



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

CALGARY, Alberta, June 21, 2023 (GLOBE NEWSWIRE) -- **LithiumBank Resources Corp. (TSX-V: LBNK) (OTCQX: LBNKF)** (“LithiumBank” or the “Company”) is pleased to announce the filing of the Boardwalk Lithium Brine Project Preliminary Economic Assessment (“PEA”) Technical report entitled “Preliminary Economic Assessment (PEA) for LithiumBank Resources Boardwalk Lithium-Brine Project in West- Central Alberta, Canada” effectively dated June 16, 2023, originally announced [May 25th, 2023](#).

### **PEA Highlights**

- 31,350 metric tonnes per year of battery grade lithium hydroxide monohydrate (“LHM”)<sup>1</sup> production over a 20-year period, the largest proposed LHM production in North America;
- USD \$2.7 Billion NPV<sub>8</sub> and 21.6% IRR on a pre-tax basis;
- USD \$1.7 Billion NPV<sub>8</sub> and 17.8% IRR on an after-tax basis;
- OPEX of USD \$6,807/ton LHM;
- Direct Lithium Extraction (“DLE”) used to process Boardwalk brine will require less fresh water and have a surface footprint that is a fraction of hard rock or evaporation lithium production;
- Ramp up to commercial production within 3 years is possible under newly established permitting directives;
- Located in Tier 1 jurisdiction, west-central Alberta, which has a long history of resource extraction, well established infrastructure, and an actively supportive government;
- Power to be generated on site using high-efficiency gas turbines with steam cogeneration that will lower the project’s overall carbon footprint. The proposed gas turbine units may be run on 80% hydrogen when a reliable supply is available;
- Multiple opportunities to enhance project economics through optimization, further engineering, and pending incentive tax credit;
- Project economics used USD \$26,000/t LHM and provides strong leverage to higher lithium prices.

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<sup>1</sup> 31,350 metric tonnes lithium hydroxide monohydrate (“LHM”) is equivalent to 28,000 metric tonnes lithium carbonate equivalent (“LCE”)

A PEA is preliminary in nature as it includes a portion of inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized.

In addition to the Boardwalk project, LithiumBank also holds two other development ready, district scale assets in Western Canada, Park Place (AB) & Saskatchewan. The Company sees multiple avenues to create value in the coming months through enhancing the economics of the Boardwalk PEA, delivering an initial PEA for Park Place (AB), and by estimating a resource at its Saskatchewan assets.

“The Boardwalk PEA sets the stage for our team to pursue advanced lithium resource development in Western Canada” commented Rob Shewchuk CEO & Director of LithiumBank. "By the end of 2023, we expect to commence pilot plant studies in parallel on both Boardwalk and Park Place and capture near-term enhancement opportunities that have already been identified. We believe this has the potential to position both the Boardwalk and Park Place districts among the most attractive direct brine projects in North America.”

#### **Near Term PEA Enhancements**

- The Government of Canada announced an Investment Tax Credit (ITC) for Clean Technology Manufacturing in its Budget 2023. Refundable tax credit will be applied on capital expenditures for the extraction and processing of critical minerals ([ITC link](#));
- Use of smaller electrical submersible pumps (ESPs) that could fit in reduced diameter well casing throughout the network that is expected to reduce capital expenditures;
- Leveraging of existing wells and surface infrastructure including roads, well pads, pipelines, and utilities;
- Reduction of well and power requirements through enhanced 3-D reservoir modelling and new drilling information;
- Next generation sorbent being developed by Conductive, the provider of the lithium brine DLE technology chosen for the PEA, is expected to reduce costs, increase efficiency and reduce reagent consumption;
- Alternative DLE technology trade-off studies;
- Utilise ZS2 Technologies Inc. to capture and sequester CO<sub>2</sub> emissions to produce carbon credits, extract magnesium from barren brine to produce low carbon cement products that will lower brine reinjection amounts by at least 10%; and
- Additional trade-off studies aimed at streamlining pipeline infrastructure.

The PEA Technical Report 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.

