



CENTURY LITHIUM

Unlocking Tomorrow's Energy

Corporate Presentation

FEBRUARY 2025

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). Further information about the Project, including a description of the key assumptions, parameters, description of sampling methods, data verification and quality assurance (QA) / quality control (QC) programs, methods relating to Mineral Resources and Mineral Reserves and factors that may affect those estimates are contained in the NI 43-101 Technical Report on the Feasibility Study of the Angel Island Mine (formally named Clayton Valley Lithium Project), Esmeralda County, Nevada, USA, April 29, 2024. Following Section 3.4 of NI 43-101 the report is available on SEDAR+ and on the Company's website.

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 news releases, latest Management Discussion and Analysis and Financial Statements for the Nine Months Ended September 30, 2024, 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 www.centurylithium.com or on Company's profile at www.sedarplus.com.

FORWARD LOOKING STATEMENTS

This presentation contains certain forward-looking statements within the meaning of applicable Canadian securities legislation. In certain cases, forward-looking statements can be identified by the use of words such as "plans", "expects" or "does not anticipate", or "believes", or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved" and similar expressions suggesting future outcomes or statements regarding an outlook.

Forward-looking statements relate to any matters that are not historical facts and statements of our beliefs, intentions and expectations about developments, results and events which will or may occur in the future, without limitation, statements with respect to the potential development and value of the Project and benefits associated therewith, statements with respect to the expected project economics for the Project, such as estimates of life of mine, lithium prices, production and recoveries, capital and operating costs, IRR, NPV and cash flows, any projections outlined in the Feasibility Study in respect of the Project, the permitting status of the Project and the Company's future development plans.



About Century Lithium

Century Lithium Corp. is an advanced stage lithium company, focused on developing its wholly owned Angel Island project in west-central Nevada, which hosts one of the largest lithium deposits in the United States. The Company utilizes its patent-pending process for chloride leaching combined with Direct Lithium Extraction to make battery quality lithium carbonate samples from Angel Island lithium-bearing claystone on-site at its Lithium Extraction Facility in Amargosa Valley, Nevada.

Angel Island is one of the few advanced lithium projects in development in the United States to provide an end-to-end process to produce battery grade lithium carbonate for the growing electric vehicle and battery storage market. The project is currently in the permitting stage for a three-phase feasibility-level production plan expected to yield an average of 34,000 tpa of battery grade lithium carbonate over a 40-year mine-life.



Share & Trading Information

TSX.V: **LCE** | OTCQX: **CYDVF**

Issued & Outstanding	149.5 M
Warrants	nil M
Options	7.5M
Fully Diluted	157 M
Market Capitalization	~\$40 M
Cash Position*	~\$ 8.1 M
TSX.V 52 Week High – Low	\$ 0.93 – \$ 0.21
OTCQX 52 Week High – Low	US\$ 0.71 – \$ 0.15

Share Structure as at February 1st, 2025

* Cash position as at Q3 2024

ANALYST COVERAGE

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



Lithium: U.S. “Critical Mineral”



- The United States 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](#)



U.S. Government Policy Themes

Objectives & Programs

- Government has recognized importance of a domestic supply chain and is allocating significant funding to the energy transition movement

Inflation Reduction Act (IRA)

- Groundbreaking legislation providing material funding to miners and automakers to onshore critical mineral supply chain; following passing of the law in 2022 we have seen a material change in strategy and aggressiveness to secure supply among Western manufacturers
- 10% production tax credit for critical minerals produced within the U.S. or a possession of the U.S.
- For new EV vehicles, consumers are eligible for up to US\$3,750 tax in credits if at least 40% of the value of the critical minerals were extracted or processed in the U.S. or countries with which U.S. has a free trade agreement, or recycled in North America

Department of Energy (DoE)

- The DoE is aiming to develop a robust domestic electric vehicle supply chain to compete with China
- Over US\$120 bn has been announced in U.S. battery manufacturing and supply chain announcements and over 200 new expanded minerals, materials processing and manufacturing facilities
- The long-term objectives of the DoE remain to invest in R&D to find new ways to develop infrastructure with the minerals it has available, and to invest in ways to recycle existing used

Source: Department of Energy, Inflation Reduction Act



Investment Highlights



ADVANCED STAGE

- One of the largest lithium deposits in the USA
- Feasibility level
- 40+ year life of mine
- Tier 1 jurisdiction - Nevada
- Adjacent to Albemarle's Silver Peak Mine
- Low OPEX \$2,766/t



PROVEN TECHNOLOGY

- Pilot Plant is in its 3rd year of operation with proven processing flowsheet
- Chloride-based process
- Direct Lithium Extraction (DLE) via Li-PRO™ from Koch Technology Solutions
- One of the few advanced projects in the US to provide an end-to-end process



