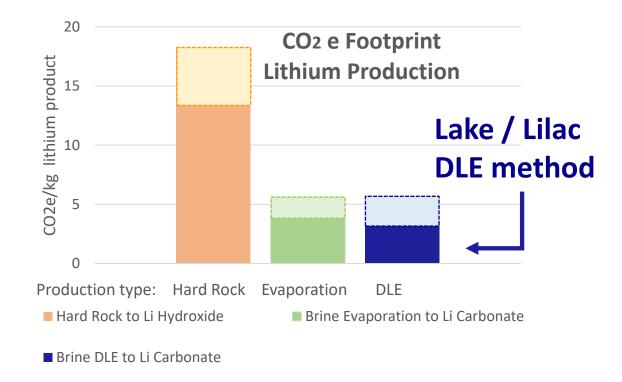
Energy & Science

Bill Gates-Led Fund Invests in Making Lithium Mining More Sustainable

Lilac Solutions has developed a process for extracting lithium that drastically cuts water use.

By <u>Akshat Rath</u>

February 20, 2020, 4:00 PM GMT+11



ESG Sustainable Development Goals

























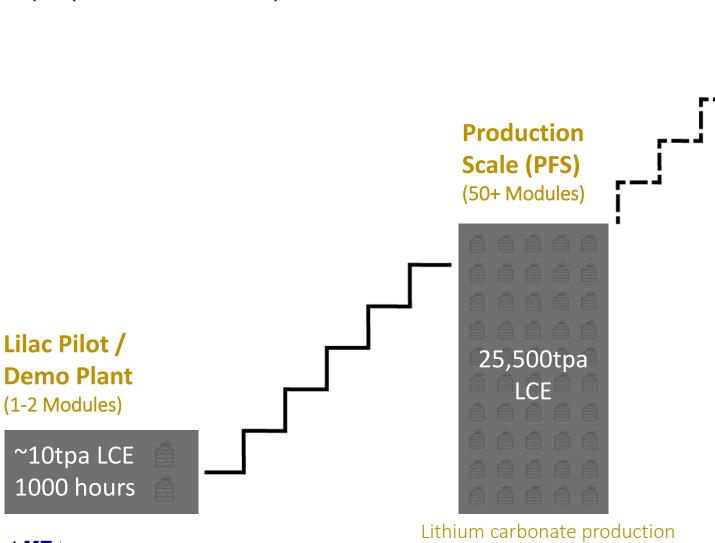
Partnership- Lilac Solutions + Kachi Project Aligns Climate Tech with Upstream Lithium Supply

- Lilac to Earn in to Kachi Project up to max 25% stake via performance based milestones
 - Initial 10% Lilac funds completion of testing of its technology for the Kachi Project
 - Further 10% Lilac funds on-site demonstration plant at Kachi and satisfies all agreed testing criteria
 - Final 5% Kachi lithium product achieves highest agreed qualification standards with certain offtakers
- Lilac to Contribute c.US\$50 million to Kachi Project, once earn in complete (pro-rata development funding)
- Lilac has major tech sector supporters aligns breakthrough climate tech with upstream ESG lithium Aligns breakthrough Climate Tech investment with upstream environmentally friendly battery materials supply. Lilac completed US\$150m Series B funding round from successful tech investors and battery/EV makers
- Lake with Lilac New independent clean lithium producer with scale



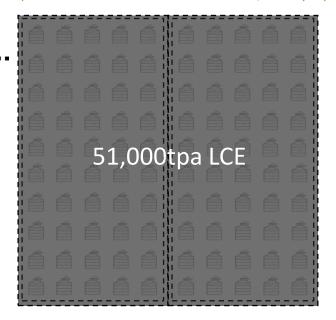
Clearer pathway

Simple production scale-up - Modular



Expansion Study*

(to Double Production to 51,000tpa)



Option for lithium hydroxide production

SLIDE / 9

^{*} Note: Expansion Study requires drilling (underway) to upgrade more Inferred Resources to Measured and Indicated Resources.

