Revolutionizing Lithium Extraction

Lithium Harvest

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. 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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Offer Highlights

Offering Summary

Issuer	Sustainable Projects Group, Inc. (SPGX)*
Equity	Up to $60 million
Convertible Debt	Up to $60 million
Offering Type	Registered Common Shares
Closing	Q4 2025

Use of Proceeds

- **Alberta facility** - commissioning in Q1 2027 and ramp; nameplate 5,400 tpa LCE by 2029
- **North Dakota I & II** - commissioning in Q4 2027 and ramp; nameplate 1,400 + 1,600 tpa LCE by 2029
- **Working capital & contingency** - support first shipments and ramp to near-steady operations
- Further expansions funded by operating cash, project-level debt, and applicable programs once initial assets are cash-generative

2036 Targets (Illustrative)

Revenue	$1.09bn
EBITDA	$788m (72% margin)
Gross Margin	74%
Installed Capacity	51,741 tpa LCE
Waypoints: EBITDA positive in 2027; cash breakeven in 2028.	

Growth Roadmap

- **Expand capacity at speed** - replicate modular, co-located plants at qualified sites.
- **Invest ahead of the curve** - trade near-term cash flow (2026-2028) to secure supply, customers, and first-mover benefits.
- **Reinvest profits to maximize long-term value** - prioritize capacity adds, project value uplift, and unit-cost reductions.
- **Growth projects to accelerate expansion and revenue** - SVU + digital twin to validate and optimize; debottlenecking and mineral co-recovery to lift output and value.

Why Us

- **Fastest-to-market** - online in 12-18 months vs 14 years for traditional mining.
- **Lowest capital & cost** - up to 73% lower CapEx and up to 48% lower OpEx vs traditional mining; top-quartile cost position.
- **Most sustainable** - carbon-neutral process design, 81% lower freshwater use, and up to 99% smaller land footprint.
- **Unique DBOO model** - we design, build, own, and operate facilities with partner scenarios that peers do not offer.
- **IP-protected, end-to-end** - patented, engineered flow sheet across pre-treatment, DLE, and post-treatment.
- **Execution pedigree** - we are water engineers, not mining theorists; 20+ years' experience and 400+ full-scale systems delivered.

Lithium Harvest

**Sustainable Projects Group, Inc. (OTC: SPGX), d/b/a Lithium Harvest. Intends to seek NYSE listing under proposed ticker "LIHV" (approval pending).*

Company introduction

Lithium Harvest

Sustainable Lithium Extraction

What if the cleanest lithium didn't come from a distant, high-cost mine?

At Lithium Harvest, we are pioneering sustainable lithium extraction right at the source. Our patented solution turns oilfield wastewater and geothermal brine into battery-grade lithium - faster, cleaner, and more cost-effectively than traditional mining - supplying the rapidly growing EV and battery markets.

- Fastest-to-market: Online in 12-18 months vs an average of 14 years for traditional mines.
- The world's most sustainable lithium: Carbon-neutral, no pits, no ponds - waste to value.
- Lowest costs: Up to 73% lower CapEx and 48% lower OpEx.

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

Metric	Detail
Ticker	Sustainable Projects Group, Inc. (OTC: SPGX), d/b/a Lithium Harvest. Intends to seek NYSE listing under proposed ticker "LIHV" (approval pending).
Founded	2020 by Sune Mathiesen (CEO) & Paw Juul (CTO)
Headquarters	Houston, TX, USA
Technology Center	Aalborg, Denmark
Employees	14 core engineers & commercial staff
Shares O/S	306M
Patented Process	Adsorption-driven Direct Lithium Extraction (DLE) integrated with proprietary water treatment
All-In-Cost	OpEx: $3,647/t; CapEx: $17,100/t (OpEx up to 48% lower and CapEx up to 73% lower vs current global averages)
Planned Capacity	1,100t LCE/yr first lithium production (2027) - 51,800t LCE/yr at full rollout

Our Story

Solving a Decade-Old Waste Problem - And Scaling to Revenue Inside Five Years

Lithium Harvest began as a field insight in 2012, when founders Sune Mathiesen and Paw Juul were running a produced-water treatment pilot for a major oil and gas company. Produced water - usually disposed as a waste stream of oil, solids, salts, and chemicals - revealed an overlooked resource: valuable minerals, including lithium, ready to be recovered. That discovery sparked a decade of R&D and laid the groundwork for a breakthrough in sustainable lithium extraction.

By 2020, the duo formalized the venture and channeled two decades of industrial-water experience (400+ plants delivered) into a patented lithium extraction platform. In 2023, Lithium Harvest completed a reverse merger with Sustainable Projects Group, Inc. (OTC: SPGX), becoming a wholly owned operating subsidiary and the group's technology center. The same year, the core patent family was granted, and public listing on the OTC market provided both IP protection and access to capital markets.

With its core technologies validated, Lithium Harvest is now transitioning from concept to its first 8,338t LCE/yr (at full scale) commercial units, scheduled to start up in 2027 - the catalyst that will convert the company from a pre-revenue story to a cash-generating producer.

Year	Milestone	Investor Relevance
2012	Field pilot identifies recoverable lithium in produced water	Waste-to-value insight grounded in real operations
2018	Initial R&D	Bench-scale R&D and techno-economic model for a viable business case, not just green
2020	Lithium Harvest incorporated	Transfers 20 yrs water treatment know-how into a focused cleantech venture
2022	R&D completed and patent application filed	Validates commercial viability and locks the IP gateway before scale-up
2023	Reverse merger with Sustainable Projects Group → public listing OTC: SPGX	Provides capital markets access
2024	Core patent family granted	IP moat ahead of scale-up
2025	Uplist to a major U.S. exchange	Elevates corporate profile and liquidity, strengthens governance credibility
2025-2030	Commercialization stage	8,338 tpa LCE at nameplate in 2029 across three sites - ~90% boost vs today's NA supply

Experienced Management Team

Sune Mathiesen, Chairman & CEO

- Former CEO, President & Director of Nasdaq-listed LiqTech International
- 20+ years of board and executive leadership in water technology and cleantech
- Co-developed multiple proprietary water treatment technologies and commercialized over 400 industrial systems
- Proven experience in capital raising, corporate scale-up, and strategic growth

Thomas Lund Hansen, CFO

- Former Strategy Director at Grundfos; extensive mining and industrial background
- Held key finance and management roles at FL Smidth, Rio Tinto, BHP Billiton, and Bryanston Resources UK
- 25+ years in mining project development, corporate finance, and strategic operations
- Expert in project funding, financial planning, and operational execution

Paw Juul, CTO & Director

- Former CEO of LiqTech Water (subsidiary of LiqTech International)
- Co-founder of Provital, with deep expertise in water treatment innovation and development
- 20+ years developing scalable industrial water solutions with over 400 large-scale industrial systems installed worldwide
- Leads R&D and technology deployment for our patented direct lithium extraction process

Execution Pedigree: Why This Team Delivers

- 400+ plants built - founders designed, engineered, and commissioned large-scale water treatment systems on 5 continents, on budget and to spec.
- Proven automation - our proprietary, fully automated control algorithm, deployed across 400+ industrial systems, runs the modular lithium units for safe, consistent uptime from day one.
- Seasoned leadership - 20+ years of C-suite experience in public and private companies, including two Nasdaq CEO tenures and multiple growth-stage scale-ups.
- Heavy-asset finance - leaders who have managed multi-million-dollar mining and process portfolios, aligning with lender requirements and disciplined capital allocation.

Result: the exact mix of process engineering, capital discipline, and public-market governance to scale our first 8,300 t LCE facilities and the multi-plant pipeline.

+20 Years
Executive management experience

+20 Years
Water treatment experience

+400
Successful water treatment systems installed

The energy transition problem

Lithium Harvest

Lithium Supply Chains Are Failing the Energy Transition

The global lithium market is broken - too slow, too centralized, and not ready for what is coming.

Mining is dangerously concentrated:

- 77% of global lithium is mined in just three countries: Australia, Chile, and China.

Refining is even worse:

- China controls 70% of global lithium refining. And 95% is concentrated in three countries (Argentina, Chile, and China).
- Europe and North America together? Just 3.4% of mining and 2% of refining.

Production is stuck in the past:

- 66% of lithium still comes from hard rock mining, mainly in Australia
- Brines make up 34%, but only 11% of global lithium is recovered through DLE.
- We cannot scale the energy transition on 5-17-year mine developments.
- Traditional mining methods won't solve the coming shortage. It's time to think smarter, not just dig deeper.

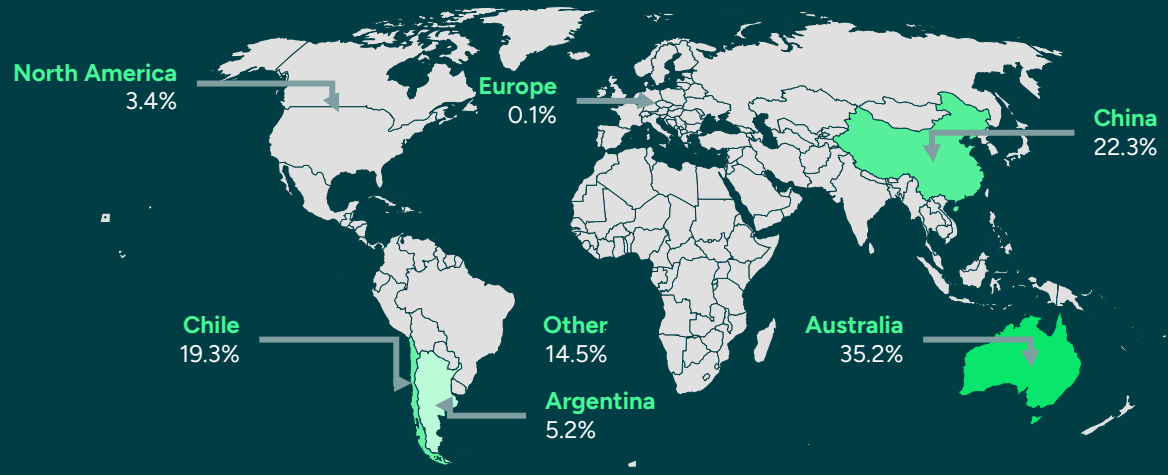
We need faster, more scalable sources:

- Oilfield and geothermal brines are underutilized, together projected to deliver just ~108,000 mt by 2035.
- That is only 31% of what continental brines alone are expected to supply.

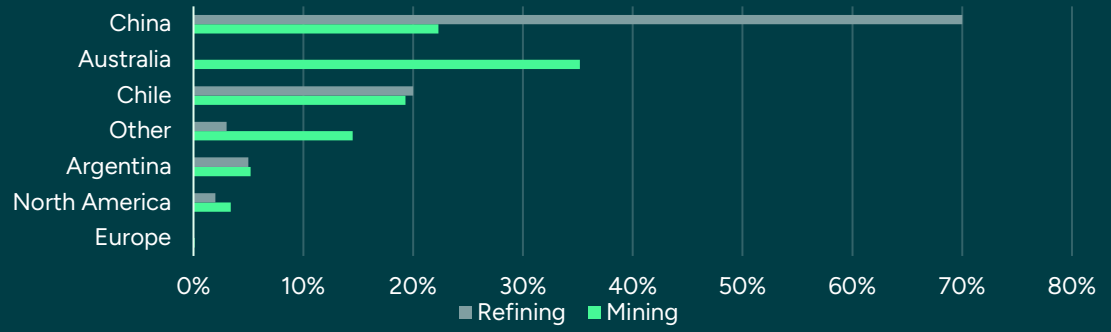
Traditional lithium supply is too slow, too centralized, and too inflexible to meet global demand. We need diversified, secondary sources - faster, localized, and more sustainable.

