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ARIZONA LITHIUM



INVESTOR PRESENTATION – Q4 2023

Two Large North American Lithium Development Projects

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Company Overview

Developing two large North American lithium projects

- ASX Code: **AZL,** OTCQB Code: **AZLAF**
- Combined resource of **6,120,800[2] tons** of LCE[3]





Prairie Lithium Project

Saskatchewan, Canada

- Brine resource
- 350,000+ acres of sub surface mineral rights
- Located in Saskatchewan, Canada, one of the top ranked mining friendly jurisdictions in the world
- Large Indicated resource of 4.0MT LCE[3] at 106mg/L Li[2]
- Large Inferred resource of 1.7MT of LCE[3] at 102mg/L Li[2]



Big Sandy Project

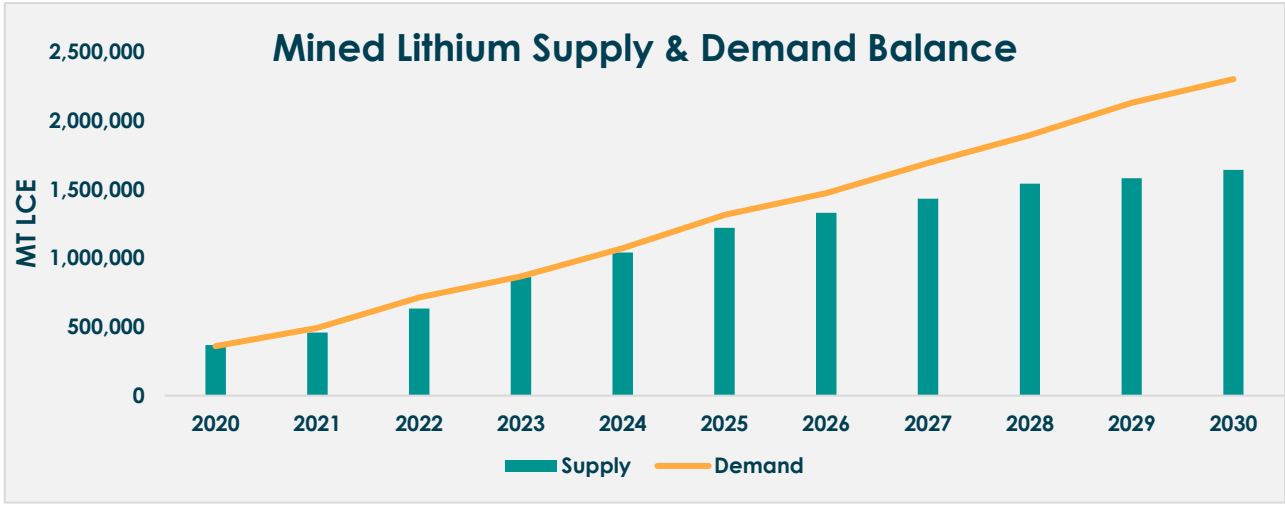
Arizona, USA

- Sedimentary resource
- Located just two hours north of Phoenix, Arizona, and our Lithium Research Centre (LRC)
- Expandable resource with 320,800 tons[1] of LCE[3] from 4% of the landholding

Notes: (1) See AZL's maiden resource update in announcement "Big Sandy Lithium Project (Arizona, USA) Maiden Mineral Resource" – 26 September 2019. (2) Prairie Project Resource Upgraded 39% – Announcement by AZL (17/08/23). (3) Lithium Carbonate Equivalent (LCE).

Lithium Supply & Demand Dynamics Support Price Appreciation

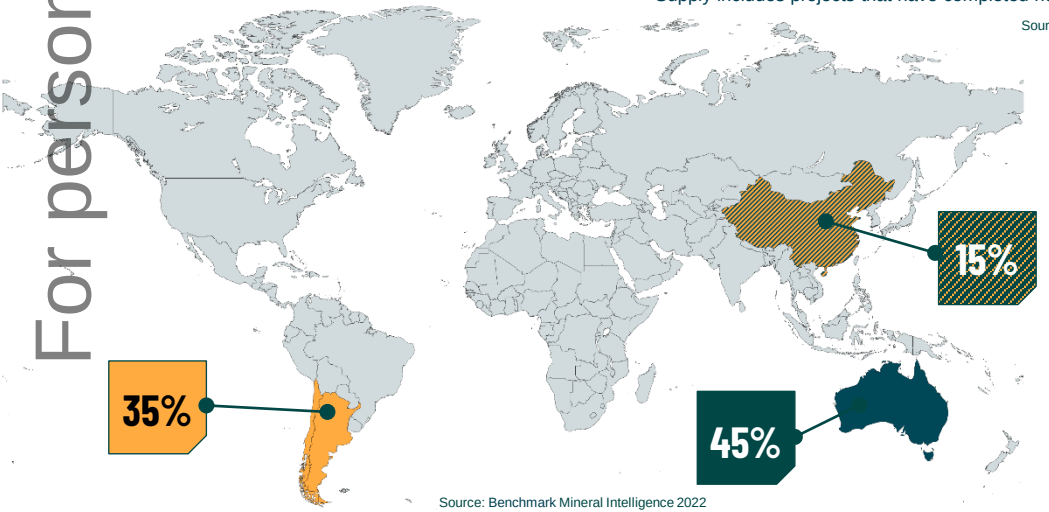
Lithium supply has struggled to keep pace with demand.



