

Transforming Waste into a Resource: Revolutionizing Lithium Extraction Through Advanced Filtration Technology



Cautionary Statement

Forward-Looking Statements

This presentation contains "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, including without limitation the financial model and business case on slides 37 and 24, respectively. Although the forward-looking statements in this presentation reflect the good faith judgment of management, forward-looking statements are inherently subject to known and unknown risks and uncertainties that may cause actual results to be materially different from those discussed in these forward-looking statements. Readers are urged to carefully review and consider the various disclosures made by us in our reports filed with the Securities and Exchange Commission, including the risk factors that attempt to advise interested parties of the risks that may affect our business, financial condition, results of operation and cash flows.

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Company Introduction



Company Overview

| | |
|--------------------------------|----------------------|
| Company | Lithium Harvest Inc. |
| Head Office | Houston, Texas |
| Technology Center | Aalborg, Denmark |
| Employees | 14 |
| 2025 Planned Production | 2,800 metric tons |
| Ticker | LIHV |
| Shares Outstanding | 296M |
| Market Cap | \$59M |

By applying our advanced and patented filtration technology, we transform Produced Water into a valuable resource. This enables us to utilize a standard Direct Lithium Extraction (DLE) process to profitably and sustainably extract lithium.

Investment Highlights



We believe that our patented technology is the most sustainable, fastest to market, and lowest-cost lithium mining technology available today.

Sune Mathiesen
Chairman & CEO

■ Proven and Patented Water Filtration Technology:

- Transforms Produced Water so it can be used in a standard Direct Lithium Extraction (DLE) process to extract lithium

■ Abundant and Accessible Feedstock:

- The global oil and gas industry consistently produces over 250 million barrels of produced water daily, ensuring a reliable supply
- Ability to generate additional profit for the oil and gas industry ensuring incentive to collaborate

■ Cost-Efficient Operations:

- Co-locating facilities with midstream operators reduces land and construction costs
- On-site extraction and refining lower both transportation costs and environmental impact

■ Industry Leading Profitability and Time To Market

- Low CapEx and OpEx ensures competitive cost and profitability even in challenging market situations
- New projects launch within 12-18 months.

Innovating the Future of Lithium Extraction

Lithium Harvest was founded in 2020 by Sune Mathiesen and Paw Juul to address the growing demand for a more sustainable and efficient way to produce lithium battery compounds. However, the roots of our patented technology date back to 2012, when we first explored the potential of produced water during a pilot trial with a leading oil and gas company.

Through that trial, we discovered that produced water—typically viewed as a waste product—contains valuable minerals, including lithium, that can be extracted. This realization set the foundation for our innovative approach to lithium extraction.

With over 20 years of experience in water treatment, our management team has developed multiple proprietary technologies and a fully automated control algorithm. These systems have been implemented in over 400 large-scale industrial water treatment projects, demonstrating our proven track record of delivering impactful solutions. At Lithium Harvest, we're not just extracting lithium; we're redefining what's possible in water treatment and resource recovery.



Experienced Management Team



**Sune Mathiesen,
Chairman & CEO**

Prior to co-founding Lithium Harvest, Mr. Mathiesen served as CEO, President, and Director of LiqTech International, a Nasdaq listed company, since 2014. Mr. Mathiesen has also served as CEO and Director of Provital, and Country Manager of Broen Lab and GPA Flowsystems.

Mr. Mathiesen has a solid board and executive management background in private and public companies. Further, he has extensive experience as an investor in early-stage startups.



**Stefan Muehlbauer
CFO**

Mr. Muehlbauer joined the Company in 2017 as CFO and was appointed CEO in 2018, as well as serving on the company's board of directors. Previously Mr. Muehlbauer has served as CEO of Arma Communications Inc., a business development and marketing agency, since 2013.

Prior to joining the Company, Mr. Muehlbauer held positions with several leading investment banks in Europe, where he focused on the biotech, pharmaceuticals, and green chemistry sectors. As the Chief Operating Officer at Silvia Quandt & Cie AG, he was responsible for building up the institution's research and corporate finance activities in these areas.



**Paw Juul,
CTO & Director**

Prior to co-founding Lithium Harvest, Mr. Juul served as CEO of LiqTech Water, a subsidiary of LiqTech International, a Nasdaq-listed company, since 2014. Mr. Juul co-founded Provital in 2009 and served as CTO until 2014.

Mr. Juul has extensive experience in new business development, specifically in the water treatment industry.



