Fueling Greener Lives

Turning waste into one of the world's most sustainable lithium sources

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
Company	Lithium Harvest
Founded	2020 by Sune Mathiesen (CEO) & Paw Juul (CTO)
Headquarters	Houston, TX, USA
Technology center	Aalborg, Denmark
Team	14 core engineers & commercial staff
What we do	We design, build, own, and operate modular lithium extraction plants for brines (DBOO model)
Patented process	Adsorption-driven Direct Lithium Extraction (DLE) integrated with proprietary water treatment
Commercial model	Performance-aligned DBOO partnerships - we earn when the plant performs (shared upside)
Cost position	OpEx ~$3,647/t LCE; CapEx ~$17,100/t installed (project- and chemistry-dependent)
Sustainability by design	Turning wastewater into critical minerals - without the land disruption, ponds, or decade-long timelines
Deployment roadmap	First commercial production targeted for 2027

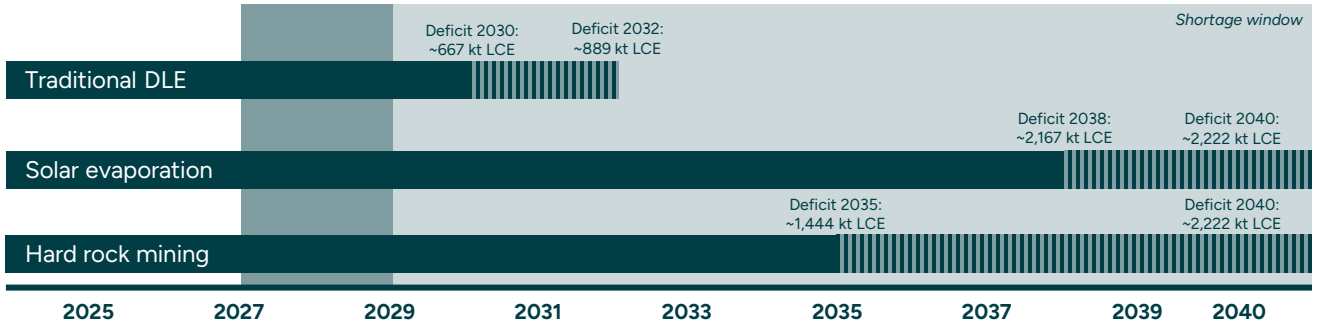
Bottlenecks of Traditional Lithium Mining

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



Rethinking Critical Mineral Supply

Stop chasing lithium in the middle of nowhere. Remote deposits + weak infrastructure drive higher costs, longer timelines, and fragile supply chains.

Why rely on distant, concentrated supply when the solution is already flowing right here? Build supply where infrastructure already exists - and where customers actually are.

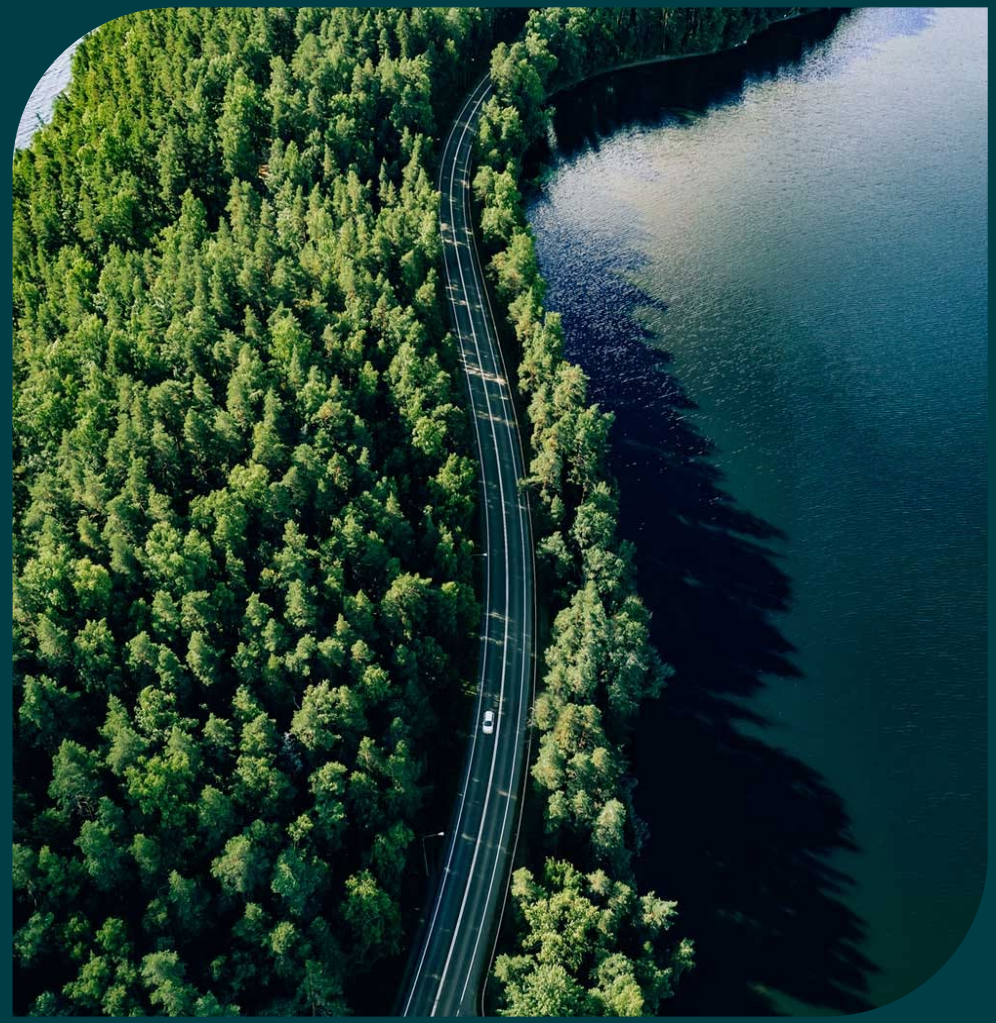
- **Feedstock:** We extract critical minerals from wastewater and brines already flowing every day
- **Infrastructure:** Co-located with midstream operators - leveraging existing infrastructure and logistics
- **Deployment:** On-site extraction and refining in modular, decentralized facilities designed to scale site-by-site
- **Market access:** Refining closer to battery and auto supply chains - reducing reliance on concentrated global supply
- **Outcome:** More resilient, more sustainable, more cost-effective local/regional critical mineral supply