*Supply includes projects that have completed necessary public market requirements, government approvals and are fully funded

Source: Benchmark Mineral Intelligence 2022

Current Lithium Supply



Source: Benchmark Mineral Intelligence 2022

COUNTRY	PRODUCTION tLCE/Year	SHARE
Australia	307,000	45%
Chile	205,000	30%
China	103,100	15%
Argentina	34,100	5%
Brazil	14,000	2%
Zimbabwe	5,000	<1%
USA	3,000	<1%
Canada	2,500	<1%
Bolivia	2,000	<1%
Portugal	2,000	<1%

Source: Benchmark Mineral Intelligence 2022

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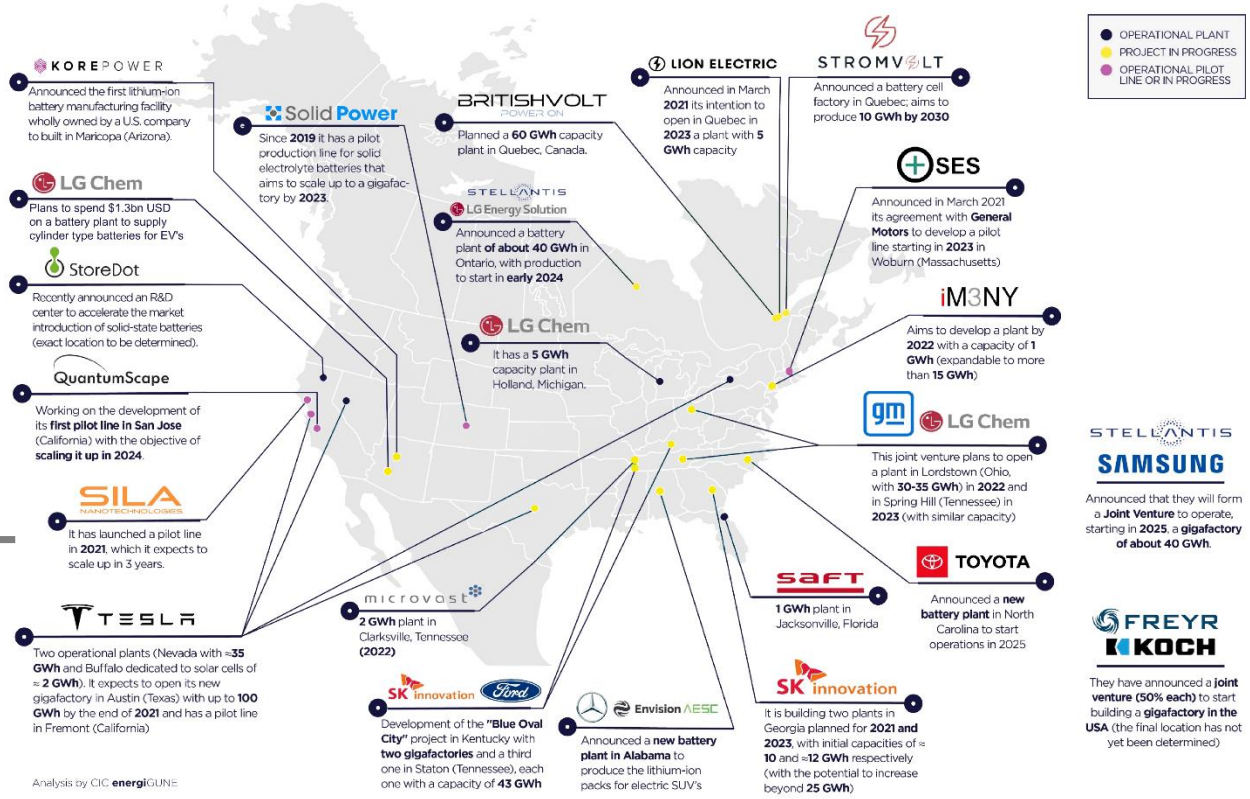
North America Lithium Industry

A growing future customer base



- GM, Ford and Stellantis have committed >$50 billion to electrify their fleets
- A significant battery materials supply chain needs to be built in North America to support these commitments

References
1. Stellantis announcement (May 24, 2022)
2. Ford announcement (May 19, 2021)
3. GM electrification commitment (November 17, 2022)

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Prairie Lithium Project Overview

350,000+ acres of subsurface mineral permits

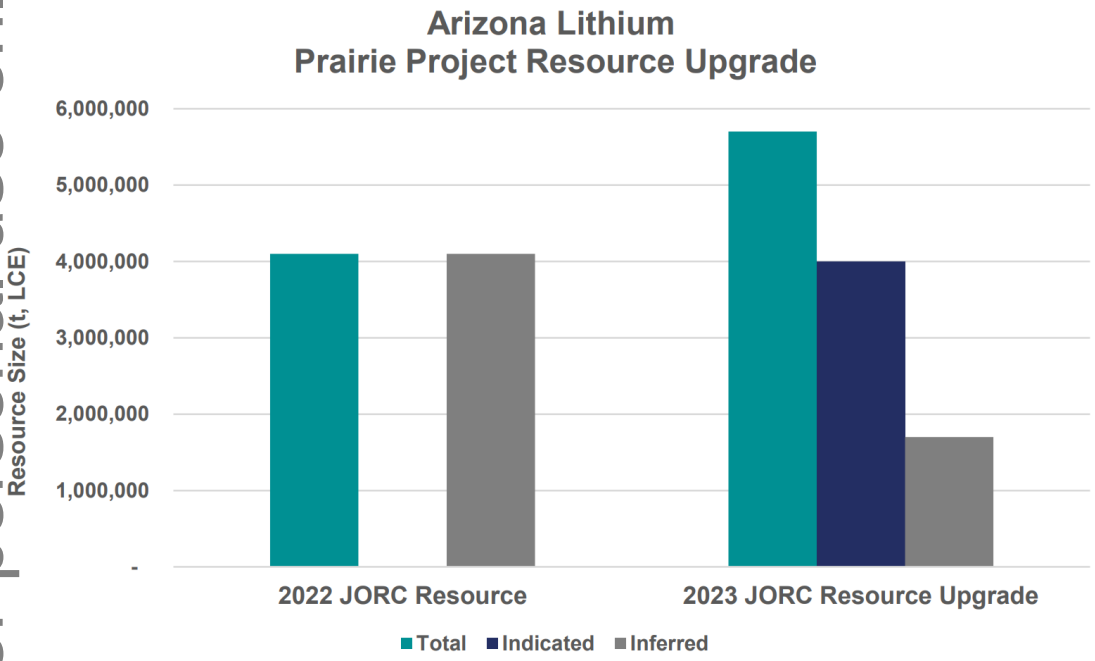
Key Points:

