Strategic Positioning in the Lithium Market

Together: Win the Lithium Market

Lithium Harvest

Build a geothermal lithium position

Executive Summary

Partner with Lithium Harvest to build a credible lithium supply position from geothermal brine - baseload, infrastructure leveraged, and aligned with what buyers and policymakers now prioritize.

The market shift: Why positioning matters now

- **The execution gap:** Lithium demand is expected to grow at a 16% CAGR through 2030. Conventional mining cannot scale fast enough, typically taking 10-17 years to move from discovery to production.
- **Qualified supply wins:** Buyers no longer underwrite "potential." They reward deliverable lithium - qualified product, repeatable volumes, and traceability.
- **Regional security is a differentiator:** OEMs and governments are pushing for localized, resilient supply chains to reduce concentration risk.

Your differentiated position - if we partner

- **Baseload advantage:** Geothermal brine flow supports repeatable production and stronger supply credibility.
- **Infrastructure leverage:** You start from an existing operating footprint and brine loop, not a greenfield mining build.
- **Speed to market:** Co-located modular builds can target first production in 12-18 months from go-decision, materially faster than conventional projects.
- **Zero lithium operating burden:** We deliver and run the asset under the DBOO (Design, Build, Own, Operate) model, giving you lithium upside without building a new internal lithium function.

Your lithium market position

- **Credible:** Proof path and documentation discipline aligned with tier-one buyer requirements.
- **Deliverable:** Baseload flow supports repeatability and ramp confidence.
- **Contractable:** Clear structure and operating model (DBOO).
- **Differentiated:** Geothermal becomes both a renewable energy and a critical minerals supply - strengthening stakeholder and offtake relevance.

Why the Market Is Shifting - & Why Secondary Resources Matter

Lithium demand is scaling faster than conventional supply pathways can reliably deliver on buyer timelines. The strategic shift isn't just "more mines" - it's more supply pathways, including secondary resources that already exist in industrial systems.

Legacy supply is structurally slow

- Conventional projects are long-lead and capital-heavy, and many face increasing permitting and community friction.
- Offtakers don't buy "resources." They buy deliverable, qualified supply on timelines that match procurement cycles and plant buildouts.

Why secondary resources are moving from niche to necessary

"Secondary resources" are industrial brines and existing streams already generated by operating assets - including geothermal brine loops.

- The stream already exists and already flows through real infrastructure.
- Less greenfield development (less land disturbance, fewer new logistics chains, and often faster execution potential).
- More repeatable supply logic when integrated into an operating system with baseload flow.

Why geothermal is one of the strongest secondary sources

- **Baseload advantage:** Continuous brine flow supports repeatable production and stronger supply credibility.
- **Infrastructure leverage:** You start from an existing operating footprint, not a greenfield mining build.
- **Dual revenue logic:** Lithium is upside; power/heat stays primary.
- **Energy-transition fit:** The same feedstock already producing renewable power/heat can also supply critical minerals - strengthening the project's relevance to stakeholders, buyers, and policy priorities.

Secondary resources become a real strategic lever when execution is engineered, and the supply can be proven, documented, and contracted.

Competitive Positioning Map

The winner in the lithium race isn't the company with the most complex technology; it's the supply pathway that can deliver qualified tons faster and with lower friction.

Why this position wins (geothermal brine + DBOO)

- **Speed to market:** Target 12-18 months to first production from go-decision - up to ~10-17× faster than greenfield mining timelines.
- **Cost advantage drivers:** Up to 73% lower CapEx and up to 48% lower OpEx versus current global averages for conventional lithium production routes (hard rock/brine/traditional DLE).
- **Sustainability built in:** Designed for net-zero/carbon-neutral process design with up to 99% smaller land footprint and ~81% lower freshwater use.

	Lithium Harvest Solution	Traditional DLE	Solar Evaporation Brine	Hard Rock Mining
Lithium feedstock	Geothermal brine	Continental brine	Continental brine	Rock / spodumene
Project implementation time	12-18 months Up to 94% shorter	5-7 years	13-15 years	10-17 years
Lithium carbonate production time	2 hours Up to 99% shorter	2 hours	13-24 months	3-6 months
Lithium yield	>95% Up to 375% higher	80-95%	20-50%	40-70%
Average footprint per mt of LCE	61 ft^2 Up to 99% smaller	172 ft^2	39,352 ft^2	3,605 ft^2
Environmental impact	Minimal	Minimal	Soil and water contamination	Soil and water contamination
Freshwater consumption per mt of LCE	22,729 gallons Up to 81% lower	26,417 gallons	118,877 gallons	20,341 gallons
CO_2 footprint per ton of LCE	Neutral Up to 100% lower (net-zero vs 20.4)	2.5 tonne	3.1 tonne	20.4 tonne
Average invested capital per mt of LCE	$17,100 Up to 73% lower	$62,500	$34,000	$60,000
Average cost per mt of LCE	$3,647 Up to 48% lower	$6,000	$6,400	$7,000

Benchmark Mineral Intelligence, S&P Global, and International Lithium Association

Market Preferences - the New Gating Criteria

Auto and battery manufacturers increasingly apply ESG and traceability screens before price or multi-year offtake discussions.

- **Traceability is a core feature:** Verified chain-of-custody data is used to unlock incentives, reduce compliance and brand risk, and support contract priority and pricing.
- **Policy-driven diversification:** Governments are steering critical mineral supply chains away from dependence on a single country. Responsible regional tonnage increasingly carries strategic value in North America and Europe.
- **Low-carbon supply pathways win attention:** Buyers are prioritizing lithium with a credible low-carbon story and documentation readiness. Geothermal has a structural advantage here: the feedstock is produced alongside renewable energy, creating a strong pathway to low-carbon lithium.

How We Win This Position - Together

The comparison table shows the strategic advantage. The remaining question is how to turn it into a market position that buyers and partners will take seriously.

The partnership logic

- **You bring the platform:** An operating geothermal asset, baseload brine flow, and site leverage.
- **Lithium Harvest brings execution:** An engineered system built for real brine variability, delivered and operated under DBOO - so you don't have to build a lithium organization.

Path A: Feasibility first (fast screen)

Best when you have water chemistry and flow history ready for review.

- We review lithium concentration, impurities, and flow continuity.
- Output: A clear view of site fit, integration complexity, and the commercial structures that make sense.

Path B: Validate to decision-grade

Best when the project scale requires stronger evidence or the data is limited.

- **SVU:** Our Mobile Site-Validation Unit runs your brine on-site under real-world conditions.
- **Digital Twin:** We translate results into a site-specific operating envelope and a bankable project basis.
- **Output:** A decision package that supports internal approvals and offtake-facing credibility.

Let's Build Your Geothermal Lithium Position

Build a contractable lithium supply pathway from geothermal brine - with DBOO execution and flexible deal structures.

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