+20 Years

Executive management experience



+20 Years

Water treatment experience



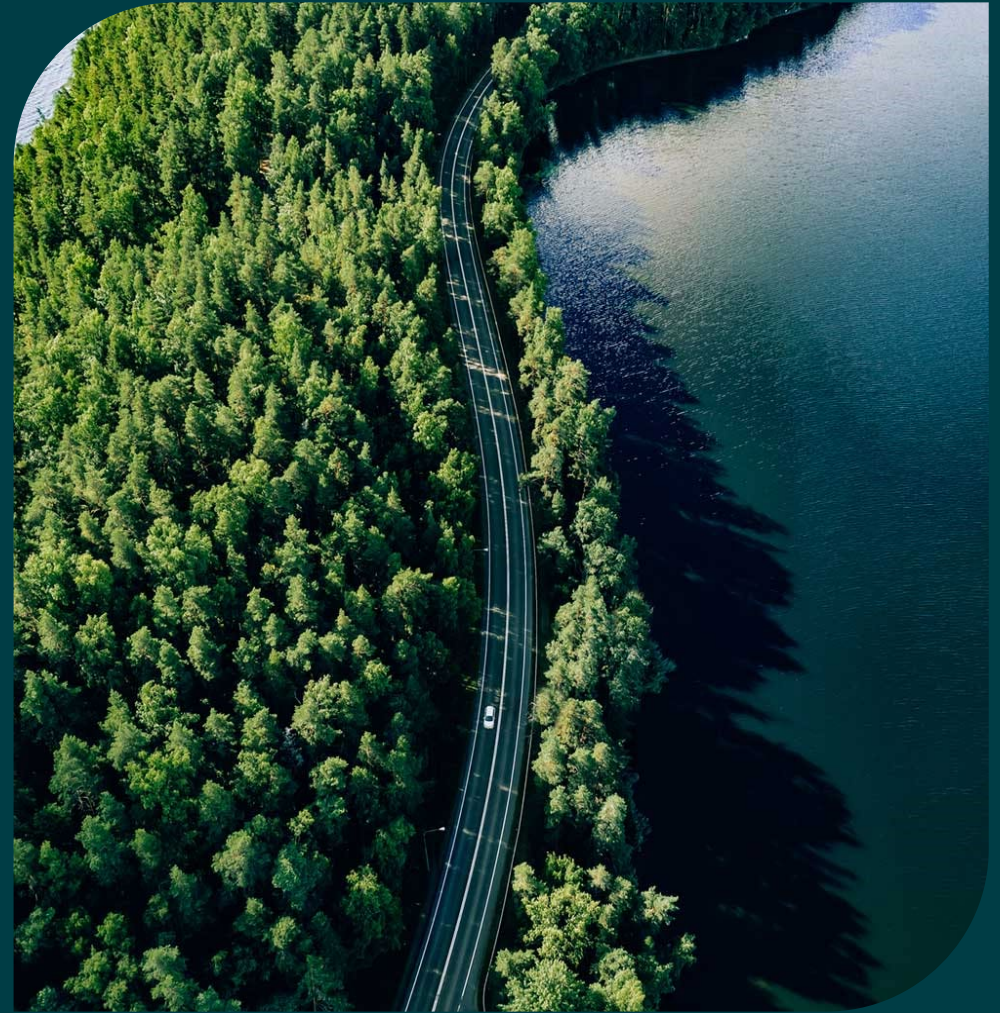
+400

Successful water treatment systems installed

Lithium

 Lithium Harvest

We Turn
Wastewater
Into High Value
Minerals



Lithium Production Technologies



Hard Rock Mining



Solar Evaporation Brine Extraction



DLE from Brine

| | | | |
|--|------------------------------|------------------------------|--------------------|
| Market share | 66% | 24% | 10% |
| Project implementation time | 8-10 years | 13-15 years | 5-7 years |
| Lithium carbonate production time | 3-6 months | 2-3 years | 2 hours |
| Lithium yield | 6-7% | 20-40% | 80-95% |
| Average footprint per 1,000 mt LCE | 115 acres | 65 acres | 1.4 acres |
| Environmental impact | Soil and water contamination | Soil and water contamination | Minimal |
| Water consumption per 1,000 mt LCE | 250 million gallons | 550 million gallons | 80 million gallons |
| CO ₂ footprint per 1,000 mt LCE | 15 million kg | 5 million kg | 1.5 million kg |
| Average invested capital per 1,000 mt LCE | \$60 million | \$50 million | \$45 million |
| Average cost per metric ton | \$6,900 | \$5,800 | \$5,700 |

*1,000 mt LCE is equivalent to 15,400 PCU
Source: Columbia University, IEA, ICMM

Direct Lithium Extraction - But Different

Our patented technology is Direct Lithium Extraction (DLE) based on adsorption technology. Using wastewater from oil & gas production as our feedstock, allows us to bring lithium operations online much quicker and at a lower cost than any other DLE technology in the market.