- **Mining friendly jurisdiction** Saskatchewan, Canada is an existing oil and gas producing region with efficient permitting processes
- Large Total Resource of **5.7MT of LCE** including 4.0MT Indicated at 106mg/L Li and 1.7MT Inferred at 102mg/L Li[(1)]
- **350,000+ acres** of nearly contiguous subsurface mineral permits in Saskatchewan
- **Modular process** that will shorten time to production, keep capital expenditure low and operate as a proof of concept for the DLE technology



Source: (1) Prairie Project Resource Upgraded 39% – Announcement by AZL (17/08/23).

Prairie Project Resource Upgrade



- In August 2023 AZL increased it's Prairie Project Resource to **5.7MT**[(1)] representing a total increase of **39%**
- Highest grade Indicated lithium brine resource in Canada with the majority of the Indicated Resource at 127mg/L Li.
- Total resource represents approximately **8 years** of current worldwide market for LCE
- Large Indicated Resource enables AZL to complete a Pre Feasibility Study (PFS) by December 2023

Source: (1) Prairie Project Resource Upgraded 39% – Announcement by AZL (17/08/23).

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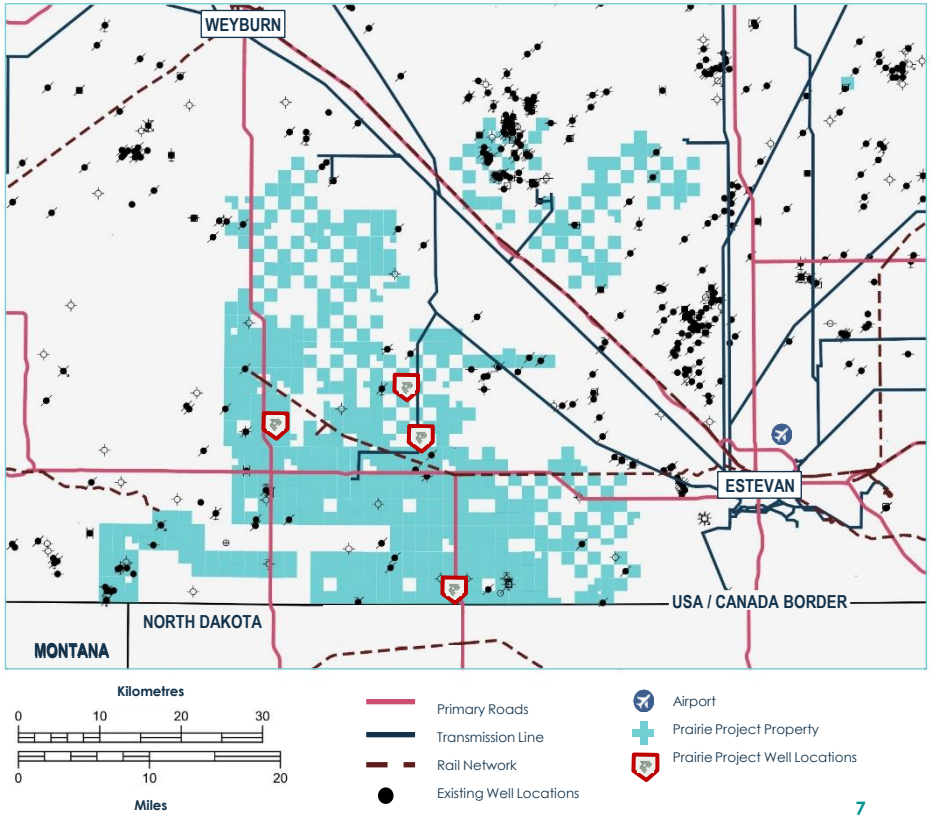
Prairie Project Resource

- The Prairie project is targeting the Duperow Formation in Saskatchewan, Canada which is consistently ranked at the top of global mining friendly jurisdictions
- To date, 800 wells have been drilled through the Duperow Formation
  - Well mapped and well understood geology
  - Well established drilling and production procedures
- The Duperow Formation characteristics are:
  - 2,400m depth
  - 140m thick
  - Laterally continuous across the basin
- Total resource of 5.7 million tonnes of Lithium Carbonate Equivalent(2)
- Excellent access to utilities and services including:
  - Drill rigs, service rigs, skilled labour, fresh water, electricity, natural gas, railroads, grid roads, highways



Source: (1) Announcement of Prairie Lithium Acquisition by AZL (21/12/22). (2) Prairie Project Resource Upgraded 39% – Announcement by AZL (17/08/23).