Lithium Harvest

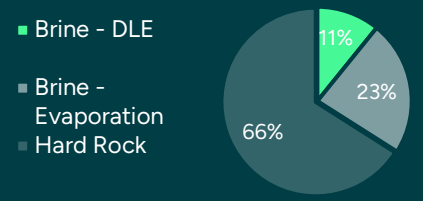
Lithium Production Concentration



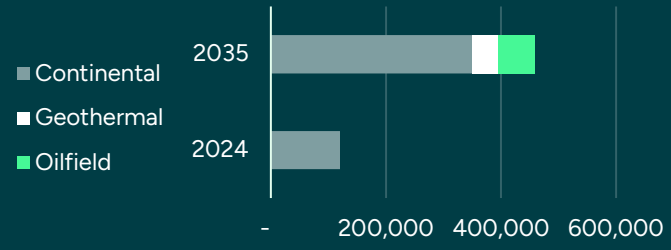
Global Lithium Mining & Refining Share



Lithium Sources



Lithium Supply From DLE



Source: Benchmark Mineral Intelligence and IEA

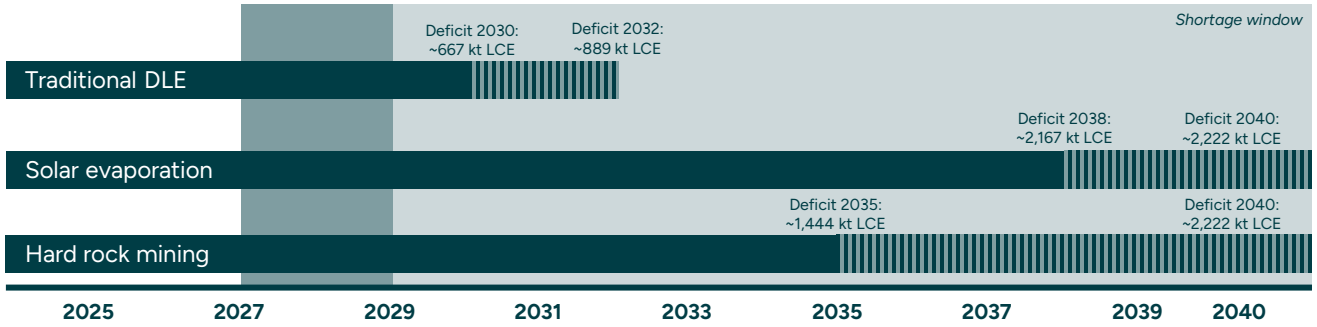
Bottlenecks of Traditional Lithium Mining

Traditional mining is too slow, costly, and fragile - creating a bottleneck we can't afford.

A Slow, Capital-Heavy, Fragile Path That Still Supplies 89% of Lithium Today

Bottleneck	Why it matters
Economic	Greenfield projects typically require US$0.5-1.5 bn before revenue; slow payback, with 11-13 projects delayed/canceled in current conditions.
Time-to-market	Discovery to first product often exceeds a decade: Evaporation 13-15 yrs, Hard rock 10-17 yrs, Conventional DLE 5-7 yrs.
Pipeline shortfall	Even after a near-term surplus, the current pipeline covers ~84% of 2029 needs → tighter 2027-2029 balances.
Environmental	Water stress: ~50% of capacity in water-stressed basins; evaporation up to 118,877-gal freshwater per t LCE. Land: ~39,352 ft²/t (evaporation) vs 3,605 ft²/t (hard rock). CO_2: ~3.1 t/t (evaporation) vs ~20.4 t/t (hard rock).
Supply concentration	Top 3 countries control ~77% mining and ~95% refining; ~70% of refining in China; Europe ~0%, North America ~2% → policy shocks = volatility.
Regulatory & social	Tightening ESG/offtake criteria and community scrutiny extend timelines and raise costs; permitting drag is now a first-order schedule driver.
Operational/technical	Low recovery, slow cycles, inflexible operations. Evaporation 20-50% & 13-24 months; hard rock 40-70% & 3-6 months.

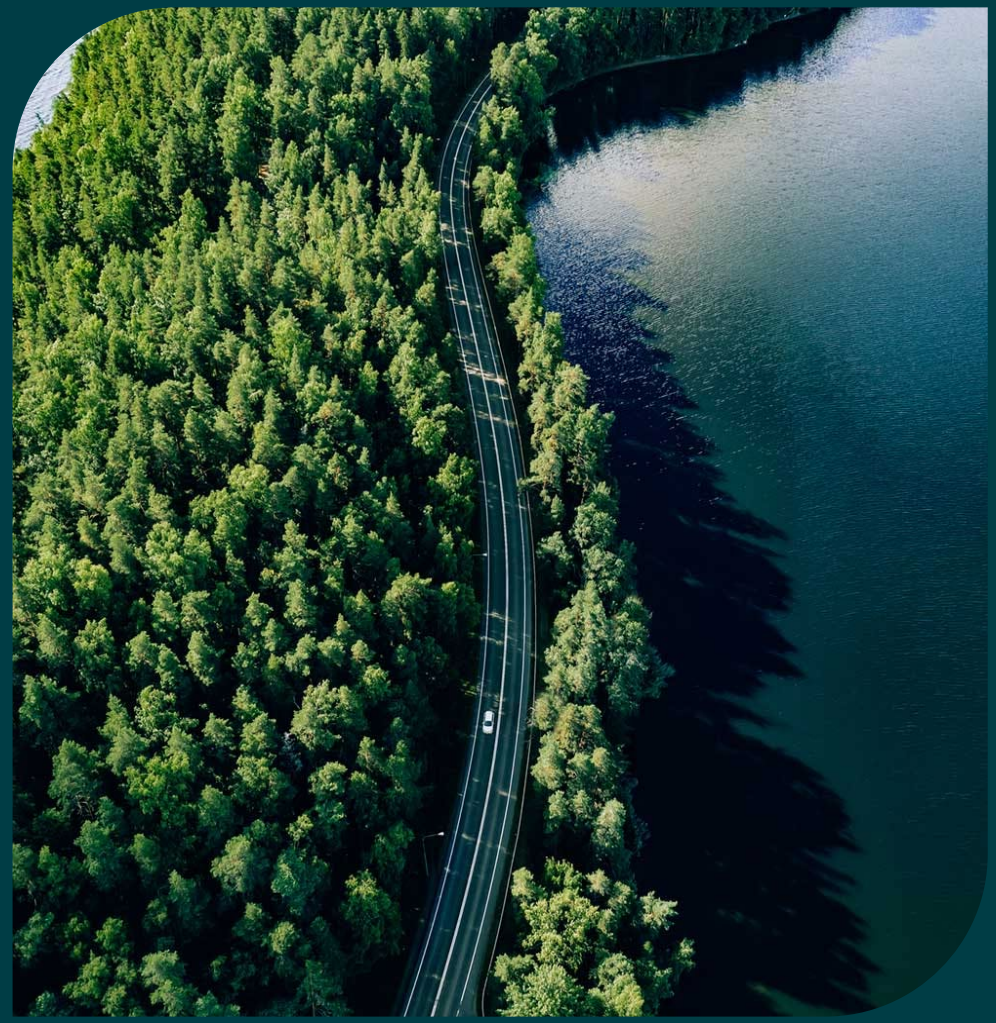
And It Misses the Demand Window



Fixing the problem

Lithium Harvest

We are turning wastewater into high-value minerals



Our Solution

Turn wastewater into high-value minerals at industrial speed.

- Local lithium, fast - We extract lithium from secondary/unconventional brines (oilfield produced water, geothermal) where flows and infrastructure already exist.
- Integrated process - Modular DLE + proprietary water treatment, with on-site extraction and refining to deliver battery-grade lithium carbonate quickly.
- DBOO delivery - We design, build, own, and operate co-located plants at partner sites (midstream hubs, oilfields, geothermal). Partners supply the brine; we run the facility and share value via revenue-share or royalties.
- Replicable scale - Growth by replication of standard units, not by waiting for megaprojects.

Why us

- Patented platform - IP-protected adsorption-based DLE integrated with advanced water treatment, tailored to each brine.
- Execution pedigree - 20+ years in industrial water, separation, and controls; 400+ full-scale systems delivered.
- Commercial building blocks - Unit operations proven in adjacent industries - scale-up is engineering, not basic science.
- Built for low-grade brines - Engineered to be profitable at lower lithium concentrations, reinforced by technology partnerships and validations.

We convert a liability stream into local, low-cost, low-footprint lithium - bridging part of the demand-supply gap and compounding value one replicated module at a time.

Why we win.

- Speed: Online in 12-18 months (up to 17× faster than greenfield mining).
- Cost-Efficiency: Up to 73% lower CapEx and 48% lower OpEx vs. conventional production.
- Yield & throughput: Hours-scale production cycles (up to 8,766× faster than evaporation) with up to 375% higher lithium yield - a direct boost to IRR and payback.
- Sustainability: Carbon-neutral process design (vs. up to 20.4t CO_2/t LCE for hard rock), 81% lower freshwater use, up to 99% smaller land footprint.
- Co-benefits: Treated water can be reused or safely disposed - turning a cost center into new income for oil producers and creating dual revenue (power + minerals) for geothermal partners.
- Flexibility: Ability to produce from different feedstocks (oilfield water, geothermal brine, etc.) due to our adaptable process design. This broadens the reachable resource base beyond what many competitors can process.

