



# Strategic growth through lithium extraction

# Capitalize on lithium's growth

## Executive Summary

At Lithium Harvest, we are revolutionizing geothermal resource management by turning lithium-rich brines into a revenue stream. Our lithium extraction solution seamlessly integrates with existing infrastructure, unlocking dual revenue potential while ensuring clean energy production.

This strategic opportunity allows you to maximize asset value by leveraging existing infrastructure for lithium production. By partnering with Lithium Harvest, your company can spearhead the green energy transition, diversify revenue streams, and position itself at the forefront of the sustainable lithium supply chain - all while upholding carbon-neutral operations and ensuring long-term financial resilience.

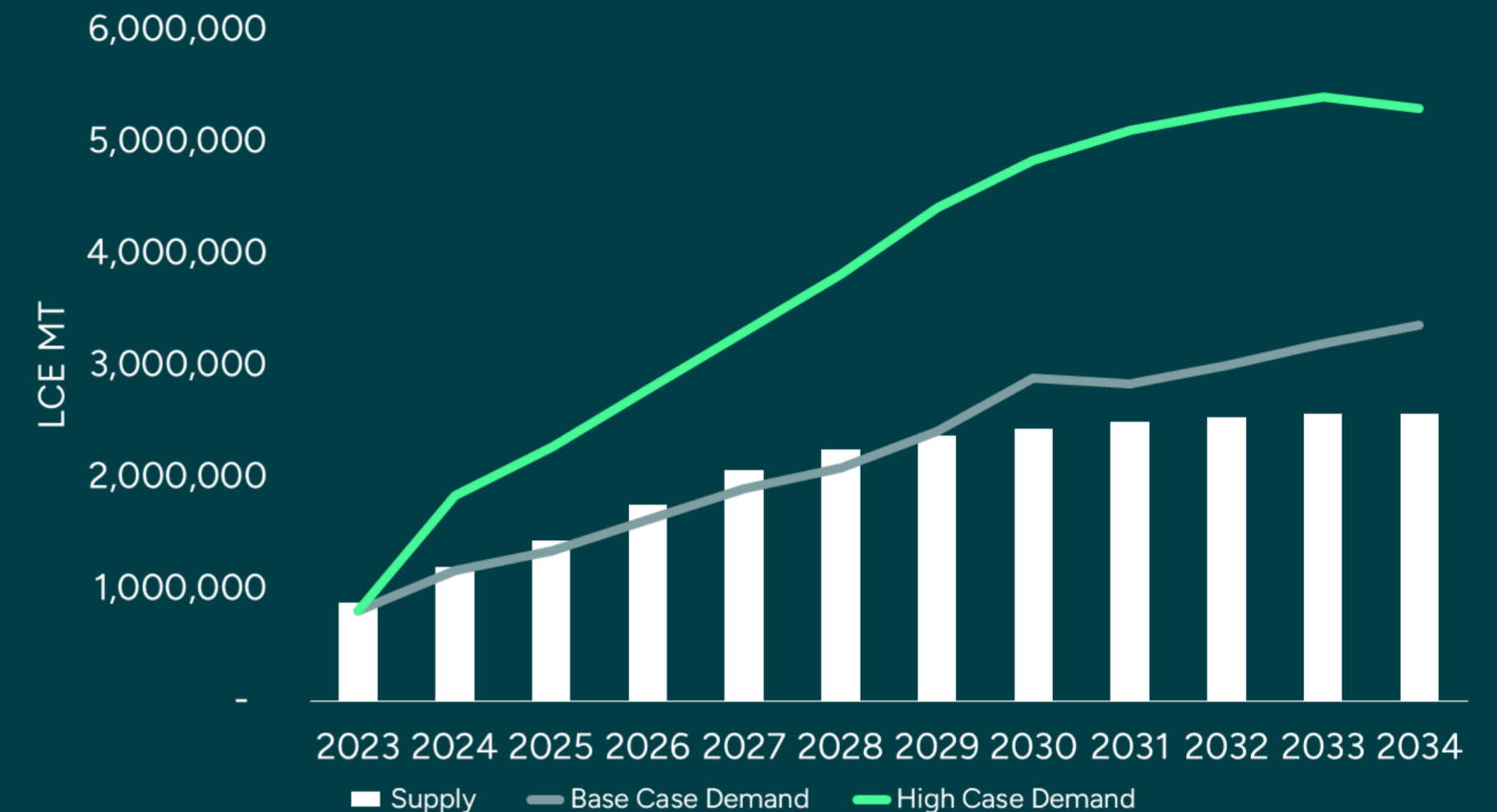
## Power & Profit: Unlocking Lithium from Geothermal Brines