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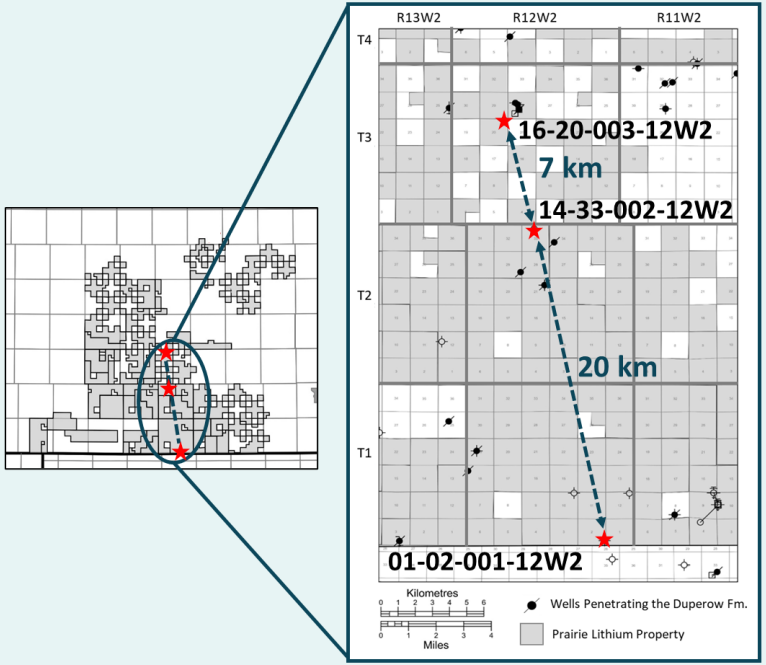
Contiguous Resource over 27km

- Three wells tested
- Large Indicated Resource (**4.0mm tonnes of LCE**)(2)
- Total Resource of **5.7mm tonnes of LCE**(2)
- Consistent grade over 27km
- **350,000+ acres** of sub surface mineral rights
- Resource upgraded in Q3, 2023



27 km

Duperow Formation	Well 01-02-001-12W2 mg/L Li	Well 14-33-002-12W2 mg/L Li	Well 16-20-003-12W2 mg/L Li
Seward Member		99	
Flat Lake Evaporite			
Upper Wymark	166	172	137
Middle Wymark	130	149 135 130	113 103
Lower Wymark		98	
Saskatoon Member	53	68 48	

Lithium Concentration (mg/L)

Source: (1) Announcement of Prairie Lithium Acquisition by AZL (21/12/22). (2) Prairie Project Resource Upgraded 39% – Announcement by AZL (17/08/23).

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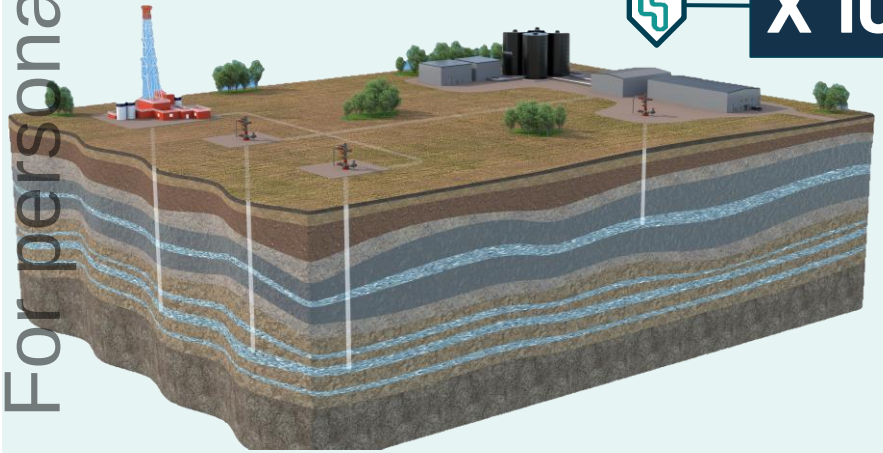
Modular DLE Technology

DLE technology may be scaled up to a commercial level and deployed on the Prairie Project resource.



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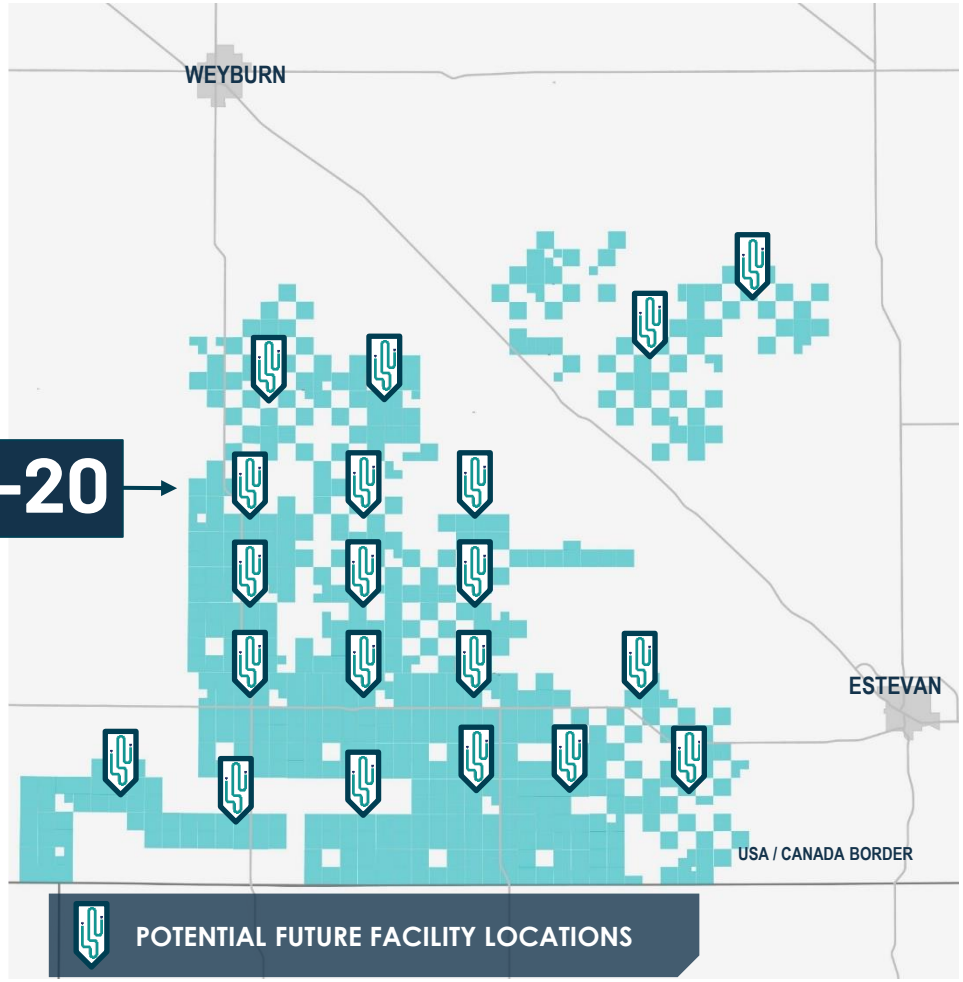

