Geothermal lithium extraction

Lithium Harvest

Dual revenue powerhouse

Generate revenue from both geothermal energy production and critical mineral recovery, unlocking the full economic potential of your operations.

Maximize the full economic potential of your geothermal operations by extracting lithium and other valuable minerals from geothermal brines - without disrupting energy production.

Lithium Harvest provides a cost-effective, seamless, and sustainable lithium extraction solution, turning your existing geothermal brines into a new revenue stream. Our advanced, closed-loop process integrates effortlessly with your operations, delivering battery-grade lithium while maintaining ESG compliance and regulatory alignment.

As global demand for lithium surges, you have a unique opportunity to supply a domestic, sustainable source of critical minerals - creating dual revenue from both energy and lithium extraction. Unlock new value from every drop of geothermal brine. Partner with Lithium Harvest to drive profitability, sustainability, and energy leadership in the green energy transition.

Dual Revenue Stream: Combine geothermal energy production with high-purity lithium recovery for maximum profitability

Sustainability Advantage: Our closed-loop process ensures minimal environmental impact, meeting ESG and regulatory demands

Effortless Integration: Our DBOO model ensures a hassle-free setup with minimal operational disruption


We operate,
you profit
Lithium
Harvest

From heat to value

Seamless Integration, Maximum Profitability

We handle the plant, so you stay focused on your business while we turn geothermal brine into dual revenue.

- **Strategic Co-location:** Our decentralized, co-located facilities enhance synergy, reduce environmental impact, and streamline lithium extraction directly at your site, enabling efficient, flexible growth.
- **Scalable & Modular:** Built to adapt to any scale, our modular solution easily manages varying volumes and lithium concentrations, maximizing output and efficiency.
- **Seamless Integration & Operation:** Our solution deploys rapidly with minimal setup, fitting seamlessly into your existing infrastructure without disrupting core operations. Ready in 12-18 months, it fits a 3,200 m^3/d facility within 1.4 acres - no extra land or pipelines required. Control valves allow bypass during low lithium concentration or maintenance, ensuring cost-effective, uninterrupted flow for your operations.
- **Turnkey, End-to-End Solutions:** Our end-to-end, design-Build-Own-Operate (DBOO) model covers everything from design to operation, ensuring smooth integration and immediate revenue so you can focus on your core business.

>95%
Lithium extracted

>90%
Water recycled

Neutral
CO_2 footprint

Our Direct Lithium Extraction (DLE) technology seamlessly integrates with geothermal operations, extracting high-purity lithium and other critical minerals while maintaining closed-loop energy production. Using advanced adsorption and water treatment methods, our fully automated, carbon-neutral process maximizes resource efficiency with minimal operational impact.

Designed for efficiency and scalability, our solution reduces resource requirements, limits on-site staffing needs, and ensures high lithium recovery rates. By combining sustainability with profitability, Lithium Harvest enables you to unlock new revenue streams while aligning with ESG commitments and industry-leading environmental standards.

- **Brine Collection:** Geothermal brine is sourced from existing operations.
- **Filtration & Pre-Treatment:** Suspended solids and impurities are removed, optimizing brine for efficient lithium extraction.
- **Advanced Lithium Extraction:** Using adsorption-based DLE technology, lithium and other valuable minerals are selectively extracted efficiently - backed by commercially proven technologies.
- **Brine Reinjection:** The treated brine is re-injected into the geothermal reservoir, ensuring sustainable, closed-loop water management without depletion.for beneficial reuse. It can be repurposed for industrial or agricultural needs, used for irrigation, re-injected into oil and gas reservoirs, or applied sustainably, further supporting environmental goals.

Double the Sustainability

You are already champions of sustainability, driving the green energy transition with clean, renewable energy. But what if you could amplify that impact? At Lithium Harvest, we transform geothermal brine into a valuable resource, furthering environmental preservation and economic growth.

By integrating our geothermal brine lithium extraction solution into your operations, we can achieve extraordinary environmental savings for the lithium extraction market:

- Up to 15 million kg of CO_2 emissions are avoided per 1,000 metric tons of lithium carbonate produced - equivalent to removing over 3,200 cars from the road yearly.
- Up to 500 million gallons of water can be saved per 1,000 metric tons of lithium carbonate produced, enough to supply 4,500 households annually.
- 47% reduction in battery life cycle emissions - significantly lowering the carbon footprint of electric vehicles and energy storage systems.

This two-way sustainability means your operations not only power the future of clean energy but also fuel the future of transportation and energy storage. Together, we can make a tangible difference for the planet and the communities we serve.

Up to 99%
smaller footprint

>90%
water recycled

Up to 96%
lower water consumption

500,000
gallons of freshwater saved

15,000 kg
of CO_2 saved

Neutral
CO_2 footprint

The fight against climate change is one of the greatest global challenges of the 21st century. The acceleration of the green energy transition highlights the need for sustainable lithium extraction.