Lithium Harvest Technology



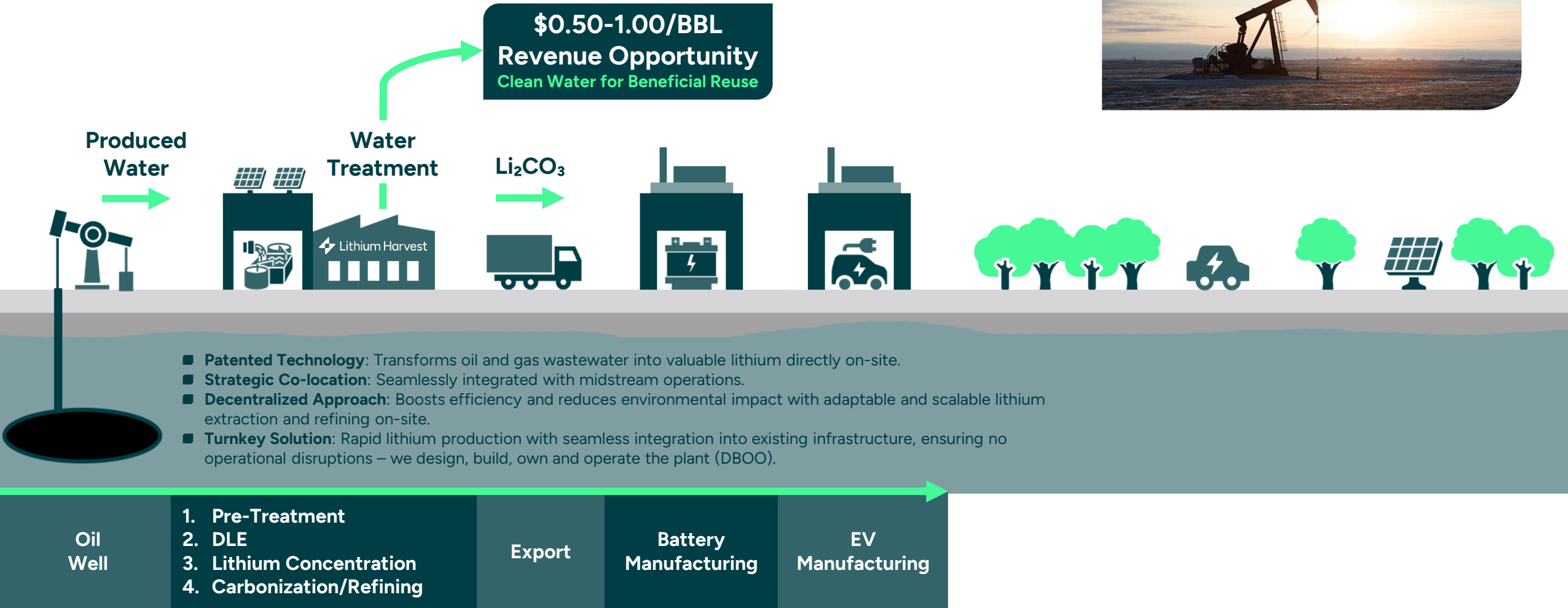
DLE from Brine

Lithium Harvest Advantage

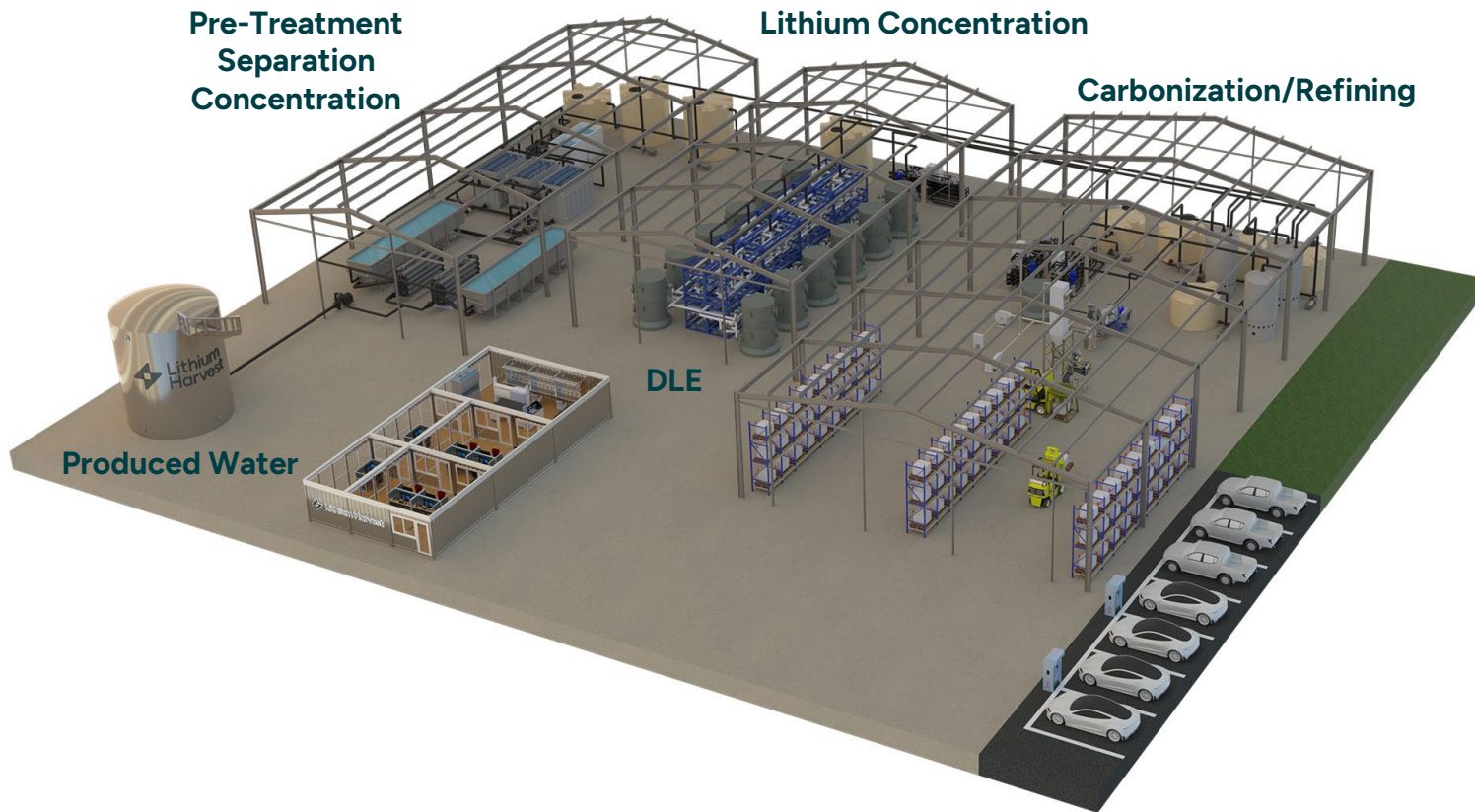
| | Lithium Harvest Technology | DLE from Brine | Lithium Harvest Advantage |
|---|----------------------------|---------------------|---|
| Project implementation time | 12-15 months | 5-7 years | No drilling permits needed |
| Lithium Feedstock | Produced water | Continental Brine | No asset acquisition |
| System design | Modular and mobile | Mobile / Stationary | Unique modular design |
| Water consumption | 20 million gallons | 80 million gallons | Water recycled for secondary reuse |
| CO ₂ footprint | Neutral | 1.5 million kg | Offsets CO ₂ footprint from wastewater |
| Average invested capital per 1,000 mt LCE | \$18 million | \$45 million | No land acquisition |
| Average cost per metric ton | \$4,550 | \$5,700 | Low Energy Technology |

Production Methods

- Lithium Harvest DLE



Our Technology - Modular and Mobile



Up to 99%
Smaller footprint



>95%
Lithium extracted



Up to 96%
Lower water consumption



>90%
Water recycled



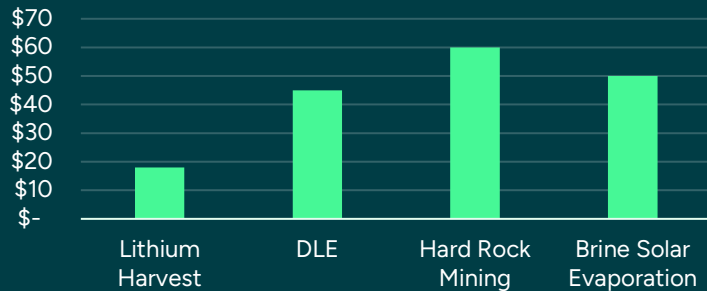
Up to 35%
Lower OpEx



70%
Lower CapEx

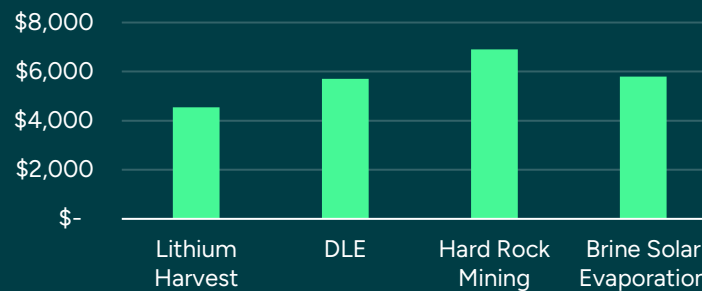
Technology Benchmark - Business Case

CapEx
Million USD per 1,000 mt LCE



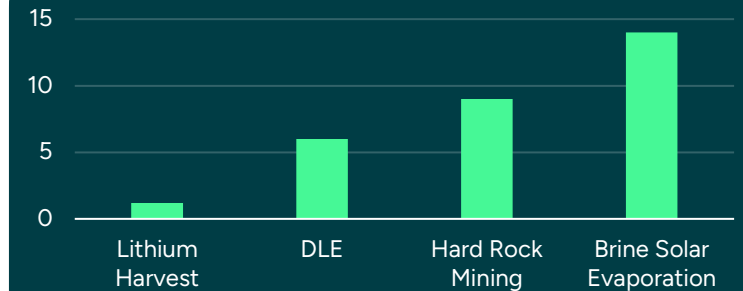
- No acquisition of land
- No acquisition of drilling rights
- Modular plant design

Average Cost
USD per 1,000 mt LCE



- Up to 95% yield
- Low energy facility
- Fully automated facility
- On-site production and refining
- Fixed price feedstock

Project Implementation Time
Years



- No acquisition of land and drilling rights
- No drilling permits
- Modular plant design
- Scalable capacity

The Lithium Market



The Lithium Industry

Geography

- 90% of global lithium production is concentrated in Australia, Chile, China, and Argentina.
- Australia is the largest producer (40% in 2023), but much of its ore is processed in China.
- Geographic concentration highlights the need for local lithium supply in the U.S. and Europe.