WATER PERMIT

- Own water rights permit in Clayton Valley Basin
- Water resources in Nevada are limited
- Essential for the development lithium projects



BATTERY QUALITY Li₂CO₃

- Tests exceed industry standard battery grade specs of 99.5%
- Quality meets general standards for use in electric vehicle batteries
- Ability to repeatedly make a high purity Li₂CO₃



Angel Island Overview

One of the few advanced projects in the US to provide an end-to-end process

Nevada

Tier 1 jurisdiction for mining

100% owned

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

Access

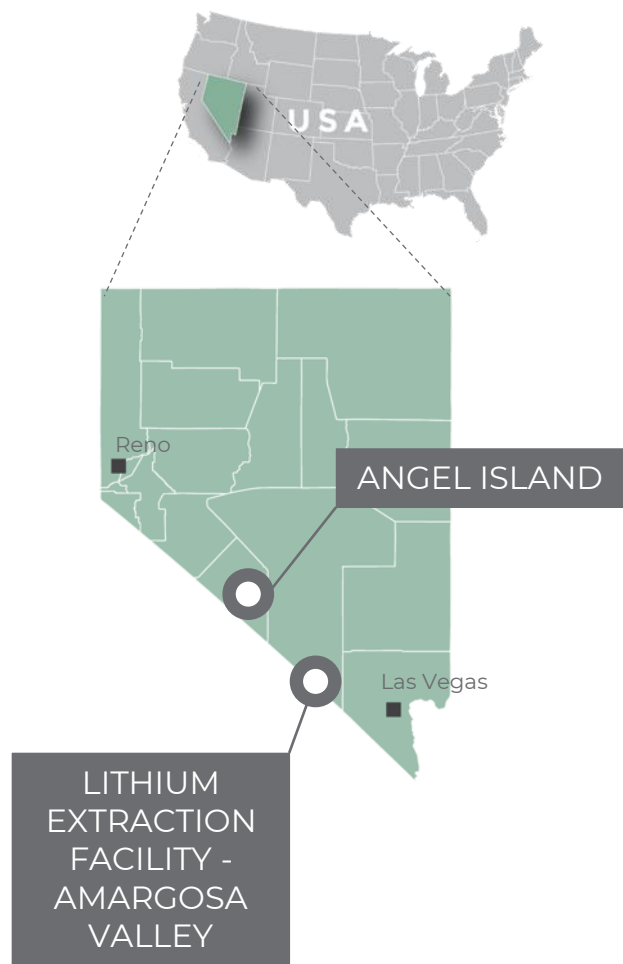
In a chloride basin adjoining Silver Peak, an established producer of lithium brine

Water

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

Power

Adjacent to Greenlink West, a planned 525 KV power corridor



Nevada Lithium Projects

HOST	COMPANY	PROJECT	PROJECT STATUS	FINANCE STATUS
Brine	Albemarle*	Silver Peak Operation	Producing	-
	SLB/Pure Energy*	Clayton Valley	PEA, Pilot Plant	-
Clay/Claystone	Century Lithium	Angel Island	Feasibility, Pilot Plant	Currently in Discussions with DoE
	Lithium Americas	Thacker Pass	In construction	\$2.26 Billion from DoE
	loneer	Rhyolite Ridge	Construction in 2025	\$968 Million from DoE

* Adjoining Century Lithium



Project Highlights

End-to-End Process

- One of the few advanced projects in the U.S. to provide an end-to-end process to produce battery-grade Li_2CO_3

Shallow Surface Mine

- Low strip ratio, soft sedimentary deposit, mining without drilling or blasting

Large-Scale Nevada-based Lithium Project

- Production plan to generate a life-of-mine average of **34,000 tpa of battery-quality Li_2CO_3**

Innovative Approach in Processing

- Using sustainable chloride-based leaching and DLE

Long 40-Year Mine Life

- **Proven & Probable** Mineral Reserve of **287 Mt** at an average grade of **1,149 ppm Li** containing 0.330 Mt of Li or **1.76 Mt of LCE**
- Measured & Indicated Mineral Resource of 1.138 Bt at an average grade of 966 ppm Li containing 1.099 Mt of Li or 5.582 Mt LCE

Designed for Expansion

- **Initial Project** capital cost \$1.54 billion | Expansion **Phase 2** \$651 million, expansion

Low Operating Cost

- OPEX **\$2,766/t** of Li_2CO_3 produced after sales of surplus **sodium hydroxide** (NaOH), a bi-product of the chlor-alkali plant

Positive Economics

- After-tax **IRR of 17.2%** and **\$3.16 billion NPV-8%** at prices of \$24,000/t Li_2CO_3 and \$600/t NaOH



