

# LithiumBank Files Updated Preliminary Economic Assessment Technical Report for the Boardwalk Lithium Brine Project, West-Central Alberta

CALGARY, Alberta, February 29, 2024 (GLOBE NEWSWIRE) -- **LithiumBank Resources Corp. (TSX-V: LBNK) (OTCQX: LBNKF)** ("**LithiumBank**" or the "**Company**") is pleased to announce the filing of the updated Preliminary Economic Assessment technical report, entitled "Preliminary Economic Assessment (PEA) for LithiumBank Resources Boardwalk Lithium-Brine Project in West-Central Alberta, Canada" effective February 22, 2024 ("**PEA**"), originally announced by the Company on [January 16th, 2024](#). The updated PEA can be found on [SEDAR+](#). The PEA incorporated the exclusively licensed Direct Lithium Extraction ("**DLE**") technology from G2L Greenview Resources Inc. ("**G2L**").

## **Boardwalk Updated PEA Improvements Highlights include:**<sup>1</sup>

- Increased lithium recovery of 98% using the G2L's cDLE<sup>®</sup> technology;
- Increased production to 34,005 tonnes per year of battery grade lithium hydroxide monohydrate ("**LHM**")<sup>2</sup> over a 20-year period;
- A significant reduction of 34% in operational expenditures to USD \$4,588 per tonne LHM;
- USD \$3.7 Billion Net Present Value<sub>8</sub> ("**NPV<sub>8</sub>**") and 25.0% IRR on a pre-tax basis;
- USD \$2.3 Billion NPV<sub>8</sub> and 20.6% IRR on an after-tax basis;
- Reduction in the payback period from 4.1 years to 3.5 years, on a pre-tax basis;
- Production of high-grade lithium sulphate (Li<sub>2</sub>SO<sub>4</sub>) eluate at a concentration of 3,238 mg/L Li (3.24 g/L Li);
- Lower cost and commercially available reagents used in the cDLE<sup>®</sup> process;
- Majority of acid is recovered in the downstream processing and reused in the elution stage;
- Reduction in freshwater usage using the G2L cDLE<sup>®</sup>;
- Achievement of commercial production within 3 years is possible under provincial permitting directives;
- Located in the resource friendly jurisdiction of west-central Alberta, which has a long history of resource extraction, well established infrastructure, and an actively supportive government;
- Power expected to be generated on site using high-efficiency gas turbines with steam cogeneration that is expected to lower the project's overall carbon footprint. The proposed gas turbine units may be run on 80% hydrogen when a reliable supply is available;
- Project economics again used USD \$26,000/t LHM and provides strong leverage to higher lithium prices; and
- No changes were made to the front end of the engineering which includes everything up to the DLE.

The PEA summarized in this news release is preliminary in nature as it includes a portion of Inferred mineral resources that are considered too speculative geologically to have the economic

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<sup>1</sup> Readers are cautioned that reliance on information in this announcement without reference to the NI 43-101 updated PEA technical report may not be appropriate. The NI 43-101 updated PEA technical report is meant to be read as a whole, and sections should not be read or relied upon out of context.

<sup>2</sup> 34,005 metric tonnes LMH is equivalent to 29,951 metric tonnes LCE.

considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the results of the PEA will be realized. Mineral resources are not mineral reserves and do not have demonstrated economic viability.

The Company sees multiple avenues to create value in the coming months through continued derisking efforts such as updating the Inferred mineral resource estimate to Measured and Indicated at Boardwalk and commissioning of the 10,000 L/day lithium brine pilot plant currently being assembled in the Company's Calgary, Alberta facility.

In addition to the Boardwalk project, LithiumBank also holds the Park Place lithium brine project which consists of 1.4M acres overlying the Leduc and Swan Hills Formations. Detailed subsurface modelling with SLB is nearing completing and is expected to result in an initial NI 43-101 Resource Estimate.