Sune Mathiesen
Chairman & CEO

Why Lithium Harvest?

Proven expertise, cutting-edge solutions, and unmatched market opportunities.

Choosing the right partner for geothermal lithium extraction is critical to your success. At Lithium Harvest, we combine decades of experience, innovative solutions, and market insights to deliver unmatched value. Here's why we stand out:

- Proven Expertise in Water Management
- Proven Technology You Can Trust
- Attractive Business Scenarios
- Capitalize on the Booming Lithium Market

Proven Expertise in Water Management

With over 20 years of experience in industrial water treatment and resource recovery, we are leaders in designing and engineering solutions for complex water systems. Our team understands the unique chemistry of geothermal brines and the complexities of water management, ensuring optimized operations and maximum resource recovery.

Proven Technology You Can Trust

Our advanced Direct Lithium Extraction (DLE) technology, combined with industry-leading water treatment solutions, is commercially validated to deliver high lithium recovery rates and adaptability to complex brine chemistries. Partnering with industry experts, we provide reliable, scalable, and sustainable solutions you can depend on.

Attractive Business Scenarios

At Lithium Harvest, we handle the complexities of lithium extraction so you can focus on your core business. Through our Design-Build-Own-Operate (DBOO) approach, we offer customized business models that align with your operational goals, ensuring hassle-free integration and rapid ROI.

Capitalize on the Booming Lithium Market

With lithium demand projected to grow significantly, partnering with Lithium Harvest positions you to tap into this rapidly expanding market. Together, we can help meet the surging demand for sustainable lithium while contributing to the global green energy transition.

Turn Your Brine Into a Dual Revenue Stream

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_2 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.

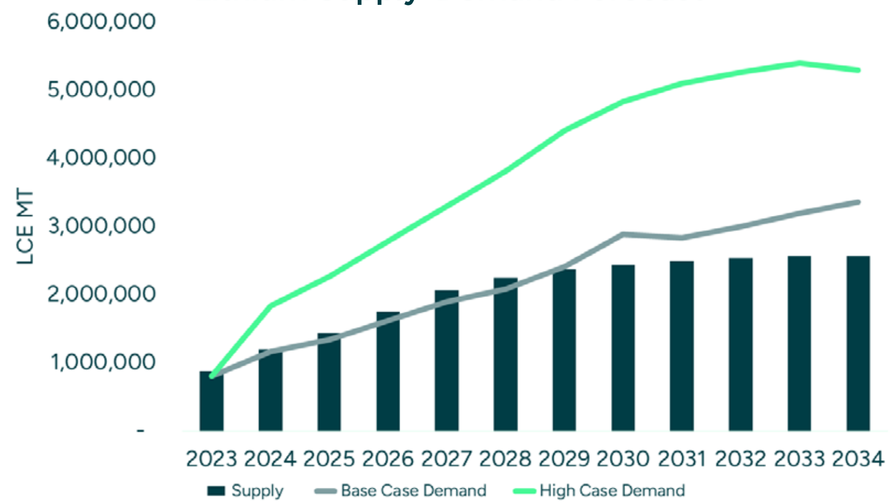
Competitive Edge in a Booming Lithium Market

Lithium Harvest's innovative extraction solution positions you ahead of the competition:

- **Cost-Efficiency:** Leverage existing infrastructure to transform geothermal brine into valuable lithium, cutting costs and minimizing investments.
- **Sustainability:** Our process reduces water usage and carbon emissions, making it one of the most sustainable lithium extraction methods available.
- **Speed to Market:** Rapid production timelines enable new revenue streams in just 12-18 months.

Lithium Market Growth:
With demand set to grow 3.5x by 2030 and 6.5x by 2034, a supply shortfall is looming in 2029. Partner with Lithium Harvest to capitalize on this opportunity and stay ahead in a fast-evolving industry.

Lithium Supply-Demand Forecast



Source: Benchmark Minerals, July 2024.

Profit-driven business scenarios

Unlock profitable opportunities with innovative collaboration models that amplify your earnings, elevate your ESG impact, and establish your leadership in the market with sustainable lithium extraction from geo-thermal brine. 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.

	Joint Ventures for Shared Success	Royalty-Based Revenue Streams
Benefits	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.

Transform your geothermal brines into dual revenue streams

- **Dual Revenue Streams:** Generate income from geothermal energy and critical mineral recovery.
- **Faster ROI:** Modular, scalable systems deliver rapid deployment and quicker returns.
- **Seamless Integration:** Our advanced, customizable solutions fit effortlessly into your existing geothermal operations.
- **Hassle-Free Sustainability:** Enjoy low-carbon, sustainable lithium production that we handle for you - easy, right?

Lithium Harvest

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