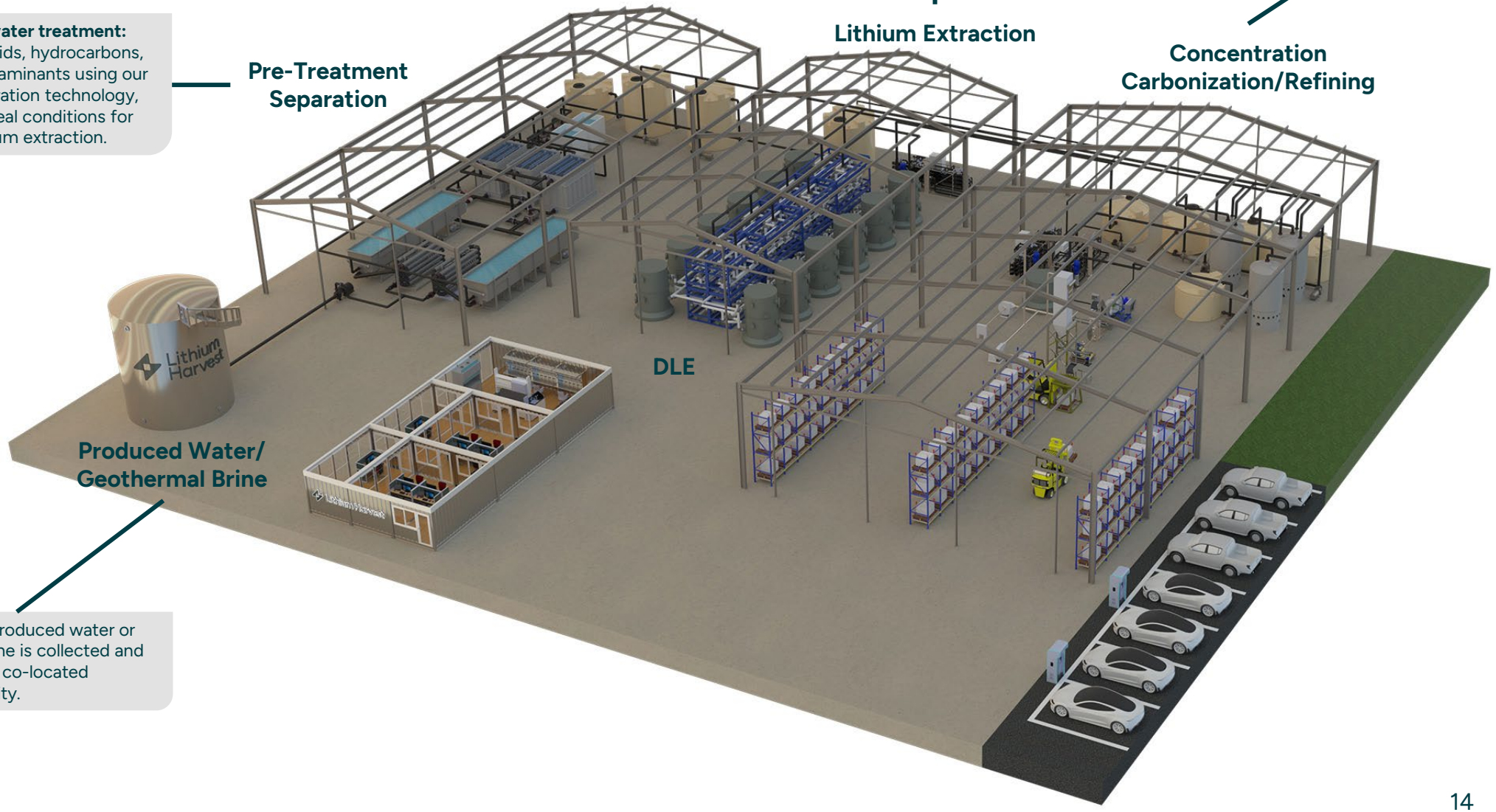
Our Process

1. Collection: Produced water or geothermal brine is collected and directed to our co-located treatment facility.

2. Advanced water treatment: We remove solids, hydrocarbons, and other contaminants using our proprietary filtration technology, creating the ideal conditions for high-yield lithium extraction.

3. Lithium extraction: Lithium is efficiently extracted by DLE without using any chemicals.

4. Lithium refining: Lithium is refined into battery-grade lithium carbonate.



Lowest Cost. Lowest Impact. Fastest to Market.

	Lithium Harvest Solution	**Traditional DLE**	**Solar Evaporation Brine Extraction**	**Hard Rock Mining**
Lithium feedstock	Produced water/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 mt of LCE	Neutral **Up to 100% lower (net-zero vs 20.4 t)**	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

CapEx Benchmark

CapEx Intensity vs DLE Peers

Positioning:

- Bottom-decile in the set (~5th percentile) at $17.1k/t, i.e., among the lowest CapEx/t observed in the set.
- Peer range $14k–$76.6k; median $38.9k, mean $42.3k; capacity-weighted avg $37.7k.

Top-tier unit CapEx: Lithium Harvest's $17.1k/t is ~56% below the peer median and ~55% below the capacity-weighted average in this benchmark.

Resilience to scope drift: The $21.8k/t gap vs the median provides material headroom for scope additions while preserving a Q1 position, assuming like-for-like scope.

Why this matters: At $17.1k/t, Lithium Harvest is in the lowest-cost decile with material headroom versus both unweighted and capacity-weighted peer averages. This positioning can absorb scope growth, inflation, or contingency and remain near Q1, preserving a clear capital-efficiency edge in this disclosed DLE set.

Company	Planned mt LCE Capacity	CapEx	CapEx/ mt of LCE	Company Origin	Operations
Tibet Summit Resources	150,000	$2,100,000,000	$14,000	China	Argentina
Lithium Harvest			$17,100	Denmark	North America
Zijin Mining Group Company Limited	20,000	$370,551,000	$18,528	China	Argentina
CleanTech Lithium	20,000	$450,000,000	$22,500	UK	Bolivia
SIMCO LITHIUM	20,000	$546,000,000	$27,300	Chile	Chile
EnergyX	Not disclosed	Not disclosed	$28,500	US	Chile
Pure Energy Minerals	10,300	$297,000,000	$28,835	Canada	US
Grounded lithium	11,000	$335,000,000	$30,455	Canada	Canada
Eramet	24,000	$735,000,000	$30,625	France	Argentina
Power Minerals Limited	7,061	$216,550,00	$30,668	Australia	Argentina
Alpha Lithium (Tecpetrol)	25,000	$777,000,000	$31,080	Canada	Argentina
Anson Resources	13,074	$495,000,000	$37,661	Australia	US
Exxon Mobil	50,000	$2,000,000,000	$40,000	US	US
Rio Tinto	60,000	$2,500,000,000	$41,667	UK	Argentina
EMP Metals	12,175	$571,000,000	$46,899	Canada	Canada
Arizona Lithium	6,000	$290,000,000	$48,333	Australia	Canada
Lake Resources	25,000	$1,380,000,000	$55,200	Australia	Argentina
Vulcan Energy	24,000	$1,390,000,000	$57,917	Australia	Germany
Lithium Bank	34,000	$2,160,000,000	$63,529	Canada	Canada
Standard Lithium SWA	22,400	$1,450,000,000	$64,732	Canada	US
Standard Lithium Phase 1A	5,400	$365,000,000	$67,593	Canada	US
LibertyStream Infrastructure Partners	23,031	$1,549,000,000	$67,257	Canada	US
E3 Lithium	32,250	$2,470,000,000	$76,589	Canada	Canada

Disclaimer: The file does not standardize CapEx scope, estimate class, and base year. Not all lithium projects are included; conclusions apply to this dataset. Rankings may shift after scope and inflation normalization. Outcomes may differ due to scope changes, inflation, permitting, and execution risk.

OpEx Benchmark

OpEx Position on Peers' Lithium Cost Curve

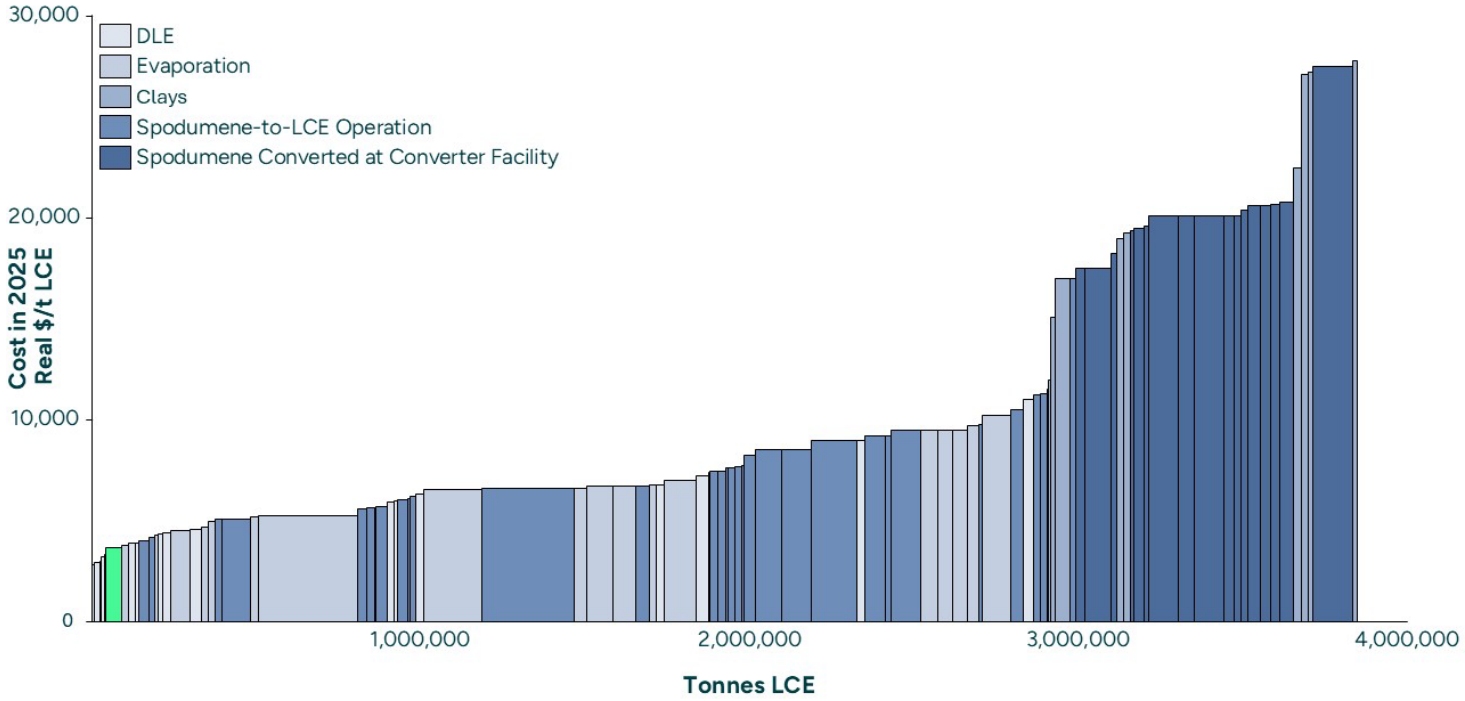
On a volume-weighted, plant-gate LCE cost curve built from the provided dataset (95 projects; 3.85 Mtpa), Lithium Harvest's cash operating cost is $3,647/t LCE.

Positioning: Lithium Harvest at ~2nd percentile globally.

Why it matters

- Bottom-decile cost position supports durable margins across price cycles.
- EBITDA-positive even if market prices fall by ~62% from today's levels (~$9,500/t per Oct 2025 benchmark).
- Improves contractability with tier-one buyers and reduces reliance on high prices to meet return thresholds.

OpEx Cost Curve



Vs market medians	
Vs P50:	–$3,796/t
Vs P75:	–$7,653/t
Vs P90:	–$16,453/t
Vs unweighted median	–$4,040/t

Vs technology medians (weighted P50):	
Traditional DLE	–$941/t
Hard Rock Mining	–$2,903/t
Solar Evaporation	–$5,353/t
Clay	–$15,603/t

Where Lithium Harvest sits on the curve	
Weighted P10 threshold:	$5,092/t
Weighted P25 threshold:	$6,080/t

Lithium Harvest at $3,647/t is below the P10 band and ranks at ~1.7th percentile by volume, confirming a bottom-decile operating cost position.

Disclaimer: Illustrative and incomplete; not all projects shown. OpEx comes from mixed sources with differing definitions (cash OpEx vs AISC) and bases (plant-gate vs delivered), and some omit sustaining costs. Many "low-cost" figures are 3+ years old and pre-date input, energy, and labor inflation. Analysts indicate Western projects often need ~$20/kg to be incentivized, so some headline costs may be understated. Data as of Oct 2025.