Lithium Sources

- 66% of lithium comes from hard rock mining (mainly in Australia).
- 24% from brine evaporation (mainly in Chile and Argentina).
- 10% from brine DLE

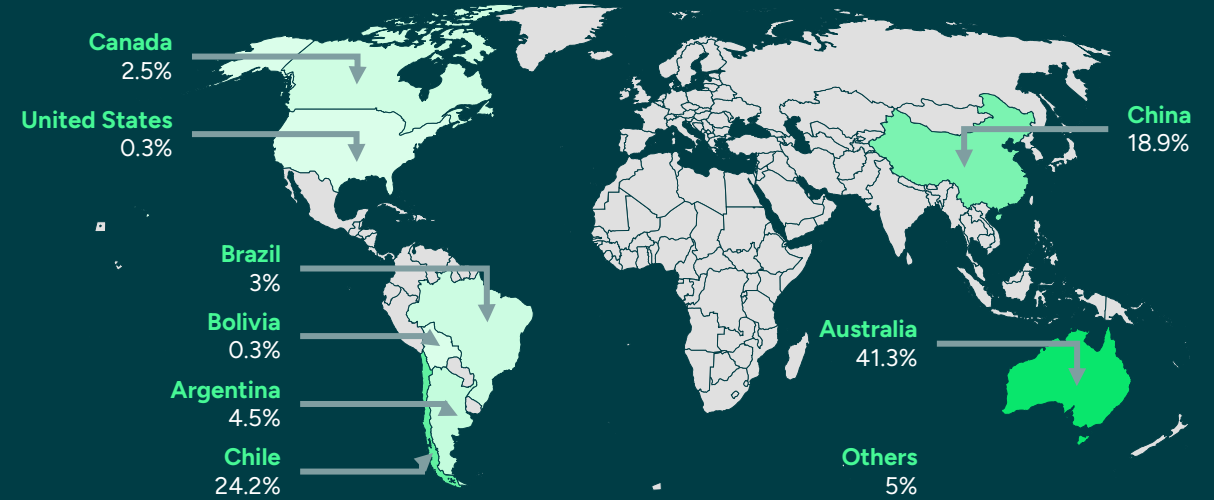
U.S. Production

- U.S. global lithium production share fell from 27% (1996) to less than 1% (2023).
- The Inflation Reduction Act emphasizes the need for U.S. lithium self-sufficiency.

End-Use Markets

- EV adoption drives 87% of lithium demand in 2023.
- Other uses: consumer electronics, energy storage, ceramics and glass, lubricants, air treatment, polymers, casting powder.

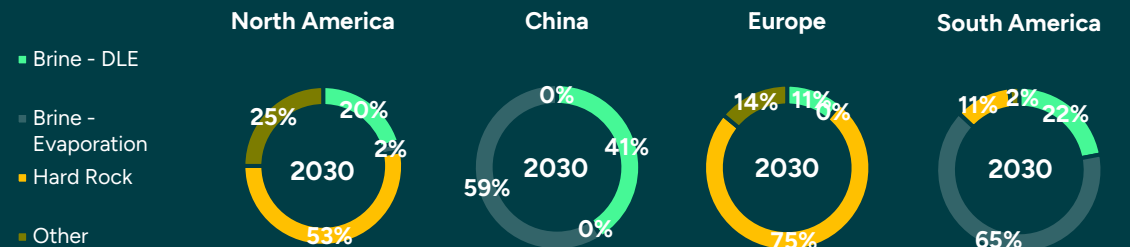
Lithium Production Concentration



Lithium Sources 2024



Lithium Sources 2030



The World is Facing a Lithium Shortage

The global green energy transition has sparked a surge in lithium demand as economies worldwide move towards decarbonization and electrification.

Lithium Demand Set to Surge 3.5x Between 2023 and 2030

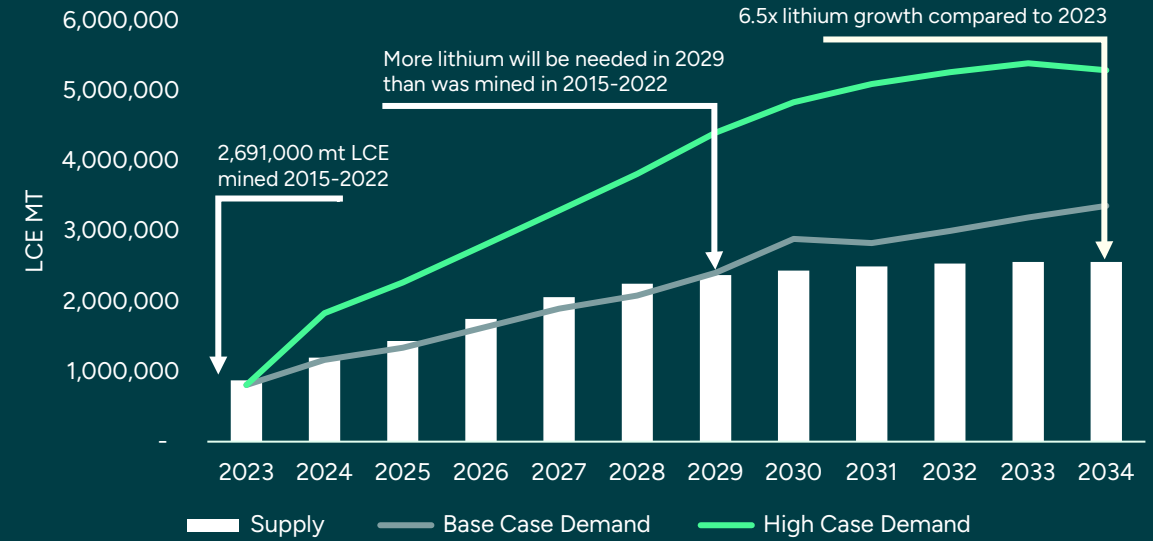
The rapid adoption of electric vehicles (EVs) and the expansion of battery storage solutions drive a significant increase in lithium demand. Projections indicate a further 250% increase from 2023 to 2030, with a growing emphasis on sustainable lithium products.

A Critical Lithium Shortage Looms by 2029 – or Even Sooner!

