

TSXV: LCE | OTCQX: CYDVF

## **NEWS RELEASE**

# CENTURY LITHIUM PROVIDES UPDATE ON FEASIBILITY STUDY AND SODIUM HYDROXIDE AS A BY-PRODUCT

December 6, 2023 - Vancouver, Canada - Century Lithium Corp. (TSXV: LCE) (OTCQX: CYDVF) (Frankfurt: Lithium" "the Company" C1Z) ("Century or https://www.commoditytv.com/ondemand/companies/profil/century-lithium-corp/) is pleased to provide an update on its ongoing Feasibility Study for its Clayton Valley Lithium Project ("Project") in Clayton Valley, Nevada, and has commenced a market study on sodium hydroxide as a soluble by-product.

## **Highlights**

- Feasibility Study continues with work on options for a phased approach to production
- Market study on sodium hydroxide as salable by-product to be included in the Feasibility Study

Throughout the year, Century Lithium remained focused on the development of its Clayton Valley Lithium Project. The work included ongoing testing of lithium extraction at the Pilot Plant and continuing work on the Feasibility Study for the Project, with reviews of capital and operating cost estimates with consultants Wood PLC, Global Resource Engineers, thyssenkrupp nucera USA, Saltworks Technologies Inc., and WSP USA Environment & Infrastructure Inc. This comprehensive study covers all areas of the lithium extraction process from shallow surface mining of lithium-bearing clay to on-site production of battery-grade lithium carbonate. Target production for the study follows that of the project's earlier Pre-Feasibility Study, which was based on a mill feed of 15,000 tonnes per day and average annual output of 27,000 tonnes per year of lithium carbonate equivalent.

To date, the Company has worked with its Feasibility Study team to revise and update estimates based on optimization. Given volatility in the lithium market, the Company is examining a phased approach to full scale production to provide prospective parties with a lower risk alternative in financing. The Company is working with its consultants to determine viable phases and underlying schedules.

The scope of the Project is multi-faceted in its approach to processing, and includes clay leaching and filtration, ion-exchange based direct lithium extraction ("DLE") from leach solutions, and the production of battery-grade lithium carbonate from the DLE product solutions via concentration, purification, and precipitation. The process is driven by locally sourced sodium chloride brine (salt solution) which is treated by electrolysis in a chlor-alkali plant to produce all the leaching and neutralization reagents required for the process on-site.

In the operation of the chlor-alkali plant, the neutralizing reagent generated is sodium hydroxide, also commonly known as lye, caustic soda, or simply caustic. In the plant, sodium hydroxide is produced as a by-product of the generation of the leaching reagent, hydrochloric acid, in an amount that is slightly greater









than the production of hydrochloric acid. The acid and base are both produced in liquid form at concentrations in the range of 30-37%, The hydrochloric acid is fully utilized in the leaching process. Sodium hydroxide is used at various points in the operation for neutralization and removal of impurities.

Pilot plant testing has shown a significant amount of the sodium hydroxide will be surplus to the production process and therefore available as a by-product for potential sale. The western United States is largely dependent on imports of this essential chemical for water treatment and other industrial uses. A market study, to be incorporated in the Feasibility Study, recognizes the potential for revenue from sodium hydroxide sales, tapping into the need for a domestic supply of sodium hydroxide.

In order to properly evaluate the alternatives and incorporate economic benefits of by-product sales, described above, the Company anticipates completion of the Feasibility Study in Q1 2024.

#### **Qualified Person**

Todd Fayram, MMSA-QP and Senior Vice President, Metallurgy of Century Lithium is the qualified person as defined by National Instrument 43-101 and has approved the technical information in this release.

## **About Century Lithium Corp.**

Century Lithium Corp. (formerly Cypress Development Corp.) is an advanced stage lithium company, focused on developing its 100%-owned Clayton Valley Lithium Project in west-central Nevada, USA. Century Lithium is currently in the pilot stage of testing on material from its lithium-bearing claystone deposit at its Lithium Extraction Facility in Amargosa Valley, Nevada and progressing towards completing a Feasibility Study and permitting, with the goal of becoming a domestic producer of lithium for the growing electric vehicle and battery storage market.

### ON BEHALF OF CENTURY LITHIUM CORP.

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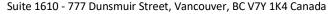
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