What Sets Us Apart

- **Our moat is real & IP-protected:** We own an end-to-end, IP-protected process for extracting lithium from oilfield wastewater, including pre-treatment, DLE, and post-treatment, all tuned for surface-level feedstock.
- **We're water engineers, not mining theorists:** 20+ years and 400+ full-scale water systems give us the practical know-how to condition tough brines, control fouling, and maintain stable, high-yield operations.
- **Designed, built, and operated in-house:** We do not outsource to engineering firms that use generic templates and have conflicting incentives. We design, engineer, build, and run the plants ourselves, keeping CapEx tight, uptime high, and learning loops on-site - not lost in handovers.
- **Integration is our superpower:** We optimize the entire process - from pre-treatment to extraction and refining - to ensure that recovery, quality, and cost all move in the right direction together. Many DLE players optimize the "DLE box" and underestimate pre- and post-treatment; we do not.

Why is this hard to copy

- **IP barrier** - Patent-protected process for extracting and refining lithium from oilfield wastewater
- **Tacit know-how** - Brine conditioning, resin chemistry, and fouling management cannot be fast-tracked
- **Systems integration** - A tuned, interoperable process train takes years to develop, not months
- **DBOO operating model** - On-site, integrated delivery removes layers of third-party risk and cost
- **Offtake stickiness** - Battery-grade qualification creates high switching costs; once qualified, producers rarely change suppliers

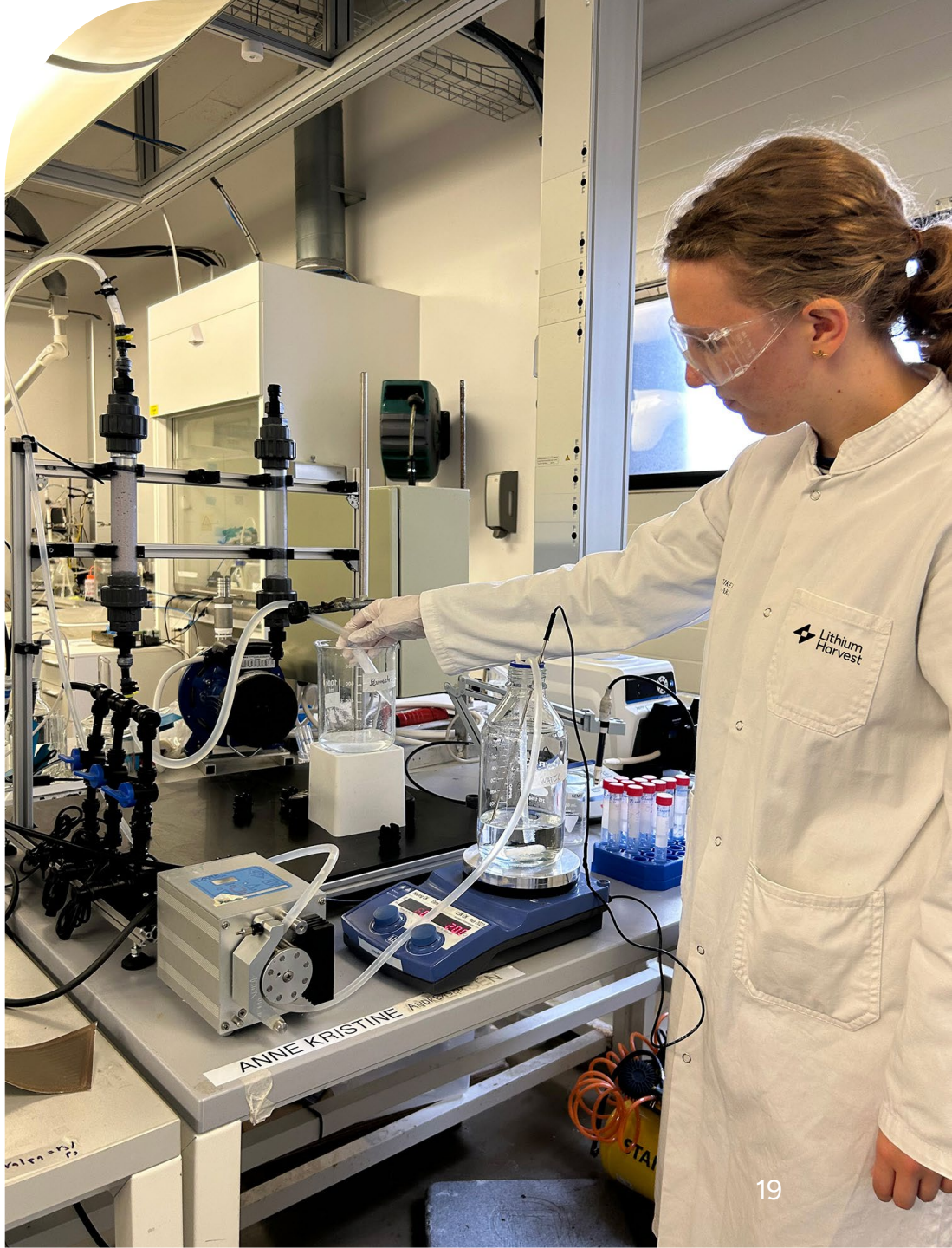
A defensible, IP-backed, fully integrated DBOO platform purpose-built for surface brines - faster to build, lower CapEx/OpEx, and structurally harder to replicate - driving superior unit economics and durable advantage.

Continuous Innovation

Faster learning, lower risk, better unit economics.

- **In-house adsorption R&D:** Verify vendor claims on project-specific brines; material-agnostic selection improves recovery and cost. Lab and packed-column data feed adsorption models and plant simulations to size modules, set cycle times, and predict throughput.
- **Mobile Site-Validation Unit (SVU):** Site-specific validation to convert prospects into bankable DBOO projects with performance guarantees. SVU outputs high-fidelity operating data that calibrates the digital twin.
- **Calibrated digital twin:** A calibrated digital twin transforms a brine sample analysis into an engineered flowsheet and defendable unit economics in hours, shrinking piloting, improving first-time-right performance, and derisking FID.
- **Optionality for margin:** Add co-recovery only where it pencils (start with magnesium). Sequence products: carbonate first for time-to-cash and cost, hydroxide when customers pull and margins justify.
- **CapEx-light adjacency:** Support battery recyclers with lithium recovery from aqueous streams while meeting inorganic fluoride limits and closing water loops.

Like Formula One, we simulate first and validate on track: the digital twin is the simulator; the SVU is the wind tunnel and shakedown run. Result: faster iterations, fewer surprises, better day-one performance. Between races, they add new parts to go faster; we continuously innovate to lift project value.



Business outlook

Lithium Harvest

Planned Projects

Alberta Facility

This project targets lithium extraction from geothermal water integrated with a new-build geothermal heating plant. It is being developed under a DBOO structure with royalties for feedstock in partnership with two geothermal operators.

Target first production is Q1 2027.

Location	Alberta, Canada	**Total CapEx**	$64.3M
***Nominal production**	5,376 (tpa LCE)	***Revenue**	$88.8M
Feed	Geothermal brine	***Gross margin**	69%
***Volume**	226,000 bbl./d	***Payback period**	1.05 years
Concentration	98 ppm		

Sustainability metrics

At full run-rate, Alberta avoids ~109.7 kt CO_2 per year - roughly ~23,800 cars off the road. It also avoids ~211 million ft² of land disturbance (~3,667 football fields) and ~517 million gallons of freshwater (~18,117 pools) annually.

ND I Facility

The project recovers lithium from produced water under a DBOO model with royalties for feedstock.
The project is being developed with a US midstream energy provider.

Target first production is Q4 2027.

Location	North Dakota, US	**Total CapEx**	$25.9M
***Nominal production**	1,374 (tpa LCE)	***Revenue**	$22.7M
Feed	Produced water	***Gross margin**	60%
***Volume**	48,000 bbl./d	***Payback period**	1.92 years
Concentration	118 ppm		

Sustainability metrics

ND I avoids ~28 kt CO_2 per year - equivalent to ~6,100 cars off the road. It also avoids ~54 million ft² of land disturbance (~937 football fields) and ~132.1 million gallons of freshwater (~4,630 pools) each year.

ND II Facility

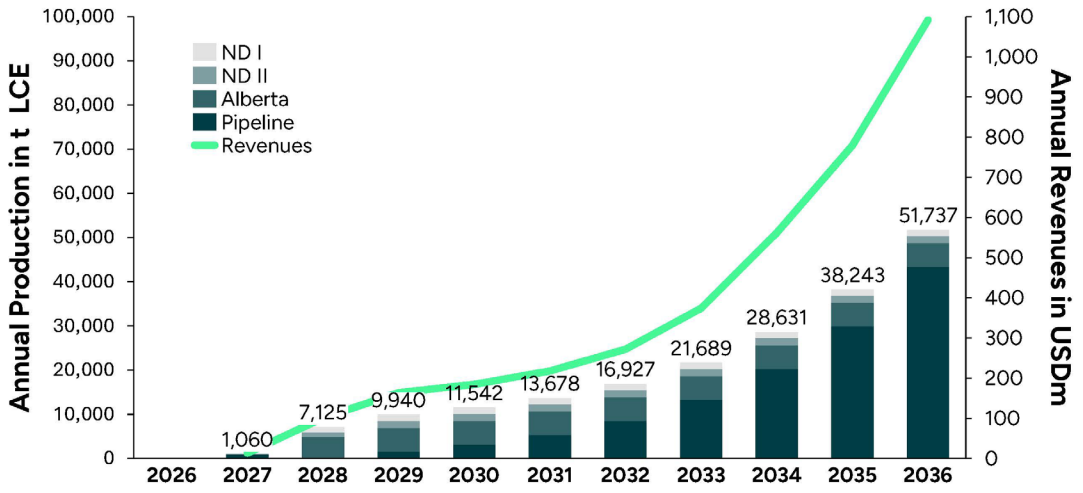
Our second North Dakota project mirrors the DBOO model, extracting lithium from produced water with a royalty-based feedstock structure. It was likewise originated with a US midstream energy provider.

Target first production is Q4 2027.

Location	North Dakota, US	**Total CapEx**	$32.8M
***Nominal production**	1,587 (tpa LCE)	***Revenue**	$26.2M
Feed	Produced water	***Gross margin**	77%
***Volume**	60,000 bbl./d	***Payback period**	1.62 years
Concentration	109 ppm		

Sustainability metrics

ND II avoids ~32.4 kt CO_2 per year, equivalent to about 7,000 cars off the road. It also avoids ~62.4 million ft² of land disturbance (~1,083 football fields) and ~152.6 million gallons of freshwater (~5,348 pools) annually.