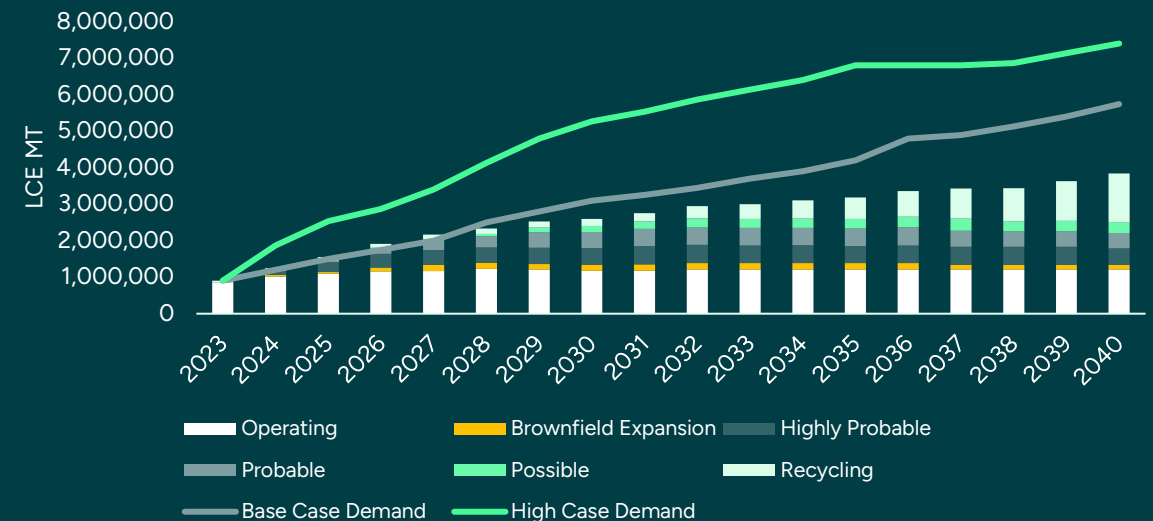
Challenges Facing New Lithium Projects

- **Market Volatility:** Prolonged market price volatility could lead to supply cuts and project delays.
- **Immediate Concern:** The lithium market is already grappling with delays in project timelines.
- **Future Supply Gaps:** If possible and recycling projects are not realized, the base case supply gap could be nearly 4x by 2030.
- **Long-Term Supply Risks:** Between 2023 and 2040, 55-65% of forecasted supply is at risk. By 2040, the high-case supply gap could almost double without new projects and increased recycling capacity.

Lithium Supply-Demand Forecast



New Lithium Projects Probability



Rapid Growth of U.S. Demand & Battery Manufacturing

Projected Manufacturing Capacity

- US battery manufacturing capacity is expected to reach 440 GWh in 2025 and **exceed 1000 GWh in 2030, an almost 9x increase** from the current 119 GWh production. Analysts forecast **growth in US lithium demand of 487%** by 2030.

Increasing Demand for Raw Materials

- Growing number of EV battery manufacturers tightens competition for local raw materials.
- US demand for CRM is projected to be 10x higher than the planned refining capacity by 2025.

Importance of Domestic Production

- Supports overall economic growth, competitiveness, and energy independence. Creates high-quality jobs and local growth.

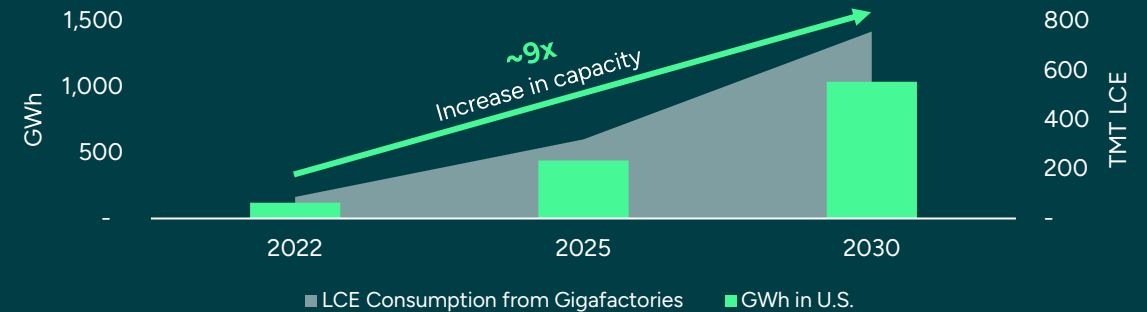
National Security and Supply Chain Resilience

- Reduces reliance on imports from adversaries, mitigates supply disruption risks, and promotes US production.

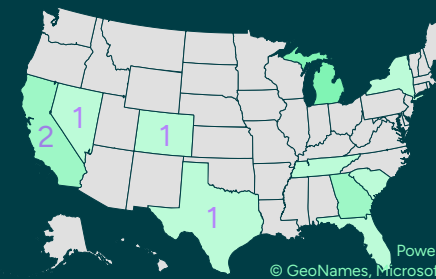
Government Support and Strategic Initiatives

- Grants, subsidies, and tax incentives promote domestic production, driven by the Inflation Reduction Act to boost the US EV supply chain.

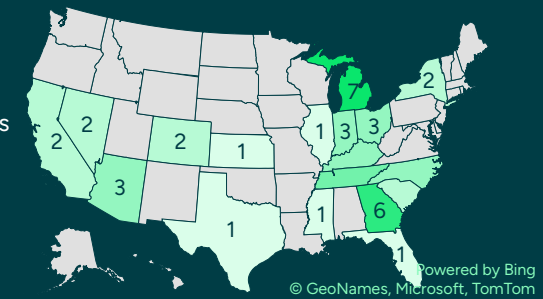
U.S. Battery Capacity Growth



Gigafactories Concentration by 2022 (14)

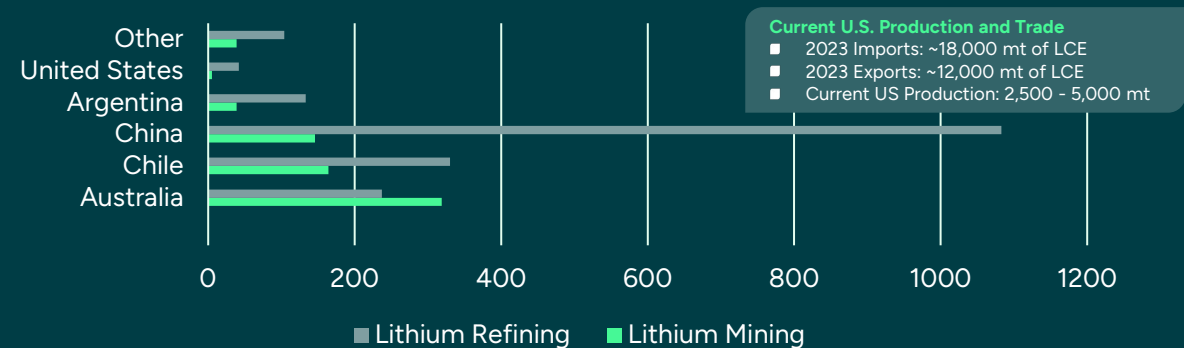


Gigafactories Concentration by 2030 (47)



