



Unlocking Tomorrow's Energy

Corporate Presentation

MARCH 2024

Cautionary Statement

TECHNICAL INFORMATION

Scientific and technical information in this presentation about the Clayton Valley Lithium Project was reviewed and approved by William Willoughby, PhD, PE, Century Lithium Corp.'s President, CEO and Director and a qualified person under National Instrument 43- 101 Standards of Disclosure for Mineral Projects (NI 43-101). More detailed information about the Clayton Valley Lithium Project, including a description of key assumptions, parameters, methods and risks, is presented in the NI 43-101 technical report of Century Lithium Corp. dated effective August 5, 2020 – amended March 15, 2021, titled "NI 43-101 Technical Report Prefeasibility Study Clayton Valley Lithium Project Esmeralda County, Nevada", available on SEDAR.

The Mineral Resource and Mineral Reserve estimates contained in this presentation were prepared in accordance with the requirements of securities laws in effect in Canada, including NI 43-101, which governs Canadian securities law disclosure requirements for mineral properties. NI 43-101 differs significantly from the requirements of the United States Securities and Exchange Commission (SEC) that are applicable to domestic United States reporting companies. Any mineral reserves and mineral resources reported by the Company herein may not be comparable with information made public by United States companies subject to the SEC's reporting and disclosure requirements.

ADDITIONAL REFERENCE MATERIALS

This presentation should be read in conjunction with Century Lithium Corp.'s (Company) news releases, latest Management Discussion and Analysis and Financial Statements for the six months ended September 30, 2023, Technical Reports, Annual Information Form and Management Information Circular, for full details of the information referenced throughout this presentation. These documents are available on the Company's website at <u>www.centurylithium.co</u> or on SEDAR.

FORWARD LOOKING STATEMENTS

This document contains forward looking statements and information within the meaning of applicable Canadian and United States securities legislation and readers should read the cautionary notes contained on the slide titled "Forward Looking Statements & Disclaimer" in the Appendix of this document.

Share & Trading Information

TSX.V: LCE | OTCQX: CYDVF

Issued & Outstanding	148.7 M
Warrants	11.4 M
Options	8.1 M
Fully Diluted	168.2 M
Market Capitalization	~\$ 100 M
Cash Position*	~\$ 17 M
TSX.V 52 Week High – Low OTCQX 52 Week High – Low	\$ 1.32 – \$ 0.365 US\$ 0.99 – \$ 0.26

ANALYST COVERAGE

PI Financial	Justin Stevens
Alliance Global Partners	Jake Sekelsky
Noble Capital Markets	Mark L. Reichman
Hallgarten & Company	Christopher Ecclestone

Share Structure as at March 1st, 2024 * Cash position as at Q3 2023

Our Vision

The Clayton Valley Lithium Project is of one of the largest lithium deposits in the United States and is located adjacent to Albemarle's Silver Peak Mine: North America's only lithium operation in production.

Century Lithium's vision is to grow into a leading domestic lithium producer for the growing electric vehicle and battery storage market. We aim to achieve excellence in all aspects of our business, including safety, efficiency, shareholder value, environmental and social performance, and to be respected by our investors, employees and communities.





Investment Highlights



2022 - 2023 Highlights



Board of Directors

Bryan Disher CHAIR 37+ years of experience in corporate finance, retired partner from PwC Canada, CPA, CA

Ken Owen M.Sc DIRECTOR

40+ years experience in mining management including De Beers, Anglo American and SRK

James G. Pettit DIRECTOR 30+ years experience in corporate finance, executive management & compliance

William Willoughby, PhD, PE PRESIDENT, CEO & DIRECTOR

45+ years of experience in all aspects of natural resources development, production and financing

Corby G. Anderson, PhD, CEng, FIMMM, FIChemE **DIRECTOR**

+40 years of global experience in engineering, design, industrial plant operations, corporate level management, education, research, and professional service

Donald G. Myers DIRECTOR

35+ years experience in management and investor relations for resource and technology companies



Management

William Willoughby, PhD, PE PRESIDENT, CEO & DIRECTOR

45+ years of experience in all aspects of natural resources development, production and financing

Todd S. Fayram, MSc Eng SENIOR VICE PRESIDENT, METTALURGY

35+ years of experience, focusing on metallurgy, pyrometallurgy and extractive operations for multi-national mining and metals producers.