Kachi project

Proposed plant design



One building with Ion Exchange Modules Replaces 20-30km² of Evaporation Ponds



Kachi PFS metrics

Compelling economics

Pre-Feasibility Study results

Mineral Resource* (Indicated)

1.01Mt

Annual production Li₂CO₃

25,500tpa

Annual EBITDA

US\$260m

Project life

25+ years

Expansion Study Underway

51,000tpa#

CAPEX

US\$544m

Cash cost

US\$4,178/t

Annual operating costs

US\$107m

Project Finance

70% debt##

Post-tax NPV8

US\$1,580m**

IRR post-tax

35%

Note: Results based on PFS Study Assumptions (refer ASX releases 30 Apr 2020, 17 March 2021)

Discussions with Export Credit Agencies Underway; Indications of c. 70% debt over 8-10 years



^{*}Based on Indicated Resource 1.0Mt @290mg/L lithium

^{**}Assuming US\$15,500/t lithium carbonate price (CIF Asia) (refer ASX release 17 March 2021)

[#] Expansion study to double production, but not confirmed

Kachi Project Finance Support

UK Export Finance & Canada EDC – Export Credit Agencies Support Expression of Interest - Funding to ~70% of Total Required – including Expansion





Project Finance

~70% debt##

CAPEX

US\$544m

Debt Duration

10-11 years*

Annual production Li_2CO_3

25,500tpa

Project life

25+ years

Expansion Study Support

51,000tpa#

Note: Expression of Interest subject to standard project finance terms (refer ASX release 11 Aug 2021)

Expansion study to double production, but not completed ## Indicative level of support c. 70% debt over 8.5 years post construction UK Export Finance provided Expression of Interest to support ~70% of the total finance required Incl. Canada EDC up to US\$100m.

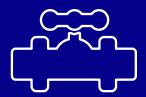
- Subject to standard project finance terms, including DFS, ESIA and offtake
- Support for expansion to 51,000 tpa
- 8.5 year debt funding post construction
- Significantly lower cost of capital than traditional debt financing and Reflects ESG benefits of project



^{* 8.5} years Post Construction

Project Production Timeline

2021 – Q2, 2022



DFS ESIA

Definitive Feasibility
Study
2022 Expansion Study

2021 – Q2, 2022



Demonstration Plant

Q1,2022 Demo Plant Onsite 2021-22 Samples in Batteries 2021-22 Samples to Offtakers 2021 – Q2, 2022



Financing

Project Finance
Export Credit Agencies
Indicative 70% debt 10 years
Triggered by DFS, ESIA

Q3,Q4 2022



Construction / Production

Mid-Late 2022 Approvals/ Construction starts

2024 Production 25,500tpa LCE



World's cleanest lithium.

Four lithium projects in heart of the Lithium Triangle.

Large leaseholding 2,200km² (550,000 acres)

World's five largest producers all have equity in operations in the Lithium Triangle.





Cauchari project / Olaroz Project

Next lithium projects through development

Cauchari - Identical lithium brines as adjoining Ganfeng/Lithium Americas development

Lake's brines being tested for direct lithium extraction

Cauchari and Olaroz - Scoping study and resource drilling planned for 2021/22





Corporate snapshot

Funded to FID

Share price

A\$0.84 us\$0.74

7 Dec 2021 (10 day VWAP) 52 week high \$1.18c, low \$0.05c

Shares on issue

1.216bn

Market capitalisation

A\$1020m

US\$720m

Institutional Investors

Ausbil, Acorn

+ Institutional investors USA, EU

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Cash 30 Sept 2021

A\$63m US\$48m

Debt

Zero

Unlisted Options

26m

30c options, March 2023 expiry

85m

75c options, 15 June 2022 expiry

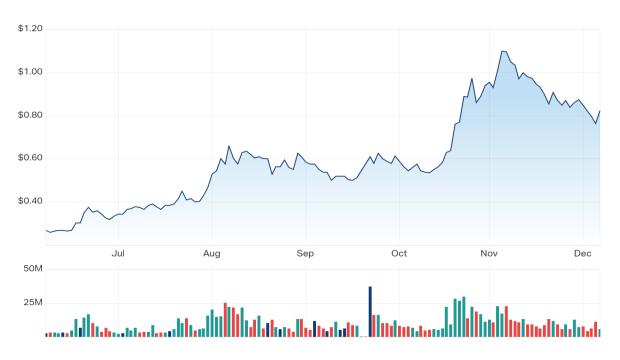
37m

55c options, Dec 2024 expiry

5.7m
49c options, Aug 2024 expiry

Half year share price chart

LKE Chart



SLIDE / 16

Lake Resources - Clean Lithium Solution for Cathodes.

- World's highest purity lithium
- Technology-led direct extraction
- Major ESG benefits
- New independent clean producer
 - at scale, with de-risked finance

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