Geothermal brines have long been an underutilized resource, but at Lithium Harvest, we are changing that. Our lithium extraction solution seamlessly integrates with geothermal plants, transforming brines into a dual revenue stream. By extracting high-value lithium and other critical minerals, you can diversify income and capitalize on the booming lithium market - without disrupting energy production.

Our carbon-neutral solution maximizes lithium recovery, aligning with sustainability goals while ensuring long-term profitability:

- **Seamless Integration:** Our extraction solution effortlessly integrates with existing geothermal infrastructure, requiring minimal modifications to operations.
- **Strategic Co-location:** We co-locate extraction and refining facilities at geothermal sites, optimizing logistics and reducing operational costs.
- **Scalable & Modular:** Our flexible design adapts to geothermal plants of all sizes, handling diverse brine chemistries and varying lithium concentrations.
- **Turnkey, End-to-End Solutions:** We provide a full-service Design-Build-Own-Operate (DBOO) model, managing everything from installation to operation - so you can focus on energy production while we handle lithium extraction.

## Lithium Supply-Demand Forecast



**Lithium demand is expected to grow 3.5x by 2030 and 6.5x by 2034.**

## Lithium Market Dynamics

The lithium market projections show that lithium demand will surge by 250% between 2023 and 2030, with an even greater emphasis on securing sustainably sourced lithium.

### Current Market Size:

- 2023 global lithium production was estimated at approximately 850,000 mt of lithium carbonate equivalent (LCE).

### Future Demand Projections:

- Global lithium demand is expected to grow 3.5x by 2030 and 6.5x by 2034 from 2023 levels.

### Supply Constraints:

- By 2029, demand is expected to outstrip supply – or even sooner.
- The race to secure lithium intensifies as countries focus on energy security and reducing reliance on foreign supply chains.
- Cuts/delays in lithium projects and geopolitical risks further threaten supply stability.

## Technology Benchmark



Lithium Harvest Solution



DLE from Brine



Solar Evaporation Brine Extraction



Hard Rock Mining

Feedstock	Geothermal brine	Continental brine	Continental brine	Rock / spodumene
Project implementation time	12-15 months	5-7 years	13-15 years	8-10 years
Lithium carbonate production time	2 hours	2 hours	2-3 years	3-6 months
Lithium yield	>95%	80-95%	20-40%	6-7%
Average footprint per 1,000 mt LCE	1.4 acres	1.4 acres	65 acres	115 acres
System design	Modular and mobile	Mobile / stationary	Stationary	Stationary
Environmental impact	Minimal	Minimal	Soil- and water contamination	Soil- and water contamination
Water consumption per 1,000 mt LCE	20 million gallons	80 million gallons	550 million gallons	250 million gallons
CO <sub>2</sub> footprint per 1,000 mt LCE	Neutral	1.5 million kg	5 million kg	15 million kg
Average invested capital per 1,000 mt LCE	\$18 million	\$45 million	\$50 million	\$60 million
Average cost per metric ton	\$4,550	\$5,700	\$5,800	\$6,900

Source: Columbia University, IEA, ICMM.