3.4x
Increase in
gigafactories

2025 Mining and Refining Capacity (TMT)



Lithium Price Dynamics

Price volatility in 2022 and 2023

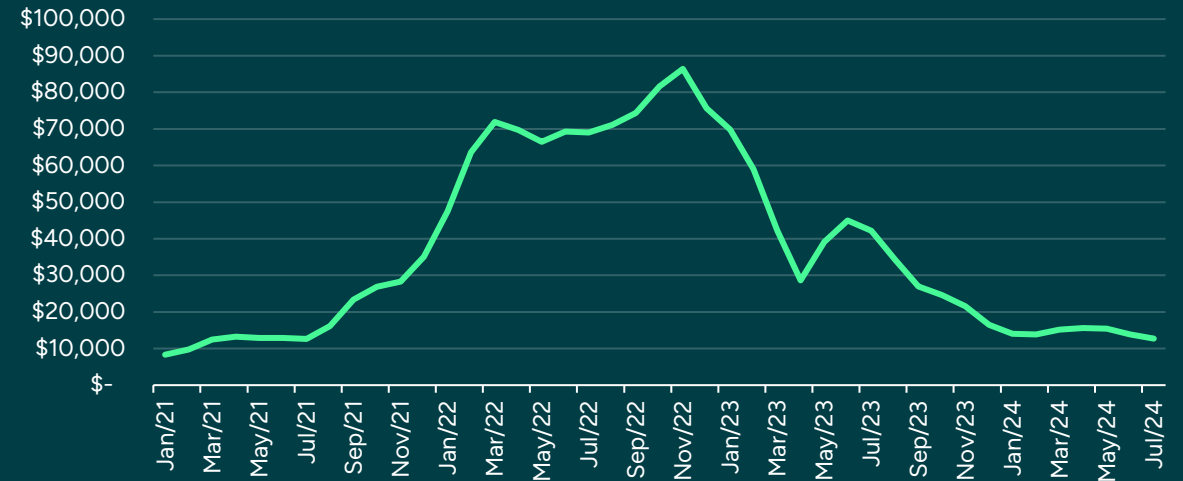
- **Supply and Demand Imbalances:** Temporary oversupply periods caused price drops until demand caught up, leading to volatility.
- **Geopolitical Factors:** China's dominance in the lithium-ion battery market introduced supply chain vulnerabilities for other countries, such as stockpiling. **China holds 7% of the world's lithium resources and supplies +70% of the world's lithium.**
- **Global Economic and Political Events:** Economic factors like inflation, the Ukraine war, and subsidies affected global energy markets and EV adoption.