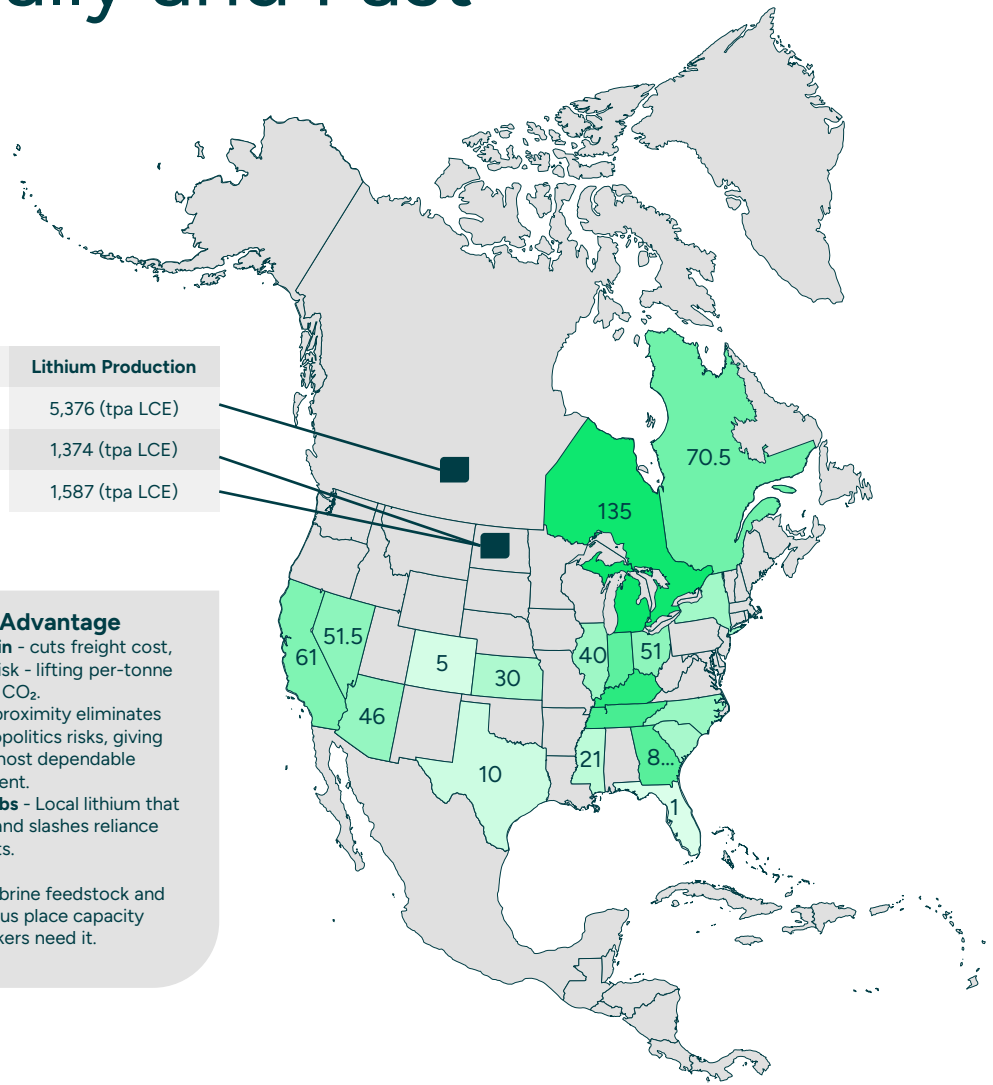


Lithium Harvest

**Numbers based on first year of full production*

Supplying the NA Battery Belt - Locally and Fast

Facility	Lithium Production
Alberta	5,376 (tpa LCE)
ND Facility I	1,374 (tpa LCE)
ND Facility II	1,587 (tpa LCE)



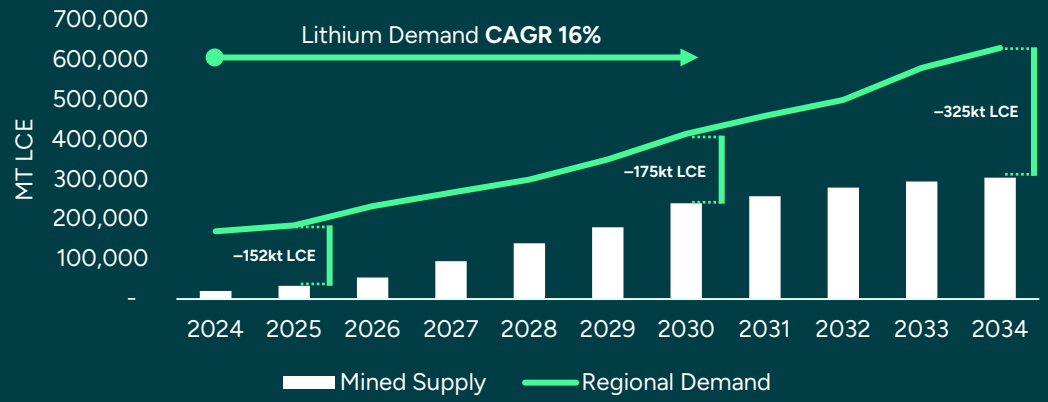
Proximity Advantage

Shortest supply chain - cuts freight cost, CO_2, and lead-time risk - lifting per-tonne margin while cutting CO_2.
Built-in resilience - proximity eliminates port, border, and geopolitics risks, giving battery makers the most dependable lithium on the continent.
Energy security & jobs - Local lithium that creates skilled jobs, and slashes reliance on adversarial imports.

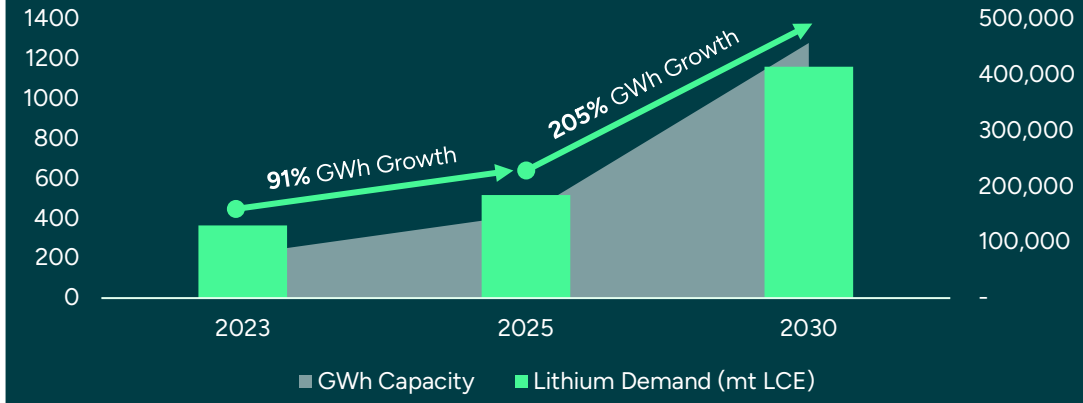
Our readily available brine feedstock and modular facilities let us place capacity exactly where off-takers need it.

Numbers referred to North America gigafactories in GWh in 2030

NA Lithium Supply & Demand



Lithium Demand Outruns NA Battery Build-Out



7x Supply Growth Still Can't Close the Gap

Year	NA Battery Capacity	NA Li Supply	NA Li Demand	Regional Gap	Lithium Harvest Boost	Gap After Lithium Harvest
2025	~420GWh	~33,000 mt	~185,000 mt	~-152,000 mt	-	~-152,000 mt
2030	~1,280GWh	~240,000 mt	~415,000 mt	~-175,000 mt	+11,542 mt (full LH pipeline in 2030)	~-163,458 mt

Source: Benchmark Mineral Intelligence and Lithium Harvest Internal Analysis

Growth Strategy

Capital-light. Speed-focused. Market-first.

Our playbook

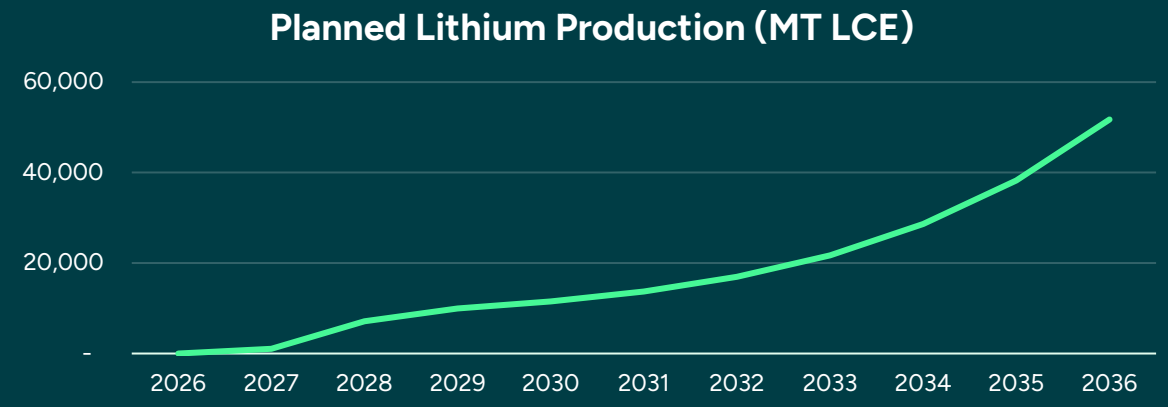
- **Replicate fast with DBOO** - Deploy low-cost, modular units at pace, secure long-term offtake to de-risk revenue, and recycle early cash into new sites.
- **Invest ahead of the curve** - Trade some near-term cash flow to secure supply, customers, and first-mover advantage in 2026-2028.
- **Reinvest to compound** - Early EBITDA funds additional units and R&D, lifting capacity, recovery, purity, and offtake quality.
- **Lock preferred-supplier status** - Bankable scale, reliable specs, and low footprint align with buyer ESG and policy incentives.