Resources & Reserves*

Mineral Resource Estimate

	Tonnes Above Cut-off (millions)	Li Grade (ppm)	Li Contained (million t)	LCE (million t)
Measured	858.38	990	0.849	4.524
Indicated	348.95	875	0.305	1.625
Measured & Indicated	1,138.59	966	1.099	5.582
Inferred	119.03	827	0.098	0.524

The effective date of the Mineral Resource Estimate is April 29, 2024. The QP for the estimate is Ms. Terre Lane, MMSA, an employee of GRE and independent of Century. The Mineral Resources are constrained by a pit shell with a 200 ppm Li cut-off and density of 1.505 g/cm³. The cut-off grade considers an operating cost of \$20/t mill feed, process recovery of 78% and a long-term lithium carbonate price of \$24,000/t. The Mineral Resource estimate was prepared in accordance with 2014 CIM Definition Standards and the 2019 CIM Best Practice Guidelines. Mineral Resource figures have been rounded. The cut-off grade considers an operating cost of \$16.90/t mill feed, process recovery of 83% and a long-term lithium carbonate.

Mineral Reserve Estimate

	Tonnes Above Cut-off (millions)	Li Grade (ppm)	Li Contained (million t)	LCE (million t)
Proven	266.39	1,147	0.306	1.626
Probable	21.26	1,174	0.025	0.133
Proven & Probable	287.65	1,149	0.330	1.759

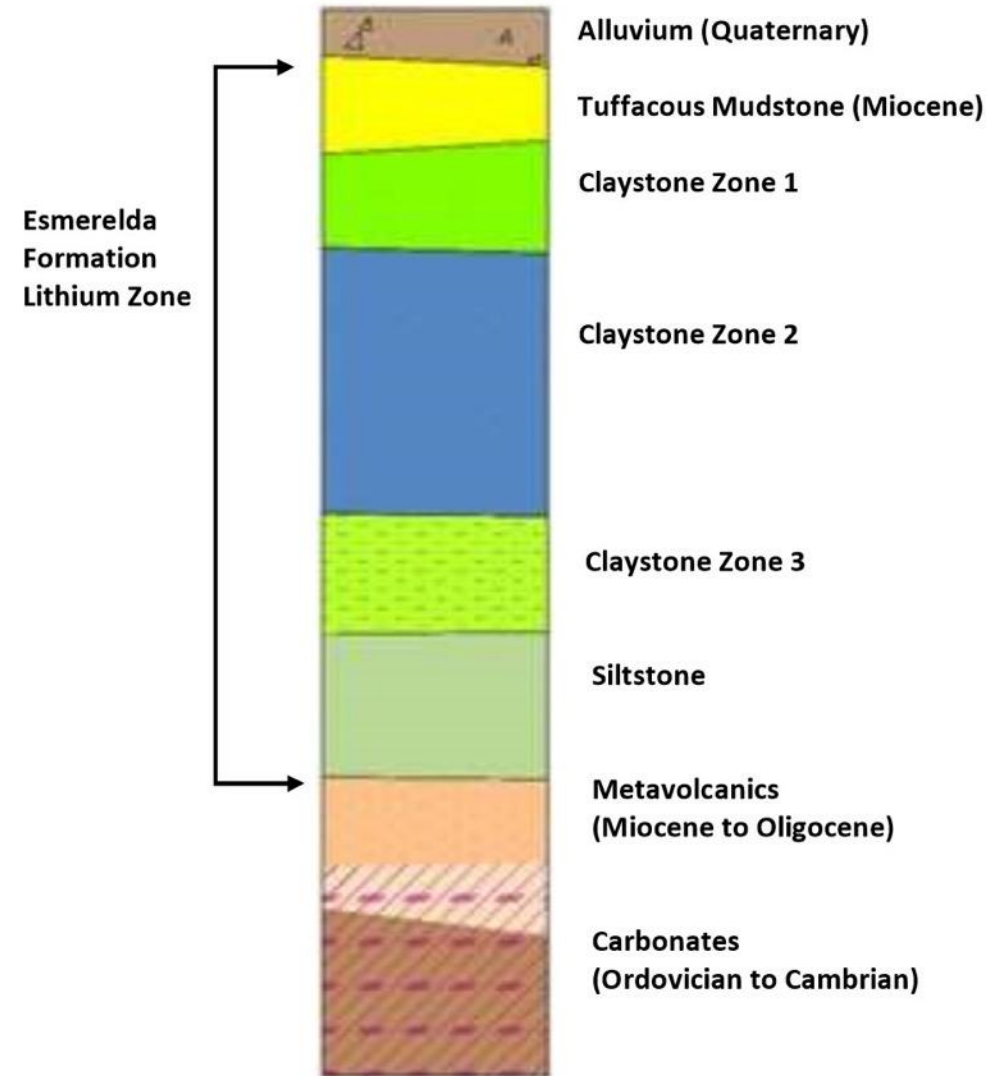
The effective date of the Mineral Reserve Estimate is April 29, 2024. The QP for the estimate is Ms. Terre Lane, MMSA, an employee of GRE and independent of Century. The Mineral Reserve estimate was prepared in accordance with 2014 CIM Definition Standards and 2019 CIM Best Practice Guidelines. Mineral Reserves are reported within the final pit design at a mining cut-off of 900 ppm. The mine operating cost is \$5.44/t milled, processing cost of \$40.9/t milled, G&A cost of \$2.68/t milled and a credit for the NaOH sales of \$28.95/t milled. The NaOH sales credit is proportionally applied to all the operating costs to get appropriate costs for the cut-off grade calculation. The cut-off grade considers a mine operating cost of \$2.22/t, a process operating cost of \$16.69/t milled, a G&A cost of \$1.09/t milled, process recovery of 78% and a long-term lithium carbonate price of \$24,000/t. The cut-off of 900 ppm is an elevated cut-off selected for the mine production schedule as the elevated cut-off is 4.5 times higher than the break-even cut-off grade.
5. Mineral Reserve figures have been rounded. One tonne of lithium=5.323 tonnes lithium carbonate.