How Does The Brine Resource Compare?

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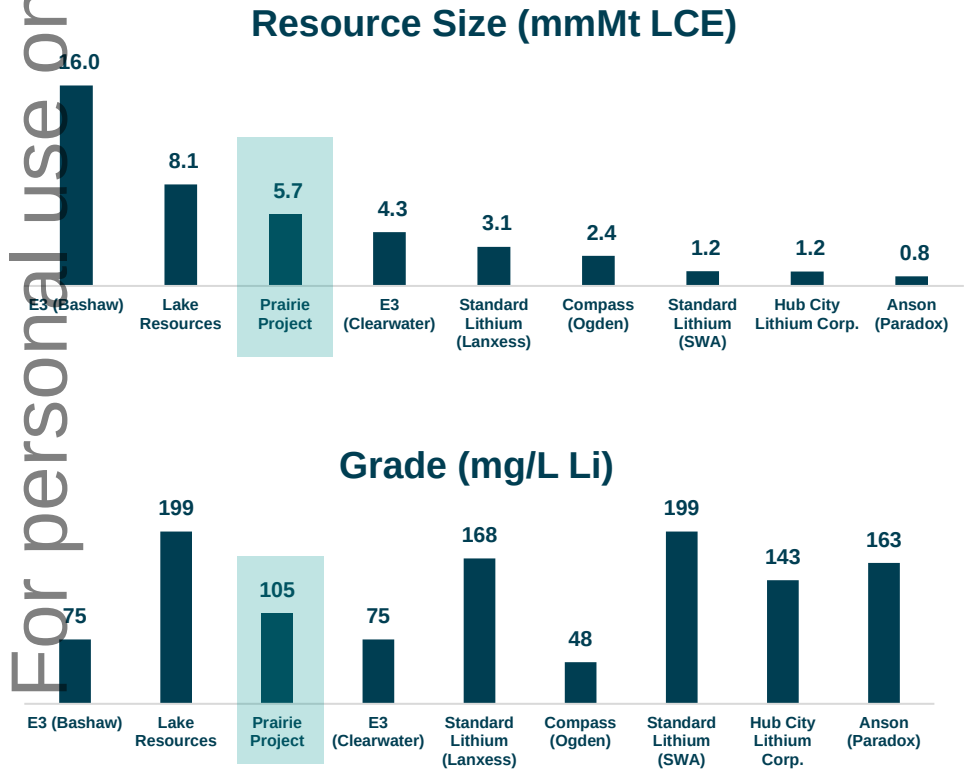

- Highest quality indicated lithium resource discovered in Canada to date
- Prairie has a competitive North American grade with the bulk of the indicated resource at 127 mg/L[(4)]
- The largest contiguous high grade (>100 mg/L Li) North American resource of 5.7 MT LCE

References:

1) E3 Metals Corp. NI 43-101 Resource Estimate (21/03/2023)
2) LKE announcement 22/08/2023
3) E3 Metals Corp. NI 43-101 Resource Estimate (21/03/2023)
4) Prairie Lithium - Announcement by AZL (17/08/2023)
5) Preliminary Economic Assessment and Upgrade of Mineral Resource (19/06/2019)
6) Updated Initial Assessment, Lithium Mineral Resource Estimate, Compass Minerals International (14/09/2022)
7) Standard Lithium NI 43-101 Technical Report (25/11/2021)
8) NI 43-101 Technical Report on the Lithium Brines of Mansur Viewfield Areas of Southern Saskatchewan, Canada (01/04/2023)
9) Anson Resources Definitive Feasibility Study Presentation (09/09/2022)

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Big Sandy Project Overview

Key Points:

- First drilling program completed in 2019
- Total Inferred and Indicated Resource **320,800 tons**(1) of LCE from 4% of the landholding
- Production of high-quality battery grade Lithium Carbonate of **99.8%**(2) **purity (Battery Grade >99.5% purity)** from Big Sandy Ore
- The Big Sandy Lithium Project is located in northwest Arizona, approximately 225 kilometres north of Phoenix, and approximately 90 kilometres southeast of the regional center of Kingman



Source: (1) See AZL's maiden resource update in announcement "Big Sandy Lithium Project (Arizona, USA) Maiden Mineral Resource" – 26 September 2019. (2) ASX announcement "Battery Grade Lithium Carbonate Produced" – 24 March 2021.