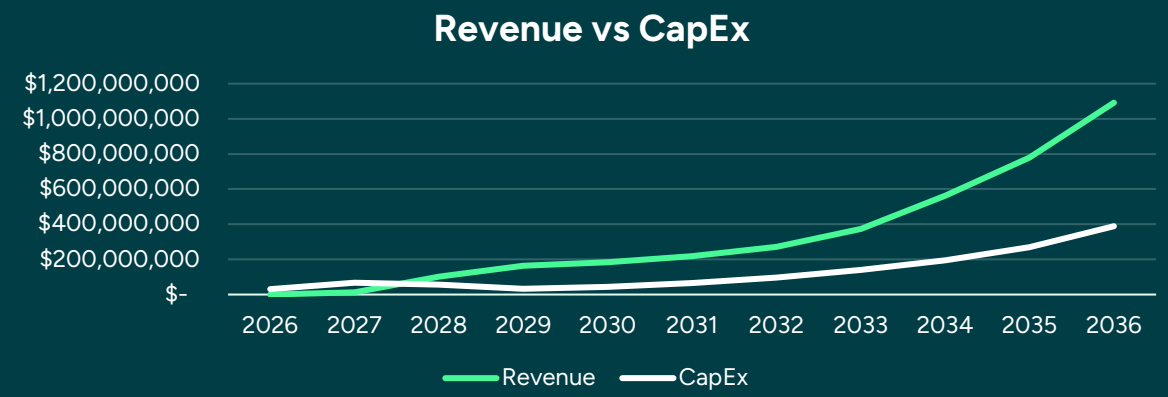
Capital efficiency at scale

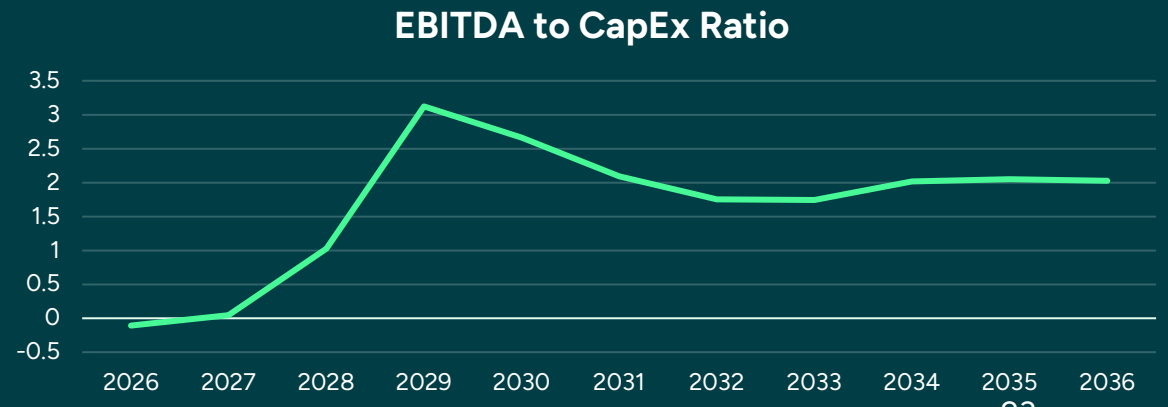
- **Build phase (2026–2030):** CapEx $231.0m, EBITDA $276.1m, EBITDA/CapEx ~1.20x.
- **Scale phase (2031–2036):** CapEx $1,155.6m, EBITDA $2,284.5m, EBITDA/CapEx ~1.98x.
- **Total (2026–2036):** CapEx $1,386.6m, EBITDA $2,560.6m, EBITDA/CapEx ~1.85x.

Secure Strategic Position in Global Lithium Market

- With a 2-5-year operational head start, we expect a multi-year advantage due to our speed to market, low CapEx per ton, and sustainability leadership.







Lithium Harvest

Finance Overview

Pre-revenue today. Funded to execute. Clear path to cash flow.

Capital & listing

- Ticker: SPGX (OTC). Target up-list Q4 2025 as LIHV (subject to shareholder approval).
- Capital raised to date: $5.6m (Founders $1.2m + Series A $4.3M at $100M valuation).
- Non-dilutive support: MUDP grant $78,278 (+$552,021 pending).
- Cash on hand (Oct 7, 2025): ~$0.55M. Burn: $95K–$110K/month - sufficient to reach commercial readiness.

Revenue & margin ramp

- First commercial revenue is expected in 2027 upon commissioning the Alberta Facility in Q1 2027.
- Margins expand with scale: Gross margin ~60% → ~74% (2027→2036); EBITDA ~23% → ~72%.

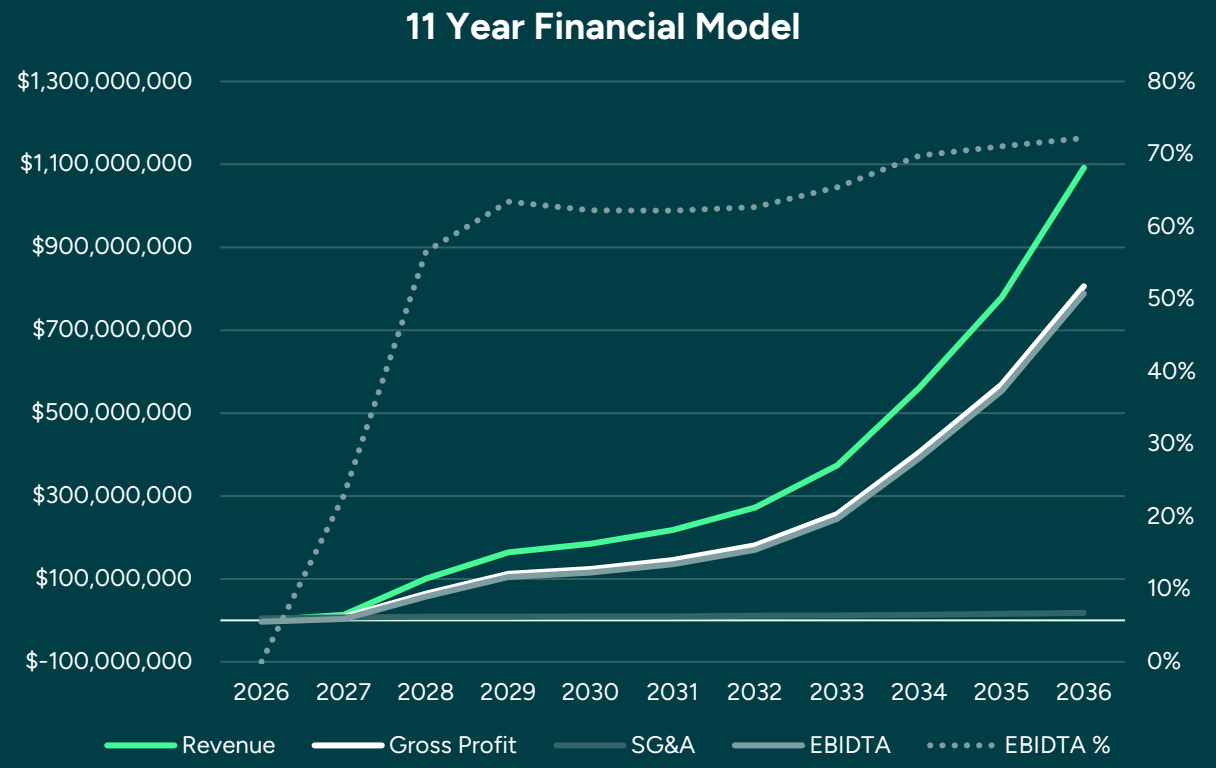
	2027	2028	2030	→2033	→2035
Revenue ramp	$13.5M	$101.0M	$164.2M	$184.7M	$1.092Bn

Cost & capital efficiency

- CapEx intensity: $17,100/t installed - up to ~73% below traditional mining and ~56% below peer-median DLE.
- OpEx: $3,647/t - supports ~60% gross margin on the model's 2027 price path.

Profitability & funding plan

- EBITDA positive in 2027 as Alberta stabilizes. FCF positive 2029 after Alberta + ND I + ND II ramp.
- Current raise funds Alberta, ND I, ND II through commissioning and early ramp, plus working capital and key hires.
- Next expansions financed via operating earnings, project -level debt, and applicable programs; strategic capital considered where it accelerates value on attractive terms.



**Disclaimer: The revenue, gross margin, 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.*

Pricing Assumptions: The model applies a progressive pricing curve aligned with leading analyst consensus rather than a static spot. This forward curve reflects expected demand growth, supply additions, and technology adoption, yielding a realistic revenue outlook anchored to market expectations.

Lithium
market opportunity

Lithium Harvest

No Energy Transition Without Lithium

The energy transition runs on critical minerals. Lithium leads them all.

Irreplaceable in electrification	■ Lithium is the fastest-growing critical mineral and essential to decarbonization, with no scalable alternative to lithium-ion batteries for transport and storage today. ■ Lithium-ion delivers the highest energy density of any proven, scalable battery chemistry. ■ EVs and BESS already absorb ~61% of new lithium demand, and that share keeps rising to 81% in 2030. ■ The IEA ranks lithium as the fastest-growing critical mineral for net-zero pathways; no viable substitute exists at scale.
Supply risk is structural	■ The top three countries control 77% of mining; ~70% of refining sits in one (China). ■ Such concentration is the antithesis of energy security and has triggered unprecedented policy action in the EU, US, Canada, and other countries.
A widening investment gap	■ Meeting forecast demand needs USD 500-600 billion in new mine CapEx by 2040, yet 2024 real investment grew just 2%. ■ Exploration spending plateaued at USD 6.7 billion in 2024; lithium was the only area still growing (30%), underscoring the scarcity of bankable projects.
Supply risk is structural	■ Supply bottlenecks threaten to delay EV roll-outs, inflate clean-power costs, and undermine industrial-policy goals. ■ Diversified, low-impact projects such as Direct Lithium Extraction (DLE) and recovery from alternative brines have become priority targets for both governments and OEMs.

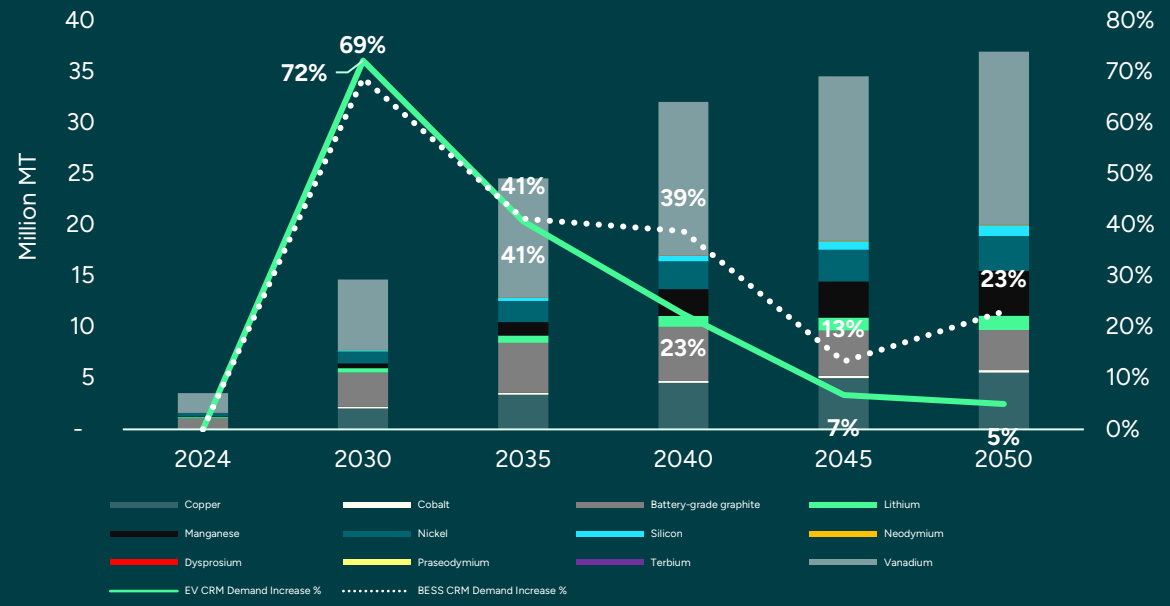
Energy security = mineral security.

- The IEA calls diversification the golden rule of energy stability, yet lithium refining is more centralized today than it was in 2020.
- Over 37 countries (including the EU, US, and Canada) now list lithium as a "strategic" or "critical" mineral in statutes or strategy papers.
- Lithium is the bottleneck for EVs, storage, and clean power - and it remains the weakest link in the energy supply chain.
- Smart capital is urgently needed to scale sustainable, local supply.

Lithium is the foundation of energy security, but its supply chain is neither secure nor sustainable.