Daniel Kalmbach, CPG MANAGER, GEOLOGY & TECHNICAL SERVICES

23+ years experience in natural resources geology, exploration, mining, and environmental project management

Abraham (Braam) Jonker, CPA, CA CHIEF FINANCIAL OFFICER

30+ years experience in natural resources and accomplished financial leader in the mining industry

Adam Knight, PE PROJECT MANAGER

26+ years experience in management and operations of mining corporations

Spiros Cacos, MA VICE PRESIDENT, INVESTOR RELATIONS

23+ years experience in public markets, ranging from exploration and development to full scale production



Lithium Chemicals Balance



Source: Benchmark Mineral Intelligence

Demand Forecast: 2020 - 2040



Source: Benchmark Mineral Intelligence

Lithium: US "Critical Mineral"



- US Government designated lithium as a "Critical Mineral" of strategic importance in December 2017. (Executive Order 13817 – A Federal Strategy to Ensure, Secure and Reliable Supplies of Critical Minerals)
- "Critical Mineral" designation favors domestic sources of lithium across the supply chain
- Section 3 of the policy calls for identification of new sources of the minerals, increasing exploration mining and processing and streamlining permitting



Policy Updates: The Defense Production Act



The Defense Production Act

Originating in 1950s during the Korean War, the act specifically grants authority to address the mining and production of minerals critical to U.S security.

U.S president Joe Biden has invoked the Defense Production Act in a bid to boost domestic production and processing of key battery raw materials and reduce the country's dependence on foreign supply.



Funding

President Biden's determination specifically cited the need for "lithium, nickel, cobalt, graphite, and manganese for large-capacity batteries, allowing their producers to get assistance under the Defense Production Act's Title III fund.

The White House did not set out plans for direct investment or loans from the government. Instead, the government would fund feasibility studies as Biden said the government would "create, maintain, protect, expand, or restore sustainable and responsible domestic production capabilities of such strategic and critical materials by supporting feasibility studies."



Feasibility Studies

DPA determination issued on the 31st March authorized the Defense Department to conduct feasibility studies for "mature mining, beneficiation, and value-added processing projects; by-product and coproduct production at existing mining, mine waste reclamation, and other industrial facilities; mining, beneficiation and value-added processing modernization to increase productivity, environmental sustainability and workforce safety.



Benchmark's view

In the near-term Benchmark expects the measures to open up supply from existing infrastructure, such as byproduct from current assets. In the longer-term Benchmark expects the measures to help new projects at the bankable feasibility stage of development to unlock much needed investment.





Lithium Deposit Types

		BRINE	
Mine Product	Lithium Carbonate (Li ₂ CO ₃)	Lithium Carbonate (Li ₂ CO ₃)	Spodumene Concentrate (6% Li ₂ O)
Typical Grade	1,000-3,000 ppm Li	500-1,000 ppm Li	4,500-7,000 ppm Li
Production Steps	Mining Acid Leaching Evaporation Crystallization	Pumping of Brine Evaporation Crystallization	Mining Crushing and Grinding Roasting Acid Leaching Evaporation/Crystallization
Estimated Cash Costs (\$/tonne Li ₂ CO ₃)	\$3,387 *Century PFS	\$2,500 – 4,000*	+\$6,000*
 * Industry and company reports Century Lithium: No crushing, no grinding, no roasting Low to no overburden with simple open pit mine design Unique Chlor-Alkali circuit effectively recycles nearly 100% of required water CCD thickeners effectively manage solids/liquids separation 			

Project Location

Nevada

A prominent jurisdiction for mining

100% owned

Billion tonne lithium clay resource on Federal U.S. mining claims

Access

In a chloride basin adjoining Silver Peak, an established producer of lithium brine

Water

Own water rights permit 1,770 acre-feet/year

Power

Adjacent to Greenlink West, a planned 525 KV power corridor





Nevada Energy's Planned 525 kV Greenlink West

Nevada Lithium Projects

HOST	COMPANY	PROJECT	PROJECT STATUS
Brine	Albemarle*	Silver Peak Operation	Producing
	Schlumberger/Pure Energy*	Clayton Valley	PEA, Pilot Plant
Clay/Claystone	Century Lithium	Clayton Valley	PFS, Pilot Plant
	Lithium Americas	Thacker Pass	Feasibility, POO, Pilot Plant
	loneer	Rhvolite Ridge	Feasibility, Pilot Plant

* Adjoining Century Lithium



Century Lithium Deposit Setting



At Century Lithium's property, the lithiumbearing units are exposed at surface or with minimal overburden to depths of 150 meters



Figure L3. Generalized cross section of Clayton Valley playa, showing structural position of the major tuff-bed aquifer and inferred directions of ground-water movement.