*Note: NI 43-101 Technical Report on the Feasibility Study of the Angel Island Mine (Clayton Valley Lithium Project), Esmeralda County, Nevada, USA, April 29, 2024



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



Feasibility Study Results*

After-Tax Cash Flow Analysis (\$US)

	Initial Phase 1	Expansion Phase 2	Expansion Phase 3
Years	1 - 5	6 - 10	11+
Mining Rate	7,500 tpd	15,000 tpd	22,500 tpd
Average Annual Li ₂ CO ₃ Production	13,000 tpa	27,000 tpa	41,000 tpa
Capital Costs	\$1.537 billion	\$651 million	\$1.336 billion
Average Operating Costs w/NaOH credit	\$2,766/tonne		
Net Present Value (NPV 8%)	\$3.16 billion		
Internal Rate of Return (IRR)	17.2%		
Base Case Price for Li ₂ CO ₃	\$24,000/tonne		

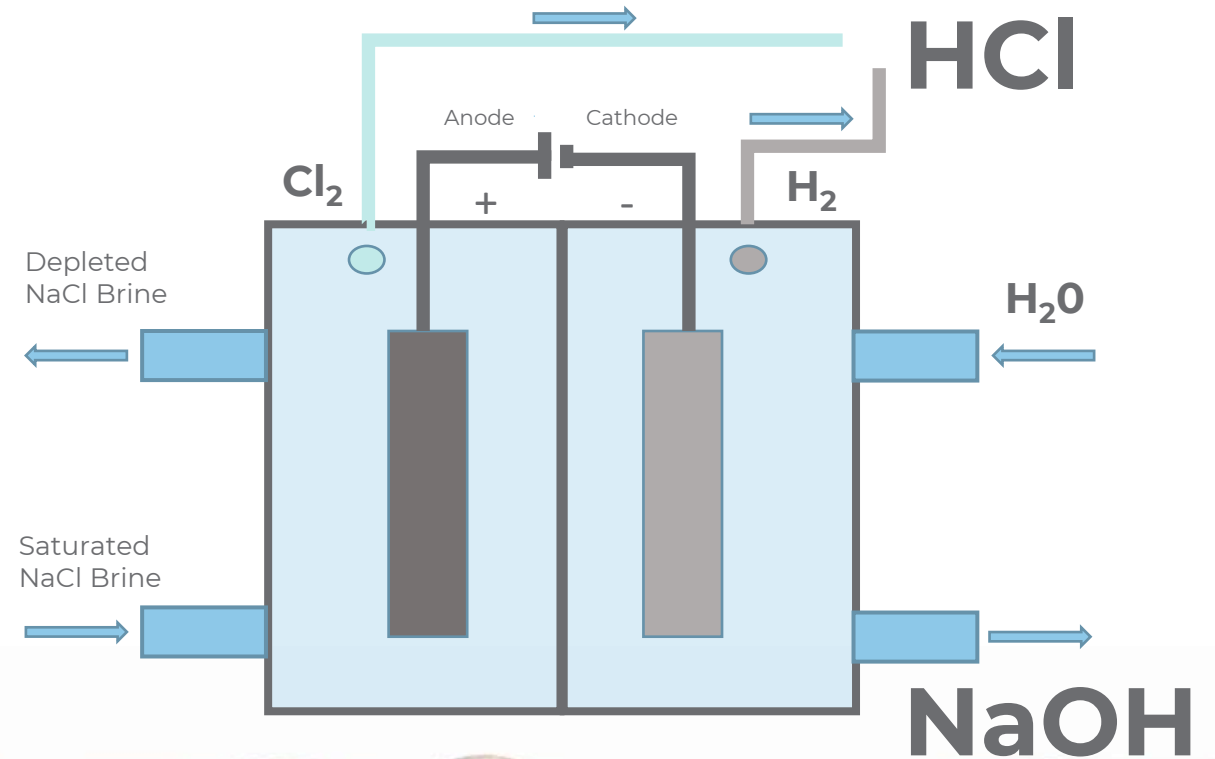
*Note: NI 43-101 Technical Report on the Feasibility Study of the Angel Island Mine (Clayton Valley Lithium Project), Esmeralda County, Nevada, USA, April 29, 2024