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

LithiumBank Resources Corp. is a development company focused on lithium-enriched brine projects in Western Canada where low-carbon-impact, rapid DLE technology can be deployed. LithiumBank currently holds over 3.6 million acres of mineral titles, 3.33M acres in Alberta and 336k acres in Saskatchewan. LithiumBank's mineral titles are strategically positioned over known reservoirs that provide a unique combination of scale, grade and exceptional flow rates that are necessary for a large-scale direct brine lithium production. LithiumBank is advancing and de-risking several projects in parallel of the Boardwalk Lithium Brine Project.

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**Cautionary Statement Regarding Forward Looking Statements**

*This release includes certain statements and information that may constitute forward-looking information within the meaning of applicable Canadian securities laws. All statements in this news release, other than statements of historical facts, including statements regarding future estimates, plans, objectives, timing, assumptions or expectations of future performance, including without limitation, the results of the Preliminary Economic Assessment, including the expected NPV of the Boardwalk project; expectations that commercial production will be achievable within 3 years under new permitting directives; expectations that governmental regulators will be supportive of the Boardwalk project; expectations that the carbon footprint of the Boardwalk project will be reduced through DLE extraction technology and through the use of high-efficiency gas turbines with steam cogeneration; expectations that that the 30% Investment Tax Credit (ITC) for Clean Technology Manufacturing will be passed by the Government of Canada; expectations that reduced capital expenditures can be achieved on the Boardwalk projects; expectations that the Boardwalk project will see reduced costs, increased efficiency and reduced reagent consumption through the use of new sorbent; expectations that the Company will pursue and obtain a mineral resource estimate at its Saskatchewan asset and/or a Preliminary Economic Analysis on the Park Place project on the timing anticipated or at all; and expectations that the Company will commence pilot plant studies on both the Boardwalk and Park Place projects by the end of 2023 are forward-looking statements and contain forward-looking information. Generally, forward-looking statements and information can be identified by the use of forward-looking terminology such as "intends" or "anticipates", or variations of such words and phrases or statements that certain actions, events or results "may", "could", "should" or "would" or occur.*

*Forward-looking statements are based on certain material assumptions and analysis made by the Company and the opinions and estimates of management as of the date of this press release, including that the results of the Preliminary Economic Assessment, including the expected NPV of the Boardwalk project, will prove to be accurate; that commercial production will be achievable within 3 years under new*

*permitting directives; that governmental regulators will be supportive of the Boardwalk project; that the carbon footprint of the Boardwalk project can and will be reduced through DLE extraction technology and through the use of high-efficiency gas turbines with steam cogeneration; that the 30% Investment Tax Credit (ITC) for Clean Technology Manufacturing will be passed by the Government of Canada; that reduced capital expenditures can be achieved on the Boardwalk projects through the use of smaller electrical submersible pumps that could fit in reduced diameter well casing; that the use of new sorbent will result in reduced costs, increased efficiency and reduced reagent consumption; that the Company will be able to obtain a mineral resource estimate on its Saskatchewan asset and/or a Preliminary Economic Analysis on the Park Place project on the timing anticipated or at all; and that the Company will commence pilot plant studies on both the Boardwalk and Park Place projects by the end of 2023.*

*These forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking statements or forward-looking information. Important risks that may cause actual results to vary, include, without limitation, the risks that circumstances may arise which require that the Preliminary Economic Assessment be revised; the risk that permitting directives will not accommodate commercial production within 3 years; the risk that governmental regulators will not be supportive of the Boardwalk project; the risk that DLE extraction technology and the use of high-efficiency gas turbines will not reduce the carbon footprint of the Boardwalk project as anticipated; the risk that the 30% Investment Tax Credit (ITC) for Clean Technology Manufacturing will not be passed by the Government of Canada; the risk that smaller electrical submersible pumps will not result in reduced capital expenditures on the Boardwalk project; the risk that the use of new sorbent will not result in reduced costs, increased efficiency and reduced reagent consumption; the risk that the Company is not able to obtain a mineral resource estimate on its Saskatchewan asset and/or a Preliminary Economic Analysis on the Park Place project on the timing anticipated or at all; and the risk that the Company will be unable to commence pilot plant studies on both the Boardwalk and Park Place projects by the end of 2023 or at all.*

*Although management of the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements or forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements and forward-looking information. Readers are cautioned that reliance on such information may not be appropriate for other purposes. The Company does not undertake to update any forward-looking statement, forward-looking information or financial outlook that are incorporated by reference herein, except in accordance with applicable securities laws.*