From Davis, Friedman and Gleason, 1986. USGS Bulletin 1622, Origin of the Lithium-Rich Brine, Clayton Valley, Nevada.

Resources & Reserves

Indicated Resource			
Tonnes (Million)	Li ppm	Tonnes LCE (million)	
1,304	905	6.3	

Probable Reserve			
Tonnes (Million)	Li ppm	Tonnes LCE (million)	
213	1,129	1.28	



* From 2021 Prefeasibility Study

Note: See footnotes on determination of Resources and Reserves in the Appendix and the Prefeasibility Study; effective date August 5, 2020 - amended March 15, 2021.



Deposit Features

- Extensive flat-lying deposit
- Lithium in illite and montmorillonite clays to depth of at least 150m below surface
- Minimal gravel overburden
- Soft clay, requires no drilling & blasting
- Leachable clay, low acid consumption
- Potential by-products, including Rare Earth Elements ("REEs")



Pre-Feasibility Study Results * After-Tax Cash Flow Analysis (\$US)

Internal Rate of Return (IRR)

25.8%

Payback Period

4.4 years

Capital Cost Estimate

\$493 million over 2 years Net Present Value (NPV 8%) \$1.03 billion

Operating Rate

15,000 tpd for 40 years

Net Lithium Recovery

83%

Base Case Price for Lithium Carbonate

\$9,500/tonne

Average Production Lithium Carbonate Equivalent (LCE)

27,400 tonnes

Operating Cost for Lithium

\$3,387/tonne

* Effective Date August 5, 2020; amended March 15, 2021

PFS Design Assumptions

- Operating rate of 15,000 tpd
 - 5.5 million tpy mill feed @ 1100 ppm Li
 - 40-year mine life
 - < 0.3 : 1 strip ratio (O/B to feed)
 - Conveyor from pit to leach plant
- 2,500 tpd sulfuric acid plant on site
- Agitated tank leaching followed by DLE recovery of lithium
- Production of LCE on-site
- Production estimate of 27,400 tonnes LCE



Project Elements

Mining

- Shallow surface mine with limited overburden
- Soft material, easily excavated with no drilling or blasting

Leaching

• High extractions of lithium from clay with low levels of acid consumption

Filtration

• Easy separation of clay solids from liquid

DLE & Lithium Production

• Achieved high levels of lithium recovery concentration to battery-grade Li₂CO₃

Chlor-Alkali Acid Plant

• Hydrochloric acid (HCl) and sodium hydroxide (NaOH) generated on-site





Mining – Bulk Sample

From Resource to Process Ready

Bulk Sample Location

🖗 Crushing Claystone 🔹



Lithium Extraction Facility – Armargosa Valley

- 14

Acid Leach Extraction of Lithium from Claystone

Leach Tank

Pilot Plant Campus

Lithium Extraction Facility

AMARGOSA VALLEY SITE

Sodium salt-based chemistry

Metallurgically advanced – utilizing DLE

- Average lithium recovery 85%
- Average DLE recovery > 99.5%

Operating safety for over 2 years

Producing high-purity lithium carbonate



Filtration System & Tailings

From Leach Slurry to PLS & Tailings







Direct Lithium Extraction

DLE Area

- Sodium salt-based chemistry
- Incorporates Ion-Exchange (IX) with Membrane (RO) purification
- Achieved **99.5%** DLE recovery
- Operating safety for over 2 years
- Concentrated lithium solution from Pilot
 Plant results in high-purity Li₂CO₃



thyssenkrupp nucera Engaged to Design & Engineer Chlor-Alkali Plant in Feasibility Study

- thyssenkrupp nucera offers world leading technologies for high-efficiency electrolysis plants
 - Including chlor-alkali electrolysis, HCl electrolysis & alkaline water electrolysis
- The Chlor-Alkali Plant allows on-site generation of key reagents: hydrochloric acid & sodium hydroxide in order to produce lithium carbonate
- Design required to ensure compatibility of brine stream with the membrane cells of the Chlor-Alkali Plant facility concept for treatment of recovered brine stream from process