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
 - Jan 16, 2025, LCE and Orica signed a MOU



Sodium Hydroxide (NaOH) Bi-product

- The sale of surplus NaOH represents a significant offset to the Project's OPEX – **1/3 of Project's revenue**
- The chlor-alkali plant will make a membrane grade NaOH solution using innovative and environmentally friendly technologies
- **MOU signed with Orica Specialty Mining Chemicals**
 - Initial 5-year term, right of first offer for an additional 5 years
 - Pricing to be determined by definitive agreement
 - Orica – Century Lithium relationship will strengthen the U.S. supply chain, reducing reliance on imports of NaOH to the western U.S. and supporting Nevada's mining industry
- Common names for NaOH are caustic soda and lye

NaOH uses:

- Soap & detergents
- Bleach & disinfectants
- Pulp & paper industry
- Water & wastewater treatment
- Chemical neutralizations
- Food processing
- Ore & mineral processing
- Pharmaceuticals



Orica Specialty Mining Chemicals (“Orica”) Sign MOU for Sodium Hydroxide From Angel Island

Highlights of MOU

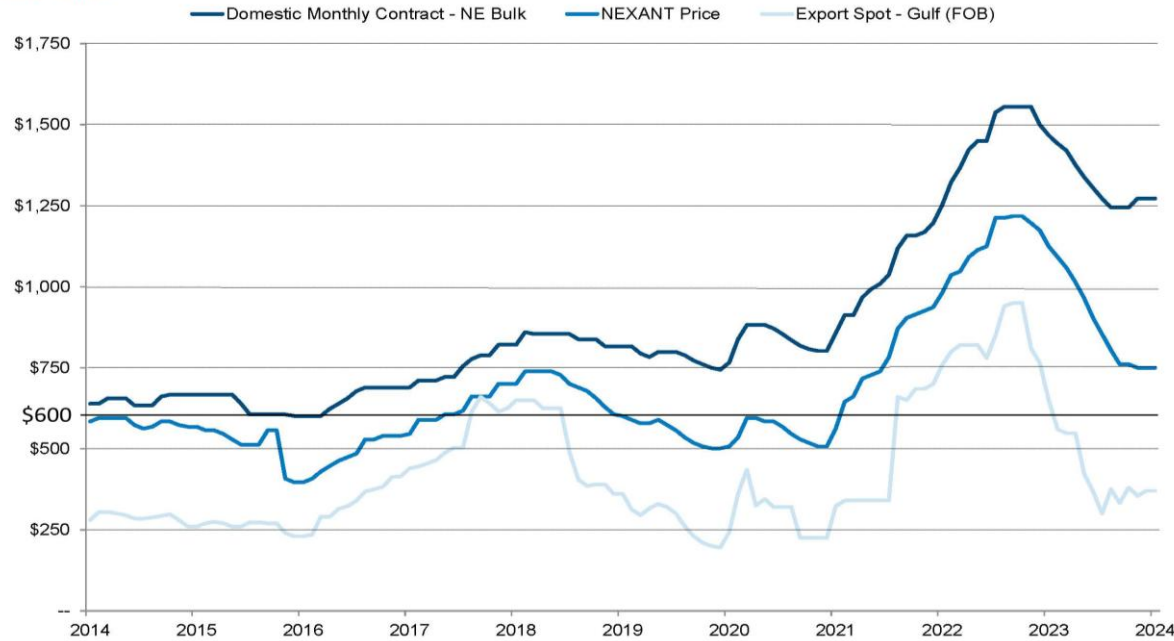
- Century Lithium intends to provide Orica membrane-grade sodium hydroxide (NaOH)
- Orica is one of the world’s leading mining and infrastructure solutions providers, and a major US manufacturer and supplier of specialty mining chemicals to Nevada’s mining industry.
- Initial 5-year term, right of first offer for an additional 5 years
- Pricing to be determined by definitive agreement
- Orica – Century Lithium relationship will strengthen the U.S. supply chain, reducing reliance on imports of NaOH to the western U.S. and supporting Nevada’s mining industry
- Century’s patent-pending process for extracting Lithium Carbonate from the claystone, combines chloride leaching DLE and uses salt, in the form of solid sodium chloride or saline brine, to make the reagents for leaching and pH control.
- In addition to lithium, the process produces surplus sodium hydroxide, the sales of which are anticipated to underpin low operating costs for Angel Island’s primary product, Lithium Carbonate.