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Big Sandy Project Resource

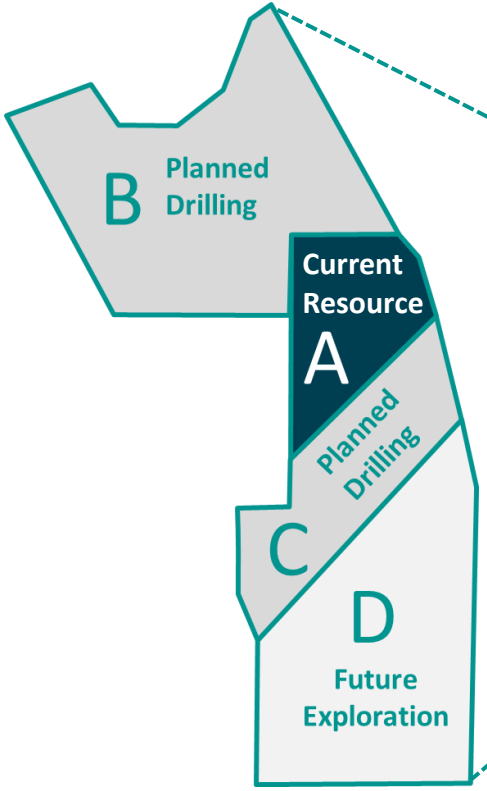
Exploration upside

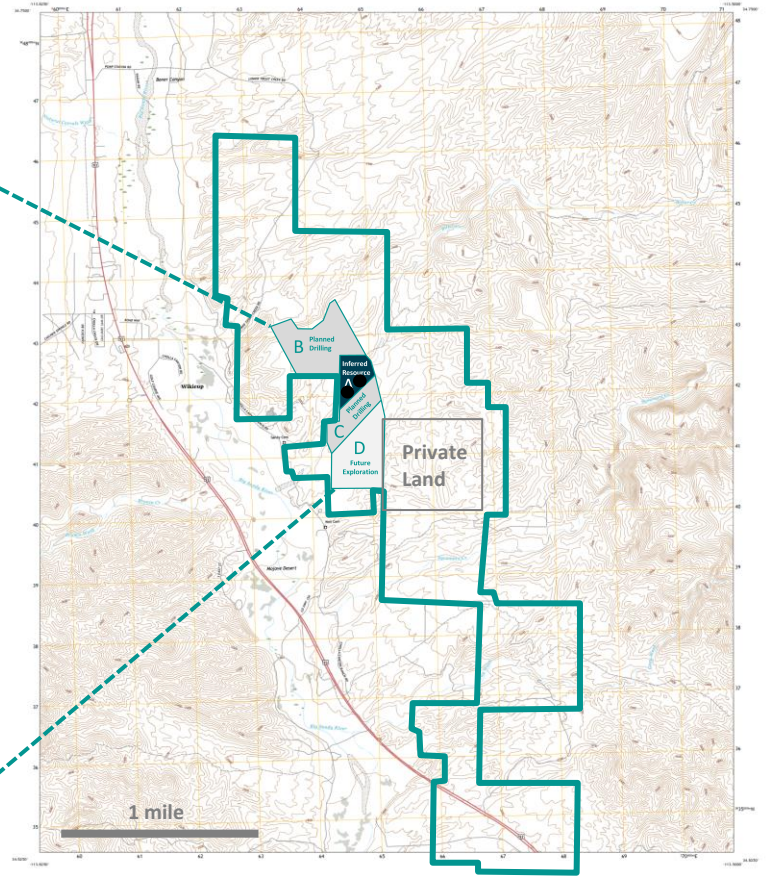
Expandable Resource

Inferred and Indicated Resource of **320,800 tons**(1) of LCE from 4% of the landholding at Big Sandy

Two hours north of Phoenix with direct access from highway 93

Future development plans include drilling to the north and south of the current Indicated and Inferred Resource





Notes: (1) See AZL's maiden resource update in announcement "Big Sandy Lithium Project (Arizona, USA) Maiden Mineral Resource" – 26 September 2019.

Advantage

Why Big Sandy's sedimentary lithium works

The lithium mineralisation is interpreted to exist within an upper and lower clay zone, separated by a distinct marker horizon of altered tuff (1)

- Lithium mineralisation extends to a maximum of approximately 110 metres below surface(1)



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Notes: (1) See AZL's maiden resource update in announcement "Big Sandy Lithium Project (Arizona, USA) Maiden Mineral Resource" – 26 September 2019.