Analyst Consensus Price Targets

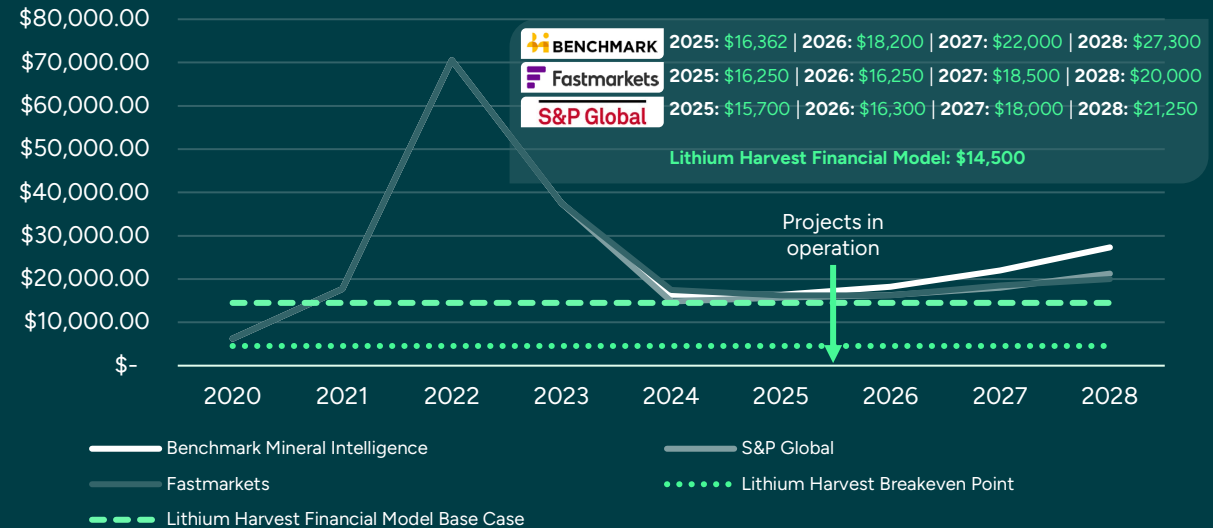
2025
\$16,104

2028
\$22,850

Historical Lithium Carbonate Prices

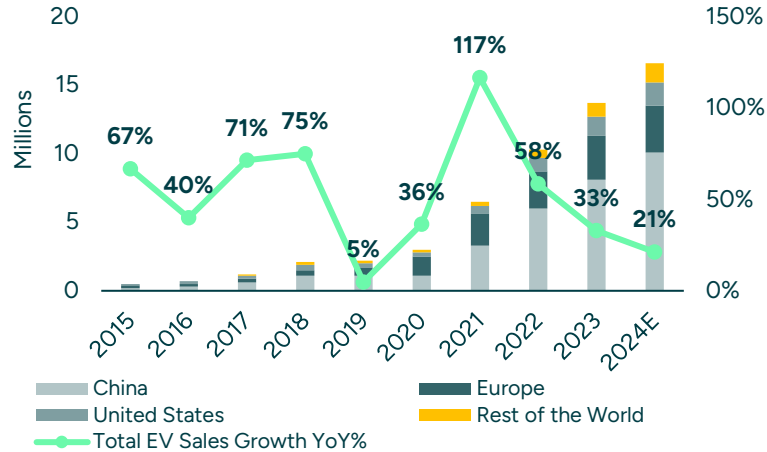


Forecasted Lithium Carbonate Prices

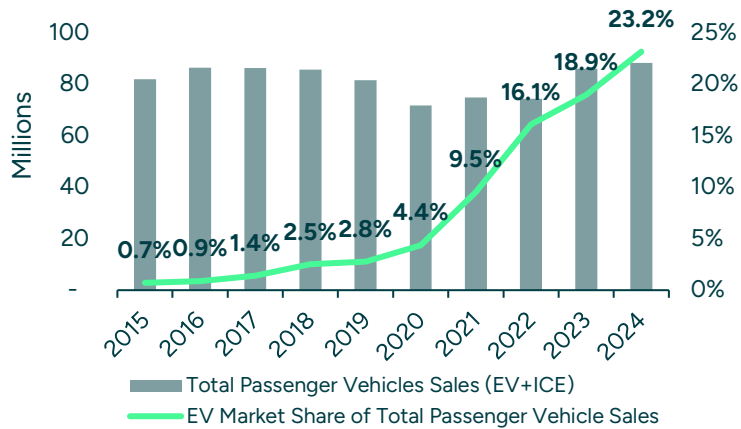


Growing Offtake Markets

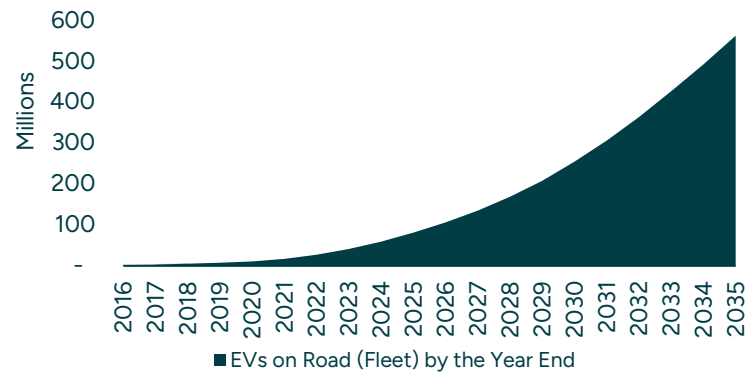
Growing EV Sales



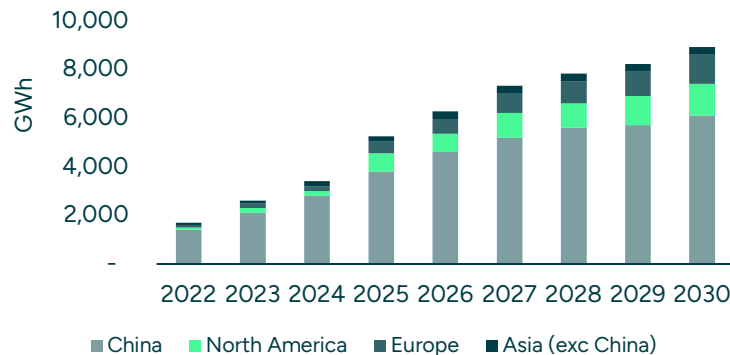
EV Market Share of Sales



EVs on Road (Fleet)



Global Gigafactory Capacity



Rising EV Sales:

- Projected EV sales in 2024: ~17 million units
- In 2024, EVs will account for over 20% of global car sales
- If 1 million more EVs were sold, approx. 53,125 mt of LCE would be needed

Sales Growth:

- H1 2024: 7 million EVs sold
- 20% increase from H1 2023

Battery Demand:

- Global battery demand in 2024: 512 GWh
- 23% year-on-year growth
- Sustained growth trend expected to remain

Future Projections:

- By 2035, 50% of all cars sold globally will be electric
- The global EV fleet is projected to grow twelve-fold to 585 million by 2035, with an average annual growth of 24% from 2023 to 2035.

Manufacturer Commitments:

- 20+ major car manufacturers (90% of global car sales in 2023) have electrification targets

Market Trends:

- Increasing availability of EVs, particularly larger ones
- The average size of lithium-ion battery packs in EVs is growing by ~10% annually

Raw Material Demand:

- Increasing need for critical raw materials: lithium, cobalt, and nickel due to more battery production

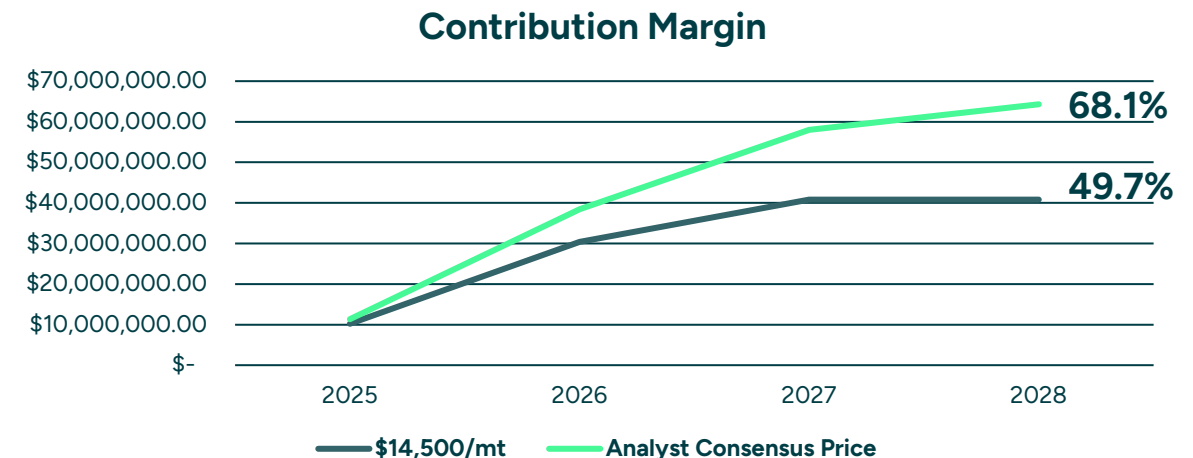
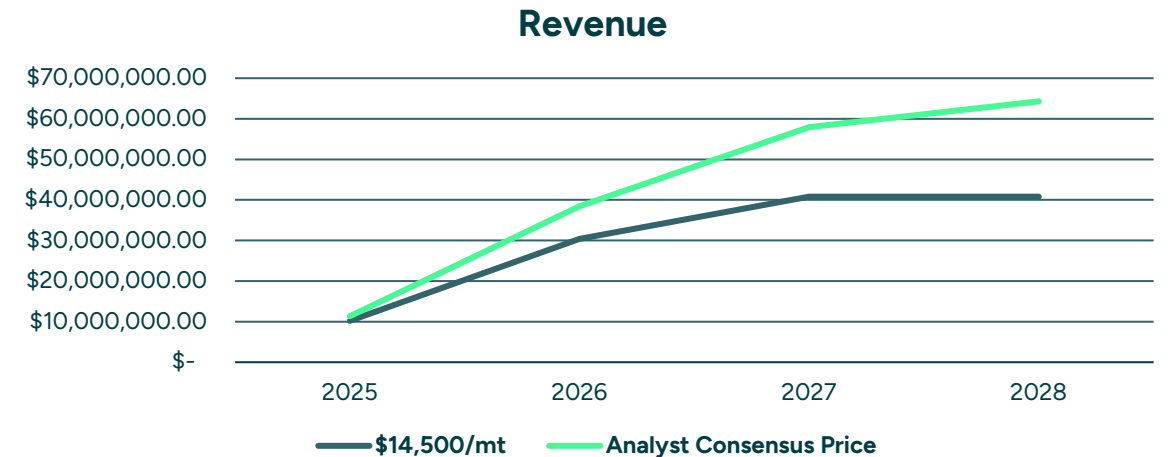
Business Outlook