NaOH Historical Price Chart

Sodium Hydroxide Historical Pricing (United States)

US\$ / tonne



Source: Bloomberg



NaOH U.S. Market Indicators

- Stable and Mature Industry
- Remains bullish with limited inventories and moderate demand
- Downstream sectors slow to recover following heavy impact from the COVID-19 pandemic
- Production cuts during 2021 have led to an ongoing shortage
- NaOH production challenges are expected to persist globally - influenced by increased electricity costs
- Continued scarcity of NaOH in North America could lead to significant price surges and supply chain challenges

Capital Cost Estimates (\$M)*

Installed Capital Costs (\$M)	Initial Phase 1	Expansion Phase 2	Expansion Phase 3
Mining & Site Preparation	\$64	\$7	\$27
Process Facilities	\$517	\$205	\$477
Chlor-Alkali Plant	\$496	\$336	\$496
Buildings, Services & Infrastructure	\$130	\$5	\$42
Indirect & Owners Costs	\$234	\$72	\$190
Contingency	\$96	\$27	\$105
Total Installed Cost	\$1,537	\$651	\$1,336



*Note: NI 43-101 Technical Report on the Feasibility Study of the Angel Island Mine (Clayton Valley Lithium Project), Esmeralda County, Nevada, USA, April 29, 2024, and Totals may not sum due to rounding. Contingency and site Indirects for chlor-alkali plant is included in the Chlor-Alkali Plant line item, contingency for mining is included in the Contingency line item, indirect costs for mining are not included in the Indirects and Owner's Costs line item.



Economic Model & Sensitivity*

The cash flow model developed using \$24,000/t price for lithium carbonate generates a 17.2% after-tax IRR and NPV-8% of \$3.16 billion

Project Sensitivity	75%	Base Case	125%
Lithium Price (\$/t LCE)	\$18,000	\$24,000	\$30,000
NPV-8% (\$billion)	\$1.58	\$3.16	\$4.70
IRR (%)	12.9%	17.2%	21.0%



*Note: NI 43-101 Technical Report on the Feasibility Study of the Angel Island Mine (Clayton Valley Lithium Project), Esmeralda County, Nevada, USA, April 29, 2024

Lithium Extraction Facility – Armargosa Valley

Acid Leach Extraction of Lithium from Claystone



Leach Tank



Lithium Extraction Facility

AMARGOSA VALLEY SITE

3rd year of safe operations

One of the few advanced lithium projects being developed in the US to provide an end-to-end process to produce battery grade lithium

Sodium salt-based chemistry

Metallurgically advanced – utilizing DLE

Production of battery grade lithium on site further demonstrates the commercial viability of the project



Direct Lithium Extraction (DLE) & Li_2CO_3 Production

- Pilot Plant utilizes the Company's patent-pending process for chloride leaching combined with DLE
- Data continues to lead to further optimizations
 - i.e. improved lithium to sodium ratio in the concentrated Li solution
 - reduction of freshwater consumption
- Feed material grades average 1,100 ppm
- Leach solution concentrations have ranged from 200 to 320 ppm Li
- Lithium extractions average 88% and have ranged from 80 to 95%
- DLE lithium recoveries are typically above 90%
- Approximately 10% of the lithium in solution is retained in the moisture in the tailings
- Average lithium recovery is 78%



Process Improvements at Lithium Extraction Facility

- Successful implementation of process improvements were developed in collaboration with Amalgamated Research, LLC (“ARi”).
- Early results indicate Century Lithium can eliminate the recycle loops within its DLE and lithium carbonate areas, while increasing eluate grades.
- This could result in a **substantial reduction in estimated capital and operating costs** at Angel Island.
- Pilot Plant has now shifted focus from Research & Development to Demonstration.
 - This will allow the Century to focus on providing dedicated testing to prospective strategic partners or potential end-users and **reduce the ongoing operating costs of the Pilot Plant.**



Battery Quality Lithium Carbonate

- Battery quality Li_2CO_3 made & repeated in 2022, 2023 & 2024
- **Added lithium carbonate stage** at the Pilot Plant as recommended in the Feasibility Study
 - better understand and minimize the recycle streams from the DLE stage through to final product
 - reduce or eliminate the need for downstream processing
- Battery Grade Li_2CO_3 made at Pilot Plant with 99.5% purity
- Century Lithium can now supply Li_2CO_3 samples, which were created on site for testing by prospective partners and end-users