Research and Development

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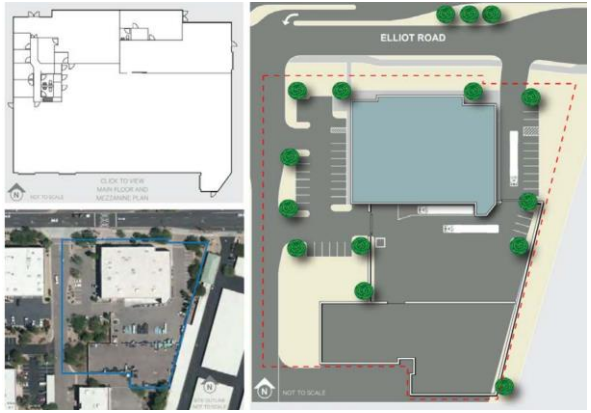
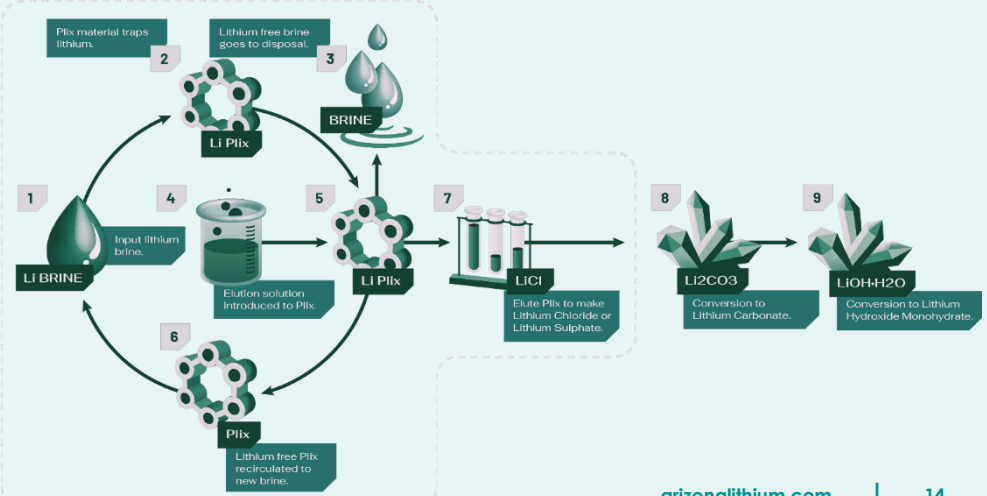
Lithium Research Centre (LRC)

- AZL has developed a world class LRC on a 9,700m2 property approximately 15km from Phoenix airport
- The facility includes a 1,900m² building for R&D and a 3,000m² secure lot for the fabrication and storage of processing equipment
- The LRC will function as a technology incubator focused on the extraction of lithium and produce battery grade lithium chemicals for current and future battery chemicals



Direct Lithium Extraction (DLE) Technology

- Lithium extraction technology that selectively removes lithium from brine
- Opportunity to produce battery grade lithium out of the lithium chloride or sulphate solution produced
- Has been tested successfully on the Big Sandy ore



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Board of Directors



Paul Lloyd
Managing Director

Paul Lloyd is a Chartered Accountant with over thirty-five years' commercial experience. Mr. Lloyd was one of the vendors of the Big Sandy Lithium project and has been the Managing Director since September 2018. Mr. Lloyd has been responsible for a significant number of IPOs, RTOs, project acquisitions and capital raisings for ASX listed public companies.



Zach Maurer
Executive Director

Zach entered the energy sector in 2009 and worked his way from a roughneck into consulting roles. During his consulting career, he managed environmental and hydrogeologic projects in Canada and the United States. In 2019, he founded and incorporated Prairie Lithium. As CEO of Prairie Lithium, he led multiple rounds of private equity funding while advancing DLE technology and brine resource exploration. In 2023, he led Prairie Lithium through the successful acquisition by Arizona Lithium. He holds a B.Sc. in Geology from the University of Regina and a Diploma in Exploration Information Technology from the South Alberta Institute of Technology (SAIT).



Barnaby Egerton-Warburton
Non-Executive Chairman

Barnaby has over 25 years of trading, investment banking, international investment and market experience with positions at JP Morgan, BNP Equities (New York) and Prudential Securities (New York). He is an experienced Investment Banker and corporate advisor, having held managing director and non-executive director positions in the investment banking, oil & gas and resource sectors. He holds a degree in economics, is a graduate of the Australian Institute of Company Directors, and a member of the American Association of Petroleum Geologists.



Matthew Blumberg
Executive Director

Matthew is currently based in New York and is a Director at Private Equity firm ALJ, focusing on Strategy, Mergers & Acquisitions. Matthew has previously worked in investment roles in New York and Sydney. He holds a Master of Business Administration (MBA) from Yale University and a double degree in Engineering (First Class Honours) and Commerce from The University of Western Australia.

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An Experienced Management Team

With a proven track record



Wendy Alaniz
Chief Financial Officer (USA)

Wendy is a Certified Public Accountant with over 20 years' experience leading accounting and finance teams at public companies, predominantly Nestlé, with extensive experience in manufacturing, cost accounting, internal controls and audit. She holds a Master of Business Administration (MBA) and a Bachelor of Science (BSc) from California State University San Bernardino, where she also spent 3 years as Adjunct Faculty, Department of Accounting and Finance, College of Business & Public Administration. In addition, she is a Certified Internal Auditor (CIA) and Certified Fraud Examiner (CFE).



Chelsey Hillier
Senior Vice President of Exploration

Chelsey holds a Bachelor of Science Geology Honours from the University of Regina. Before joining the Prairie Project in 2021 Chelsey worked in technical and management roles with Nexen and CNOOC Intl for 14 years. Chelsey manages the Technical Reporting, Subsurface Development and Reservoir Characterization Teams; and she plays and integral part in the researching, planning and execution of projects.



Brett Rabe
Chief Technical Officer

Brett worked for Lithium Americas Corp as VP of Engineering and Project Manager for the Thacker Pass Project in Nevada. Brett has been involved in the design, development, and management of lithium projects for 10 years dating back to the geothermal brine project developed by Simbol Materials, Inc where he was Sr. Process Engineer and Plant Manager. Brett also has EPC/CM experience (3 years) with Jacobs Engineering where he held process engineering and project management roles for mineral processing, infrastructure, and US Government projects. Brett's other roles include various plant manager and process engineering roles with Elementis Global, Potash Corp, Chemical Products Corp, and Barrick Gold Corp. Brett completed a Master's Degree in Metallurgical Engineering (Hydrometallurgy) from the University of Nevada-Reno in 2000 and a Bachelor's Degree in Metallurgical Engineering in 1994.