Innovative Application of Chlor-Alkali Process

Salt is the Key

- Clayton Valley brine is a potential source of NaCl (sodium chloride)
 - Salt sources abundant in western U.S.
- On-site generation of reagents
 - HCL (hydrochloric acid)
 - NaOH (sodium hydroxide)
 - Sodium and chlorine are recycled in the process
- Primary components for process developed on site
 - Water and salt components are recycled and reused
- Supports company and project ESG goals
 - Process not tied to hydrocarbon production or oil fields
- Excess NaOH (sodium hydroxide) available for sale



Lithium Extraction Pilot Plant Results

- Continuous 24-hr per day operation achieved
- Extractions of lithium in leaching up to 85%
- Flowsheet simplified
- Magnesium, iron, aluminum and other impurities removed in PIR/SIR
- DLE process recovering 99.5% lithium from the DLE portion of the Pilot Plant
- Intermediate solution produced containing 2,700 ppm lithium and insignificant impurities - suitable for further concentration
- On-site evaporation to further concentrate Intermediate Solution to 30 – 50 gpl for off-site production of lithium product
- Li₂CO₃ made off-site with 99.94% purity in September 2022



Extraction Testing of Lithium-Bearing Claystone





Extraction Testing of Lithium-Bearing Claystone





CONFIRMED: Battery Grade Lithium Carbonate 99.94% Purity

- Enhanced battery grade Li₂CO₃ (lithium carbonate) made
 - 99.94% or "Three Nines" purity
- Exceeded the standard for battery grade (99.5%)
- Li₂CO₃ derived from 7 gram/liter intermediate concentrated lithium solution
- Saltworks Technologies completed the processing system design and pilot work to make the Li₂CO₃
- Independent analyses of product samples completed by SGS Canada
- Saltworks to integrate designs into our Lithium Extraction Facility





Feasibility Study Summary

Feasibility Study Highlights

- AACE Class 3 Estimate
- 15,000 tons/day of ore processed, 40-year mine life
- 27,000 tons/year lithium carbonate produced
- Salt and energy in, lithium, caustic soda, and HCl out, with recycling of goods and services

Engineering

- Base engineering near complete
- Plant Site on Angel Island with underlying competent base rock
- Capital and Operating Cost Estimate being completed and reviewed
- All water recycled where possible

Resource Friendly

- Efficient use of water, salt, and land
- Tailings facility to backfill a portion of pit
- Potential use of solar and geothermal energy sources under development near project
- Population centers close enough for labor pool

Permitting

- Favorable jurisdiction Nevada, USA
- Environmental baseline studies progressing with some completed
- Permitting ongoing as data comes available
- Away from population centers and community of Silver Peak
- Water rights permit in place

Environmental & Social Governance





Focus on effective water and land management



Commitment to working with **local** communities for an economic, **safe** and **sustainable** operation

Moving Forward – The Year Ahead

- Complete Feasibility Study Q1 2024
- ESG Improvements
 - Connect with and support our local community
 - Study alternatives to recycle sodium, chlorine, and water
 - Pursue solar and geothermal energy solutions
- Optimize lithium carbonate production
- Examine marketing of **sodium hydroxide** biproduct
- Pursue Financial Opportunities
 - Strategic Partnership & Federal Funding (grants / loans)
- Complete Plan of Operations
- Continue NEPA permitting process with BLM and state of Nevada
 - Begin EA or EIS
 - Begin state and local permitting process
- Pursue on-site production of lithium carbonate



Summary

Advanced Stage Project

- Fully financed to production decision
- Feasibility stage lithium clay project
- 40+ year life of mine
- Advanced extractive metallurgy

Pilot Plant Program

- Metallurgically advanced utilizing DLE
 - Average lithium recovery 99.5% in DLE
- Continuous operations achieved
- Data generated for support of Feasibility Study

Confirmed Battery Grade Li₂CO₃

- Ability to repeatedly make a high purity Li₂CO₃ with low level impurities
- Integrate designs into Lithium Extraction Program

Permitting

- Favorable jurisdiction Nevada, USA
- Away from population centers & community of Silver Peak
- Environmental baseline studies ongoing
- Opportunities for renewable energy:
 - Solar & Geothermal
- Water rights permit in place





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