Environmental & Social Governance



Initial baseline studies completed



Project design will minimize environmental and cultural impact



Opportunities for use of **Renewable Energy**

- Solar and Geothermal



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

- Test Li_2CO_3 with domestic original equipment manufacturers (OEMs)
- Continue with optimization program to drive reductions in the Project's estimated capital and operating costs
- Complete a **Plan of Operations**
- Initiate NEPA permitting process
- ESG Improvements
 - Connect with and support our local community
 - Study alternatives to recycle sodium, chlorine, and water
 - Pursue solar and geothermal energy solutions
- Pursue Financial Opportunities
 - Continue to work with the U.S. **Department of Energy's (DoE) Loan Programs Office** regarding the pre-application process under the Title Seven Clean Energy Financing Program
 - **Department of Defense (DoD)** - grant
 - **Strategic Partnership**



Summary

Advanced Stage Project

- One of the largest lithium deposits in the USA
- **40+ year** life of mine
- Low **OPEX \$2,766/t** of Li_2CO_3
- MOU signed with Orica for NaOH
- After-tax IRR of 17.2% and \$3.16 billion NPV-8% at prices of \$24,000/t Li_2CO_3

Pilot Plant Program

- Metallurgically advanced – using chloride system coupled with DLE
- 7-day, 24hr continuous operation testing runs
- 3rd year of safe operation
- **On-site production** demonstrates the commercial viability of the project

Confirmed Battery Quality Li_2CO_3

- Ability to repeatedly make a **high purity Li_2CO_3**
- Integrate designs into Pilot Plant Program
- One of the few advanced projects in the U.S. to provide **an end-to-end process to produce lithium carbonate**

Permitting

- Tier 1 jurisdiction – Nevada, USA
- Environmental baseline studies ongoing
- Opportunities for renewable energy
 - Solar & Geothermal
- **Water Rights Permit** owned