Greg Smith
Geological Consultant

Greg commenced his career in 1975 and has worked over a wide cross section of minerals and countries including in North America, Australia, Asia and throughout Africa. He was the exploration manager for Moto Gold Mines Ltd, responsible for the discovery of 22.5 million ounces of gold in the Democratic Republic of Congo (Kibali Mine). Recently he planned and supervised the drill-out of the maiden resource on the Big Sandy Lithium Project. He is a Member of the Australasian Institute of Mining and Metallurgy.

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The path forward

Exciting upcoming milestones for the company

Timeline	News Flow
Q2 2023	**Results of latest well re-entry** at Prairie Project **(Complete)**
Q2 2023	Commence work on Prairie **Direct Lithium Extraction (DLE) Technology** at the LRC **(Complete)**
Q3 2023	**Upgrade the Prairie Project** resource – both size and quality **(Complete)**
Q4 2023	Construct **DLE Pilot Plant** at Prairie Project to confirm exceptional third party DLE results
Q4 2023	Completion of **Preliminary Feasibility Study** (PFS) on the Prairie Project
H1 2024	Commence **construction of commercial plant** at Prairie project via **drilling of production wells**
H1 2024	Completion of **Definitive Feasibility Study** (DFS) on the Prairie Project
H1 2024	Completion of **Definitive Feasibility Study** (DFS) on the Big Sandy Project (pending upcoming drilling approvals)
H2 2024	Commence **production of Lithium** products for potential offtakers and/or strategic investors

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COMPETENT PERSON STATEMENT

The information in this report regarding exploration results, exploration targets and the mineral resources is based on and fairly represents information compiled by Mr Gregory Smith, a Competent Person who is a Member of
the Australasian Institute of Mining and Metallurgy. Mr Smith has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from
The original market announcements and that the material assumptions and technical parameters underpinning the Resource estimate continue to apply.

COMPETENT PERSONS STATEMENT FOR PRAIRIE AND REGISTERED OVERSEAS PROFESSIONAL ORGANISATION (ROPO) AND JORC TABLES

Gordon MacMillan P.Geo., Principal Hydrogeologist of Fluid Domains, who is an independent consulting geologist of a number of brine mineral exploration companies and oil and gas development companies, reviewed and approves the technical information provided in the AZL Prairie acquisition release (21/12/2022) and JORC Code. Mr. MacMillan is a member of the Association of Professional Engineers and Geoscientists of Alberta (APEGA), which is ROPO accepted for the purpose of reporting in accordance with the ASX listing rules. Mr. MacMillan has been practising as a professional in hydrogeology since 2000 and has 22 years of experience in mining, water supply, water injection, and the construction and calibration of numerical models of subsurface flow and solute migration. Mr. MacMillan is also a Qualified Person as defined by NI 43-101 rules for mineral deposit disclosure.

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Mineral Resource Summary

Arizona Lithium (AZL)*

Resource Classification	Tonnes (Mt)	Li Grade (ppm)	Contained Li Metal (t)	Contained LCE (kt)
Indicated Resource	14.6	1,940	28,400	151
Inferred Resource	17.9	1,780	31,900	170
Total Resource	**32.5**	**1,850**	**60,300**	**320.8**

*See Arizona Lithium's latest resource update in announcement "Big Sandy Lithium Project (Arizona, USA) Maiden Mineral Resource" – 26 September 2019.

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Appendix

Mineral Resource Summary (cont.)

Company Name	Indicated & Measured		Inferred		Total	
	Resource (tonnes LCE)	Li Concentration (mg/L)	Resource (tonnes LCE)	Li Concentration (mg/L)	Resource (tonnes LCE)	Li Concentration (mg/L)
Lake Resources[2]	2,930,000	198	5,180,000	200	8,100,000	199
Prairie Project[4]	**4,000,000**	**106**	**1,700,000**	**102**	**5,700,000**	**105**
Standard Lithium (Lanxess)[5]	3,140,000	168	-	-	3,140,000	168
Compass (Ogden)[6]	2,401,218	44	45,221	256	2,446,439	48
E3 (Clearwater) [3]	4,300,000	74.5			4,300,000	75
Standard Lithium (SWA)[7]	-	-	1,195,000	199	1,195,000	199
E3 (Bashaw)[1]	16,000,000	74.5			16,000,000	75
Hub City [8]	-	-	1,150,000	143	1,150,000	143
Anson (Paradox)[9]	239,000	150	549,000	169	788,000	163

References:

1) E3 Metals Corp. NI 43-101 Resource Estimate (21/03/2023)

2) LKE announcement 22/08/2023

3) E3 Metals Corp. NI 43-101 Resource Estimate (21/03/2023)

4) Prairie Lithium - Announcement by AZL (17/08/2023)

5) Preliminary Economic Assessment and Upgrade of Mineral Resource (19/06/2019)

6) Updated Initial Assessment, Lithium Mineral Resource Estimate, Compass Minerals International (14/09/2022)

7) Standard Lithium NI 43-101 Technical Report (25/11/2021)

8) NI 43-101 Technical Report on the Lithium Brines of Mansur Viewfield Areas of Southern Saskatchewan, Canada (01/04/2023)

9) Anson Resources Definitive Feasibility Study Presentation (09/09/2022)