Lithium Harvest

CRM Demand for EV & BESS



World	**Countries Designating Lithium as Critical/Strategic**	United States, Canada, European Union, United Kingdom, Australia, Japan, South Korea, India, Chile, Bolivia, Mexico (Several other countries have taken steps recognizing lithium's importance, though not always via formal designations in law).
United States	**Critical Minerals**	Aluminum, Antimony, Barite, Beryllium, Bismuth, Cerium, Cesium, Chromium, Cobalt, Copper, Dysprosium, Erbium, Europium, Fluorspar, Gadolinium, Gallium, Germanium, Graphite, Hafnium, Holmium, Indium, Iridium, Lanthanum, Lead, **Lithium**, Lutetium, Magnesium, Manganese, Neodymium, Nickel, Niobium, Palladium, Platinum, Potash, Praseodymium, Rhenium, Rhodium, Rubidium, Ruthenium, Samarium, Scandium, Silicon, Silver, Tantalum, Terbium, Thulium, Tin, Titanium, Tungsten, Vanadium, Ytterbium, Yttrium, Zinc, Zirconium.
Canada	**Critical Minerals**	Aluminum, Antimony, Bismuth, Cesium, Chromium, Cobalt, Copper, Fluorspar, Gallium, Germanium, Graphite, Helium, High-purity iron ore, Indium, **Lithium**, Magnesium, Manganese, Molybdenum, Nickel, Niobium, Phosphorus, Platinum group metals, Potash, Rare earth elements, Scandium, Silicon metal, Tantalum, Tellurium, Tin, Titanium, Tungsten, Uranium, Vanadium, Zinc.
Europe	**Critical Raw Materials**	Coking Coal, Phosphorus, Antimony, Feldspar, Scandium, Arsenic, Fluorspar, Magnesium, Baryte, Strontium, Beryllium, Tantalum, Hafnium, Niobium, Helium, Phosphate Rock, Vanadium.
	Strategic Raw Materials	Aluminium/Bauxite/alumina, **Lithium**, Light rare earth elements, Silicon metal, Gallium, Manganese, Germanium, Natural Graphite, Bismuth, Titanium metal, Boron, Platinum group metals, Tungsten, Cobalt, Heavy rare earth elements, Copper, Nickel.

Source: IEA - Critical Minerals Dataset 2025, Government of Canada, U.S. Department of Energy, and European Council

The World is Facing a Lithium Shortage

A massive supply gap is looming, and projects cannot keep pace.

Demand is surging:

- Lithium demand rose nearly 30% in 2024, triple the average growth of the 2010s.
- Lithium demand is projected to grow 2-3x by 2030 and 4.7-5.5x by 2040.

A major shortfall is coming in 2029 - or already here:

- By 2029, the world could be 50,000-450,000 mt LCE short - that is a 15% deficit in just five years.
- 2035: Gap widens to 650,000-1.5M mt LCE.
- 2040: Deficit reaches 2.2M mt LCE under high-demand scenarios.

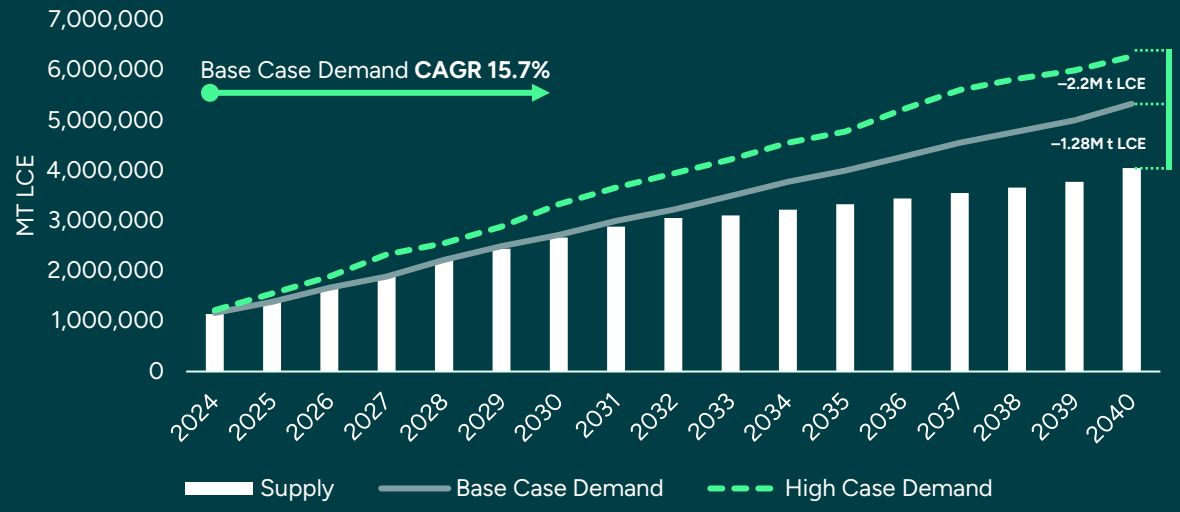
Year	Supply (mt LCE)	High Case Demand (mt LCE)	Supply Gap (mt LCE)	Supply Coverage (mt LCE)
2024	1,145,000	1,145,000	0	100%
2029	2,444,444	2,888,889	-444,445	84.62%
2035	3,333,333	4,777,778	-1,444,445	69.77%

Supply security under pressure and stalling:

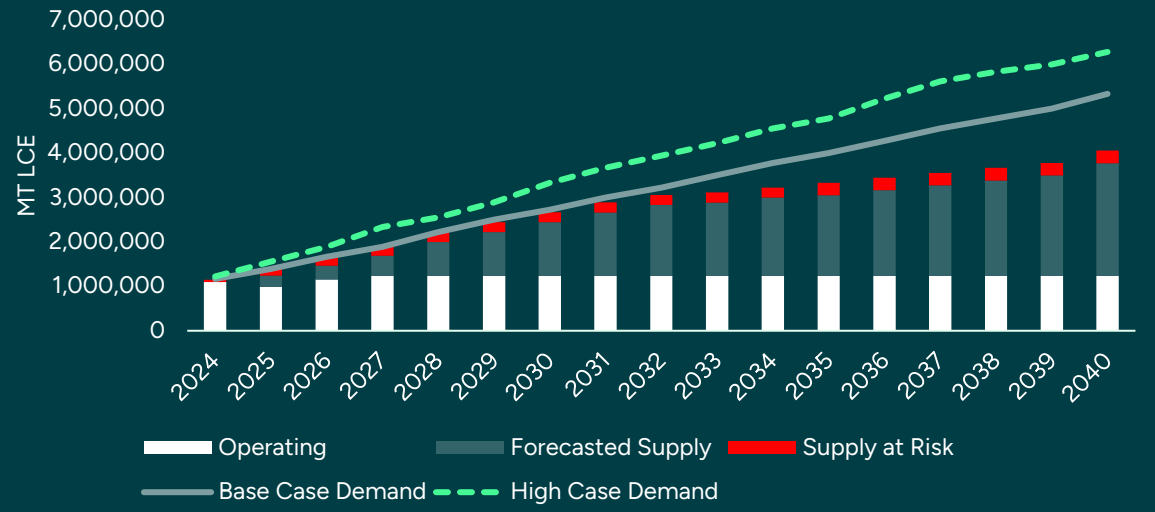
- 11-13 lithium projects are already canceled or delayed due to current market conditions, putting 150,000-282,000 mt LCE at risk.
- Most at-risk projects have high CapEx and mid-to-high OpEx.
- The shortfall could hit earlier than forecast, setting the stage for a new lithium price upcycle.

We don't just need more lithium - we need lithium faster, cheaper, and closer to where it's needed. That means new supply models, not more of the same.

Lithium Supply & Demand Forecast



Projects at Risk



Source: Benchmark Mineral Intelligence and IEA

Lithium Demand Drivers

Lithium sits at the heart of global electrification. Batteries already account for 62% of lithium use; by 2030, that share is projected to jump to 81%.

EV adoption is the leading force

- 17.1M EVs sold in 2024 – set to grow to 40M by 2030 (+233%).
- Q1 2025 EV sales up 35% YoY - momentum is accelerating.
- EV fleet: From 58M in 2024 → 235M by 2030 → Over 500M by 2035 (≈850% growth).
- EVs are set to gain more market share: 22% (2024) → 42% (2030).
- Battery demand overall: 840 GWh (2024) → 2,600 GWh (2030) a 3x jump.

Grid storage is scaling up

- BESS is set to scale fast to support renewables: 205 GWh in 2024 → 520-700 GWh by 2030.
- By 2030, 10% of lithium demand may come from BESS alone.
- The levelized cost of storage is falling rapidly: $0.05/kWh → <$0.02/kWh, unlocking broader utility and behind-the-meter adoption.
- BESS is crucial for balancing and integrating renewable energy sources.

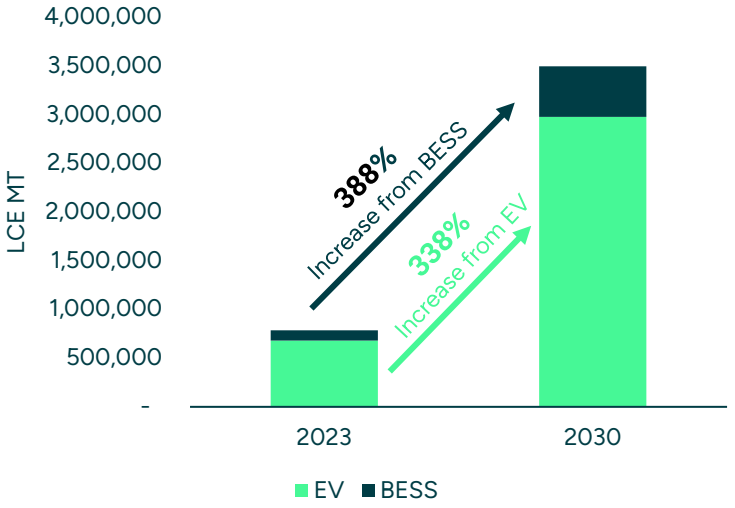
The bigger picture: Electrification everywhere

- Electrification is expanding beyond cars: fleets, industry, homes, and more.
- Critical mineral supply is now a top-tier energy security issue.
- Consumer EV spending up: $560B in 2024 → a market driven by economics, not policy.

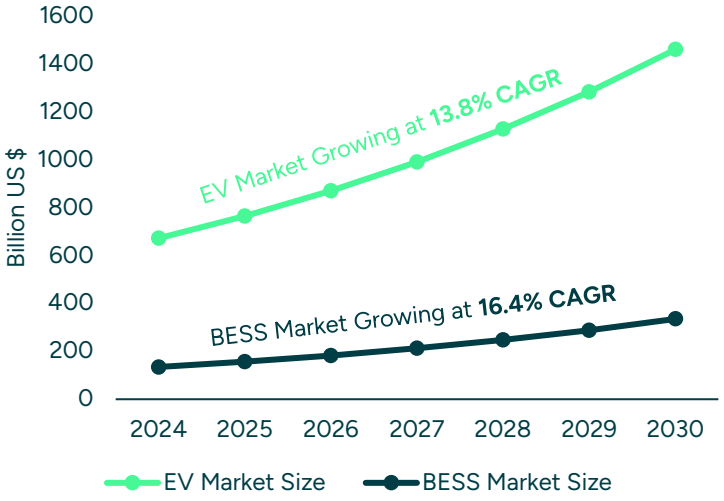
EVs drive lithium demand today, but energy storage and electrification will multiply it.
The world isn't just going electric. It's going lithium.