APPENDIX

Management

William Willoughby, PhD, PE

PRESIDENT, CEO & DIRECTOR

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

Abraham (Braam) Jonker, CPA, CA

CHIEF FINANCIAL OFFICER

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

Spiros Cacos, MA

VICE PRESIDENT, INVESTOR RELATIONS

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

Todd 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

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

Adam Knight, PE

PROJECT MANAGER

28+ years experience in management and operations of mining corporations



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

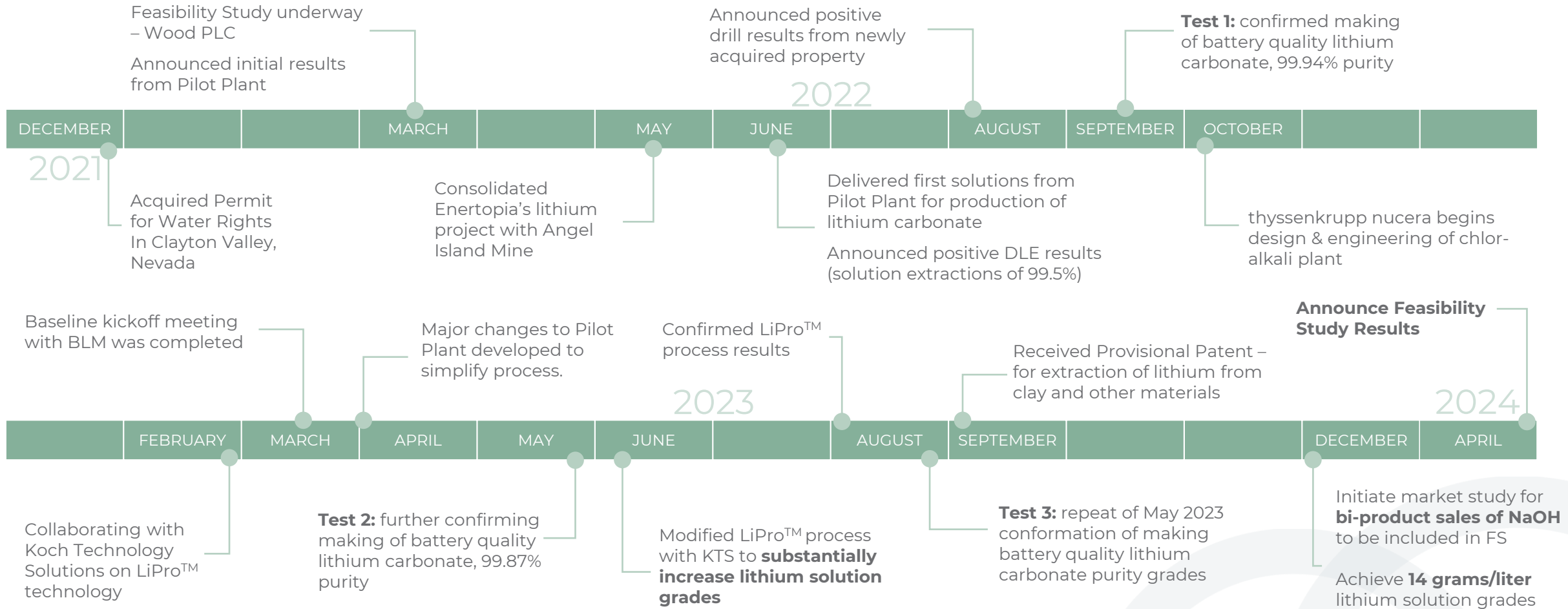
Donald G. Myers

DIRECTOR

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



Executing Key Milestones



Extraction Testing of Lithium-Bearing Claystone



Pilot Plant Components



Crushed Claystone Ready to Process

Filtration System & Tailings

From Leach Slurry to PLS & Tailings



Plate Filters



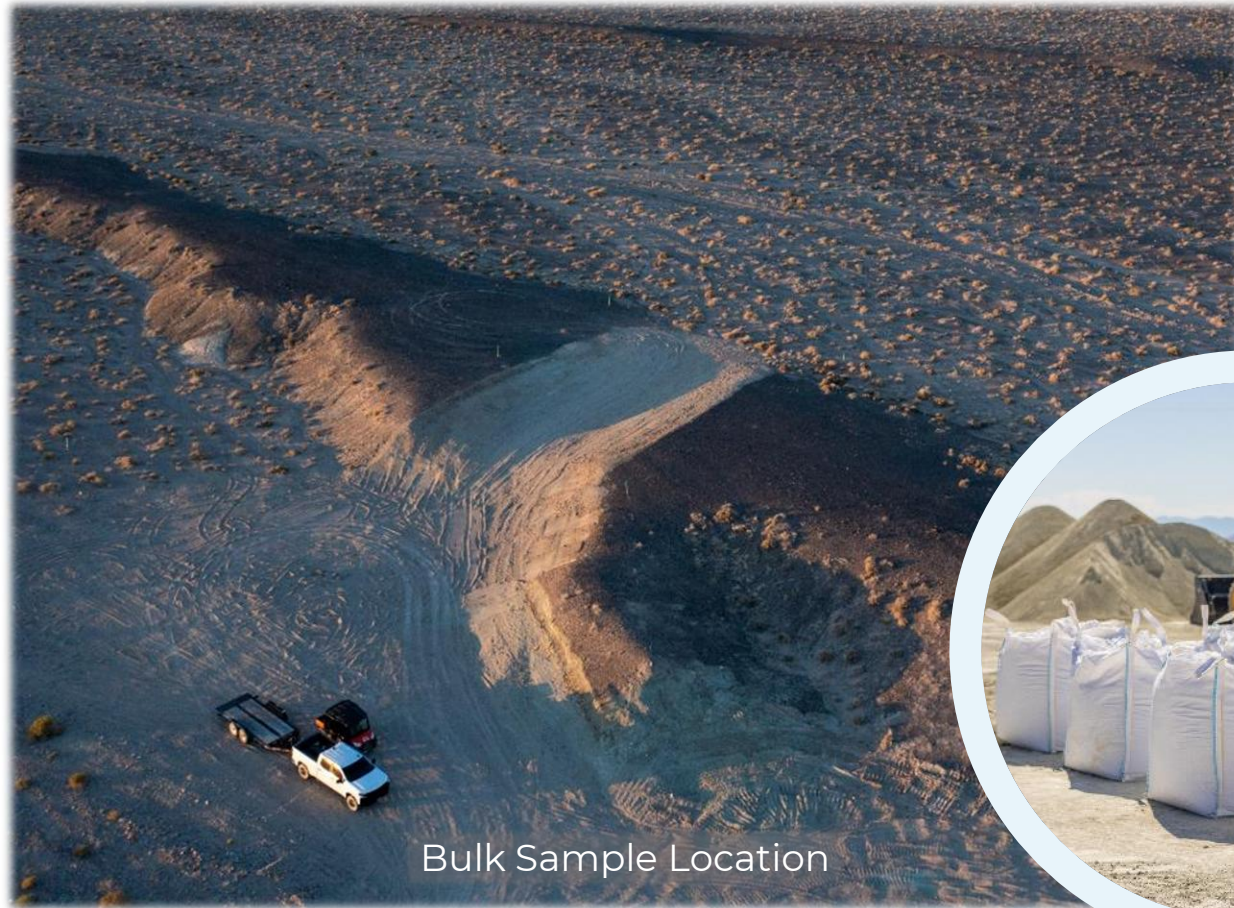
PLS



Tailings

Mining – Bulk Sample

From Resource to Process Ready



Bulk Sample Location



Crushing Claystone





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