### Our Innovation Surges Ahead of Competitors

At Lithium Harvest, our lithium extraction solution outpaces traditional methods and competing solutions by delivering one of the most cost-efficient and sustainable lithium extraction processes available today. Here is how we surge ahead:

- Unmatched Cost-Efficiency:** Unlike traditional mining or evaporation ponds, which are capital and resource-intensive, our solution offers a low-cost approach by transforming geothermal brine into valuable lithium compounds using existing infrastructure. With CapEx up to 70% lower and OpEx up to 35% lower than traditional mining methods, we significantly reduce operating expenses and eliminate the need for large-scale infrastructure investments, giving us a clear cost advantage over competitors.

- One of the Most Sustainable Lithium Solutions:** Our process significantly reduces the environmental footprint of lithium extraction by minimizing water usage and carbon footprint. Using geothermal brine from energy production, we turn a byproduct into one of the most sustainable lithium sources on the market, aligning with the highest ESG standards.
- Fastest to Market:** Our solution accelerates lithium production timelines, enabling us to bring lithium compounds to market faster than traditional mining methods. Energy companies can quickly capitalize on new revenue streams with shorter project development cycles.

By offering a cost-effective, environmentally responsible, and fast-to-market solution, Lithium Harvest ensures that you can stay ahead of the curve, meeting the demand for sustainable lithium while maximizing profitability.

## Competitive Advantages & Strategic Market Positioning

- **Diversification & Market Leadership:** Entering the lithium market provides a new revenue stream while reinforcing your role in the clean energy transition. Early adopters will gain a competitive edge in supplying sustainable lithium for the growing battery industry.
- **Leveraging Existing Infrastructure:** Lithium Harvest's extraction solution seamlessly integrates into geothermal plants, enabling low-cost lithium production without significant modifications. This minimizes capital expenses, shortens project timelines, and maximizes asset value.
- **First-Mover Benefits & Competitive Edge:** Geothermal lithium is an untapped market offering a unique first-mover advantage. Our scalable, cost-effective, and ESG-aligned solution delivers faster, more sustainable lithium production than traditional methods - positioning us at the forefront of the critical minerals supply chain.

## Profit-Boosting Business Scenarios

Explore tailored setups with Lithium Harvest's turnkey lithium extraction from geothermal brine solution - where we operate, you profit, and lead in environmental stewardship. We invite you to meet with our team to explore business cases customized to your infrastructure, aligning with your corporate growth strategy. Together, we can introduce new revenue streams and build a strong business case for joint success in this emerging market.

Benefits	Joint Ventures for Shared Success	Royalty-Based Revenue Streams
	Co-develop a lithium extraction facility with Lithium Harvest and share in the profits while establishing your leadership in sustainable innovation.	Earn consistent royalties by licensing your geothermal water for lithium extraction, enhancing your ESG profile, and supporting resource sustainability.

## Sustainability Meets Profitability

At Lithium Harvest, we help you amplify your sustainability impact while unlocking new revenue streams. You are already driving the green energy transition, providing clean, renewable energy - but now, you can take it further.

Our geothermal lithium extraction solution turns brine - a natural byproduct of energy production - into a valuable resource, reinforcing environmental responsibility and economic growth. This dual-sustainability approach enables us to:

- Reduce up to 15 million kg of CO<sub>2</sub> emissions per 1,000 metric tons of lithium carbonate produced - equivalent to removing 3,200+ cars from the road annually.
- Save up to 500 million gallons of water per 1,000 metric tons of lithium carbonate produced - enough to supply 4,500 households annually.
- Lower EV battery lifecycle emissions by 47%, significantly reducing the carbon footprint of electric vehicles.

By integrating lithium extraction into your geothermal operations, you are not just powering the future of renewable energy - you are fueling the future of sustainable transportation and battery storage. Together, we can set new sustainability standards and make a lasting impact on the planet.



Up to 96%

lower water consumption



500,000

gallons of freshwater saved



15,000 kg  
of CO<sub>2</sub> saved



Neutral  
CO<sub>2</sub> footprint



Up to 99%  
smaller footprint

# Seize the future with lithium



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