Initial Planned Projects

| Facility Details – ND 1 | |
|---------------------------|--------------|
| Location | North Dakota |
| Initial Capacity | 400 mt |
| Maximum Capacity | 1,300 mt |
| Footprint | 41,000 sq ft |
| Construction Start | H2/2024 |
| Expected Production Start | H2/2025 |

| Facility Details – ND 2 | |
|---------------------------|--------------|
| Location | North Dakota |
| Initial Capacity | 600 mt |
| Maximum Capacity | 1,500 mt |
| Footprint | 62,000 sq ft |
| Construction Start | H2/2024 |
| Expected Production Start | H2/2025 |



Financial Model 2025-2034

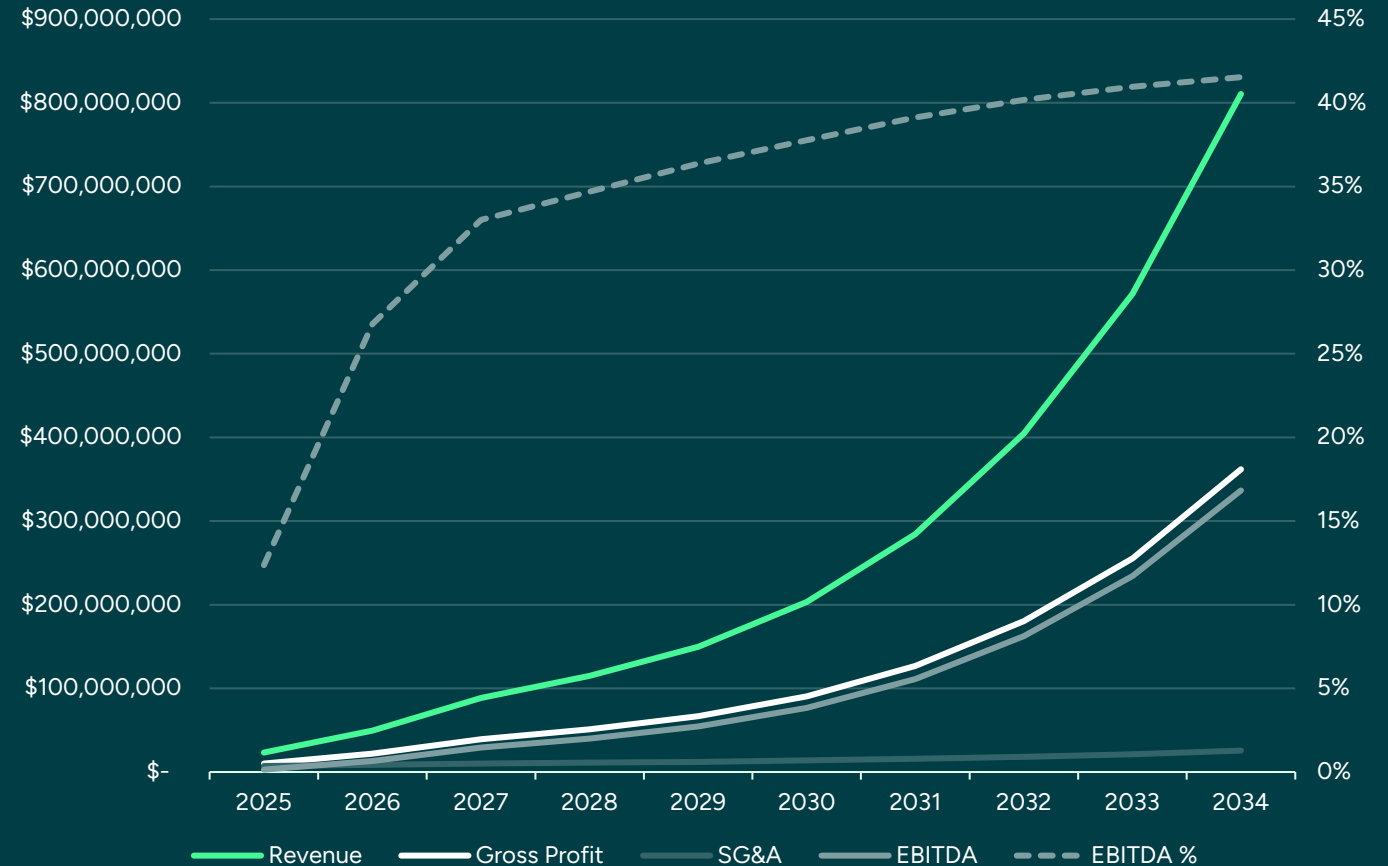
Assumptions

Lithium Sales Price: \$14,500/mt*
Feedstock: \$0.25/bbl*

*The revenue, gross profit and EBITDA numbers on this slide are the results of a financial model that is intended to illustrate the impact of contracts in our pipeline on our results of operations and are not projections of our future operating results. The numbers in this slide for sales price per metric ton, cost of goods sold per metric ton, capital expense, operating expense and gross margin are solely the assumptions used in the financial model and are also not projections of our future operating results or market prices for lithium. For purposes of the financial model, EBITDA is defined as net income calculated in accordance with GAAP, plus interest expense, taxes, depreciation and amortization. The results of this financial model are highly speculative and are likely to deviate materially from our actual results of operation.

*Assumptions based on price forecast from Benchmark Mineral Intelligence, Fastmarkets, and S&P Global

10 Year Financial Model



*All numbers are based on a lithium sales price of \$14,500/mt

The world's most
sustainable lithium





lithiumharvest.com