"Updating the Boardwalk PEA to incorporate our licensed technology from G2L to further enhance the asset is an important part of our development strategy," commented LithiumBank CEO Rob Shewchuk. "Our goal is to provide de-risked, construction-ready direct lithium brine projects to major developers. Boardwalk is the most advanced to date, but we will continue to apply our model to the rest of our portfolio to create attractive, buildable assets."

The PEA was prepared by the following Qualified Persons: Roy Eccles, P. Geol. of APEX Geoscience Ltd., Kim Mohler, P. Eng. of GLJ Ltd., Gordon MacMillan, P. Geol. of Fluid Domains, Jim Touw, P. Geol. of HCL Ltd., Frederick Scott, P. Eng. of Scott Energy, Egon Linton, P. Eng. of Hatch Ltd., Evan Jones, P. Eng. of Hatch Ltd., Stefan Hlouschko, P. Eng. of Hatch Ltd., and Lisa Park, AusIMM.

The information that forms the basis for the scientific and technical information disclosed in this news release was prepared and approved by Kevin Piepgrass, P. Geo, who is a Qualified Person (QP) for the purposes of National Instrument 43-101. Mr Kevin Piepgrass consents to the inclusion of the data in the form and context in which it appears.

#### **About LithiumBank Resources Corp.**

LithiumBank Resources Corp. (TSXV: LBNK) (OTCQX: LBNKF), is a publicly traded lithium company that is focused on developing its two flagship projects, Boardwalk and Park Place, in Western Canada. The Company holds 2,480,196 acres of brown-field lithium brine licenses, across three (3) districts in Alberta and Saskatchewan.

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*This news release contains “forward-looking information” within the meaning of applicable Canadian securities legislation. “Forward-looking information” includes, but is not limited to, statements with respect to the activities, events or developments that the Company expects or anticipates will or may occur in the future, including the Company’s expectations regarding the possible initial NI 43-101 resource estimate at the Boardwalk project; the commissioning and assembly of the lithium brine pilot plant; completion of the subsurface modelling with SLB at the Park Place project; expectations and assumptions regarding the results of the PEA; and the Company’s strategy regarding building its portfolio.*

*Generally, but not always, forward-looking information and statements can be identified by the use of words such as “plans”, “expects”, “is expected”, “budget”, “scheduled”, “estimates”, “forecasts”, “intends”, “anticipates”, or “believes” or the negative connotation thereof or variations of such words and phrases or state that certain actions, events or results “may”, “could”, “would”, “might” or “will be taken”, “occur” or “be achieved” or the negative connotation thereof.*

*Such forward-looking information and statements are based on numerous assumptions, including among others, the Company’s ability to achieve its stated goals; that the Company will continue to create value and mitigate risks with respect to the possible initial mineral resource estimate at the Boardwalk project; the Company’s expectations regarding future exploration results at Boardwalk; that the assembly of the lithium brine pilot will continue as anticipated; that the Company will complete the subsurface modelling with SLD at the Park Place project and that upon completion, there will be a resource estimate; that the Company will be able to prepare a technical report pertaining to such resource estimate; and the Company’s ability to apply the same model to each project in its portfolio.*

*Although the assumptions made by the Company in providing forward-looking information or making forward-looking statements are considered reasonable by management at the time, there can be no assurance that such assumptions will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. Important factors that could cause actual results to differ materially from the Company’s plans or expectations include, without limitation, the risk that the Company will not be able to achieve its stated goals; the potential for delays in exploration, development, permitting, and assembly activities at the Company’s projects and lithium brine pilot plant; the interpretation of the results of the PEA; the possibility that any future development results will not be consistent with the Company’s expectations; the possibility that there will not be an initial mineral resource present at the Boardwalk project; risks related to commodity price and foreign exchange rate fluctuations; the cyclical nature of the industry in which the Company operates; risks related to global financial markets, including the trading price of the Company’s shares and the Company’s ability to raise capital may also result in additional and unknown risks or liabilities to the Company.*

*Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in the forward-looking information or implied by forward-looking information, there may be other factors that cause results not to be as anticipated, estimated*

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