Lithium Harvest

Lithium Demand from EVs & BESSs



Market Size for EVs & BESSs



Demand Multipliers - EVs

	2024	2030	Growth (%)
EV Sales	17.1M	40M	233%
EVs on the Road	58M	235M	405%
EV Market Share	22%	42%	91%
EV Battery Demand	840 GWh	2,600 GWh	309%
Avg Battery Size	50 kWh	65 kWh	30%

Demand Multipliers - BESS

	2024	2030	Growth (%)
BESS Capacity	205 GWh	520-700 GWh	253%-341%
LCOS	0.05$ /kWh	<0.02$ /kWh	-60%

Source: IEA, McKinsey & Company, Grand View Research, Fortune Business Insights, and Rho Motion

Global Lithium Price Dynamics

Lithium's boom-bust reset: Will today's low prices fuel the next squeeze?

Timeline overview:

Phase	Spot Price High/Low	Core Drivers	Signals
2021-22 "Super Spike"	>USD 86,000/t (Nov 22)	Breakneck EV demand, supply bottlenecks, thin inventories	Windfall margins; 100+ mine & refinery FIDs announced
2023-25 "Reset"	<USD 9,200/t (March 25) → ~USD 11,600/t rebound (Q2-25) (-89% in 27 mo)	Mine & refinery wave in AU/CL/CN; China stockpile + price wars; downstream destocking; policy & macro shocks (COVID-19, war, etc)	Prices below the incentive level for ~40% of the pre-FID pipeline
2025-29 "Fragile Floor"	USD 11-16k/t trading range	11 13 projects delayed/cancelled (150 280 kt LCE at risk); FID slowdown; export controls; high-cost closures; off-take appetite surging	Next deficit window likely 2027-29; Supply under pressure - seeds of the next up cycle
2030s "Structural Tightness"	Analyst consensus >USD 20k/t by 2035	Demand 4.7-5.5x 2024 levels; only ~70% covered by current pipeline	Premium widens for low-cost, ESG-compliant, regionally diversified supply

Strategic takeaways

- Volatility is structural - multi-year build cycles vs. month-scale demand shifts.
- Flexible, low CapEx and OpEx producers win - they survive downturns and reap full cycle upside.
- Regional diversification commands a premium: 95% of refining is concentrated in three countries; local, ESG-driven supply reduces risk.

Near-term "oversupply" hides a looming deficit; backing fast, low-cost, regionally diversified projects pays off today and secures upside in the next potential squeeze.

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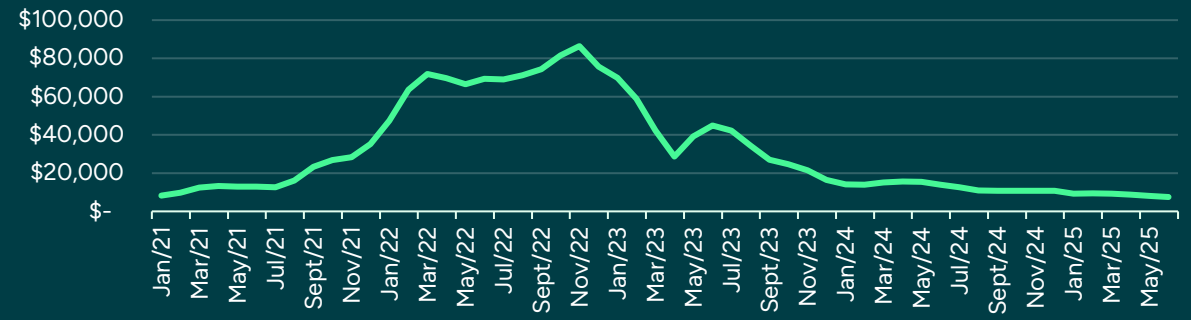
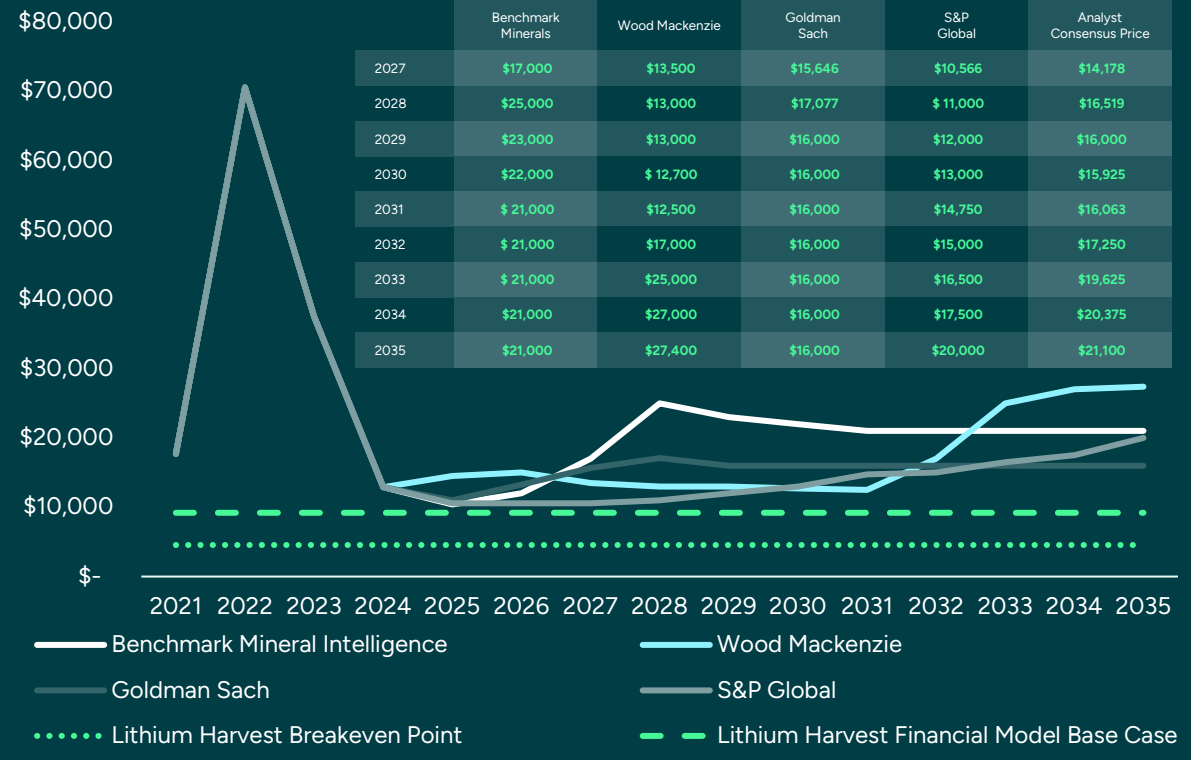
Historical Lithium Carbonate Prices



Forecasted Lithium Carbonate Prices

	Benchmark Minerals	Wood Mackenzie	Goldman Sach	S&P Global	Analyst Consensus Price
2027	$17,000	$13,500	$15,646	$10,566	$14,178
2028	$25,000	$13,000	$17,077	$ 11,000	$16,519
2029	$23,000	$13,000	$16,000	$12,000	$16,000
2030	$22,000	$ 12,700	$16,000	$13,000	$15,925
2031	$ 21,000	$12,500	$16,000	$14,750	$16,063
2032	$ 21,000	$17,000	$16,000	$15,000	$17,250
2033	$ 21,000	$25,000	$16,000	$16,500	$19,625
2034	$21,000	$27,000	$16,000	$17,500	$20,375
2035	$21,000	$27,400	$16,000	$20,000	$21,100



Source: Benchmark Mineral Intelligence, Wood MacKinsey, Goldman Sach, and S&P Global

One of the world's most sustainable lithium

Lithium Harvest

Sustainability Ladder

1. Making Lithium More Sustainable

Compared to traditional mining, we save:

Impact area	Savings per t LCE	Real-word equivalent (per t of LCE)
CO_2 emissions	20.4 t CO_2	4.4 cars off the road for a year
Land footprint	39,291 ft^2	0.68 football fields
Freshwater consumption	96,148 gal	3.37 standard pools

2. Improved Water & Resource Management

- Resource circularity. Wastewater becomes a raw material: produced water feeds lithium recovery; geothermal brine delivers two climate solutions from a single loop (power + critical minerals).
- Accelerated decarbonization. Using oil & gas, as well as geothermal streams, as feedstock enables fast, local, and low-carbon lithium for EVs and BESS - resulting in shorter supply chains and lower embedded emissions.
- Beneficial water repurposing. After treatment, fluids are reinjected to maintain reservoir balance or for beneficial reuse.

3. Making Lithium More Sustainable

EVs already win on climate.

Key Indicator	ICE	EV (Traditional Mining)	EV vs ICE
Lifetime CO_2	54.3 tonne	16.9 tonne	-69%
Battery CO_2	-	4.7 tonne	+4.7 tonne
Breakeven distance vs ICE	-	11,335 mi/18,243 km	-
Global CO_2 EVs can avoid (2035)	-	2.6 Gt	-

How Lithium Harvest turbo-charges those gains.

Key Indicator	EV (Traditional Mining)	EV (Lithium Harvest)	Impact
Battery CO_2	4.7 tonne	2.0 tonne	-57%
Lifetime EV CO_2	16.9 tonne	14.2 tonne	-16% (-74% vs ICE)
GHG breakeven vs ICE	11,335 mi/18,243 km	1,982 mi/3,190 km	5.72× sooner - 83% fewer km
Water saved per car	-	17.6 m^3	>90 water recycling/reuse
Land saved per car	-	141 m2	No new pits or ponds

4. Fastest Way to Cut Emissions

Reality check	What the data show (2024)	Implication
Emissions keep rising	Global GHG emissions hit a new record 53.2 Gt CO_2-eq in 2024, up 1.3% year-on-year. Fossil CO_2 still makes up 74.5% of the total.	Climate-asset risk is accelerating; solutions that bend this curve gain premium valuations.
Main drivers	Power generation remains the single-largest source, ~29% of global GHGs. Transport is the No. 2 sector, responsible for ~16% of emissions.	Decarbonizing these two sectors unlocks the fastest, deepest abatement potential.
Why fossil CO_2 dominates	Combustion of coal, oil and gas alone accounts for three-quarters of all GHGs.	Cutting fossil demand in power & mobility delivers outsized climate leverage.
Fastest path to large-scale cuts	Electrify transport - EVs already avoid 2.6 Gt CO_2 by 2035. Expand renewables; Solar, wind & storage supplied almost 75% of the growth in global power generation in 2024.	Both depend on massive, timely volumes of battery-grade lithium with rock-bottom Scope 1-3 footprints.
Lithium Harvest's multiplier effect	Zero-carbon, on-site lithium extraction eliminates up to 57% of battery lifecycle emissions vs. traditional mining. Fast-to-market sustainable lithium short-circuits supply bottlenecks, enabling EV and storage capacity to decarbonize sooner.	Supplying clean lithium at the source enables every downstream EV, grid-storage pack, and renewable-power project to deliver more CO_2 abatement per dollar invested.

Decarbonizing power generation and transportation are the world's quickest emissions lever, but it cannot happen without an immediate, responsible supply of battery minerals. Lithium Harvest attacks the largest sources of CO_2 and compounds sustainability up the value chain.

lithiumharvest.com