We're building a modern critical minerals platform that turns wastewater into local, sustainable, cost-effective battery-grade lithium - the fastest route from resource to market.

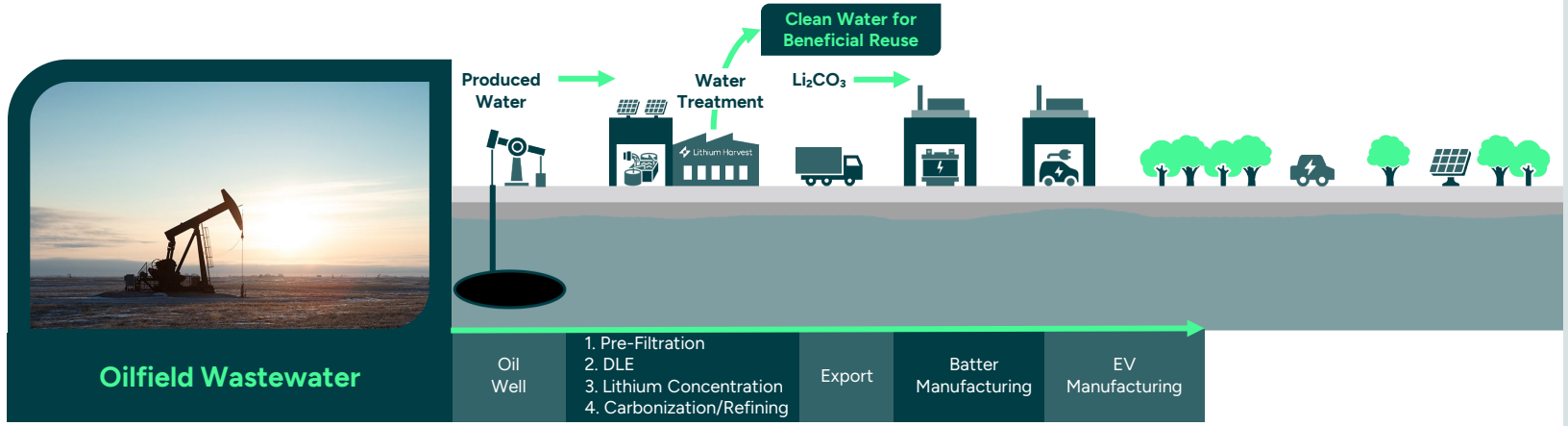
Lithium mining doesn’t have to cost the Earth.

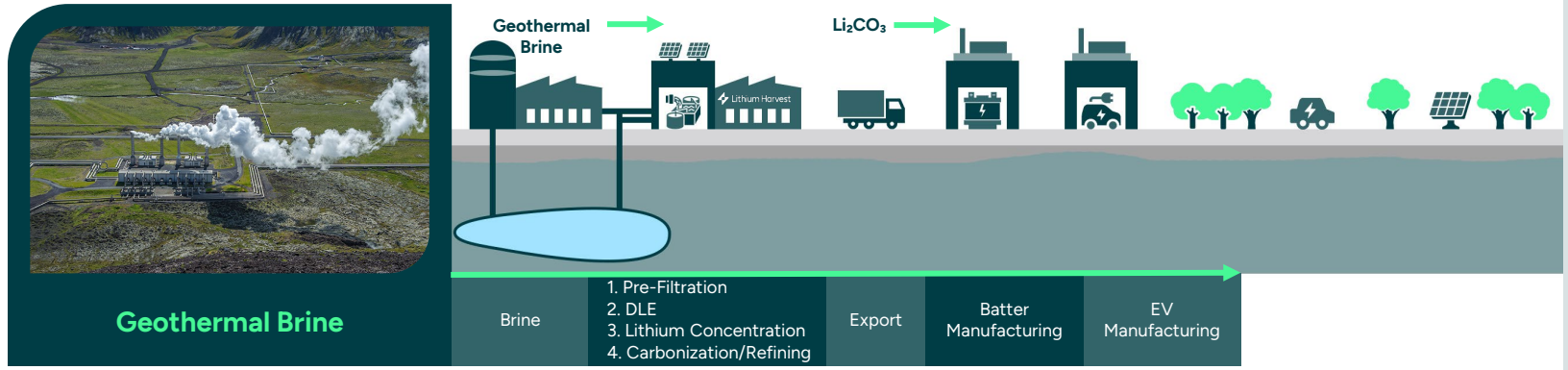
We turn wastewater into battery-grade lithium - faster, cleaner, and more cost-effective than traditional mining. We’re setting the global standard for the world’s most sustainable lithium, driving EV and energy storage markets towards a greener future.

We are turning wastewater into high-value minerals



Fastest, Cleanest Route from Brine to Battery





We design, build, own, and operate decentralized lithium hubs, delivering the fastest brine-to-battery route and low-risk cash flow for our partners.

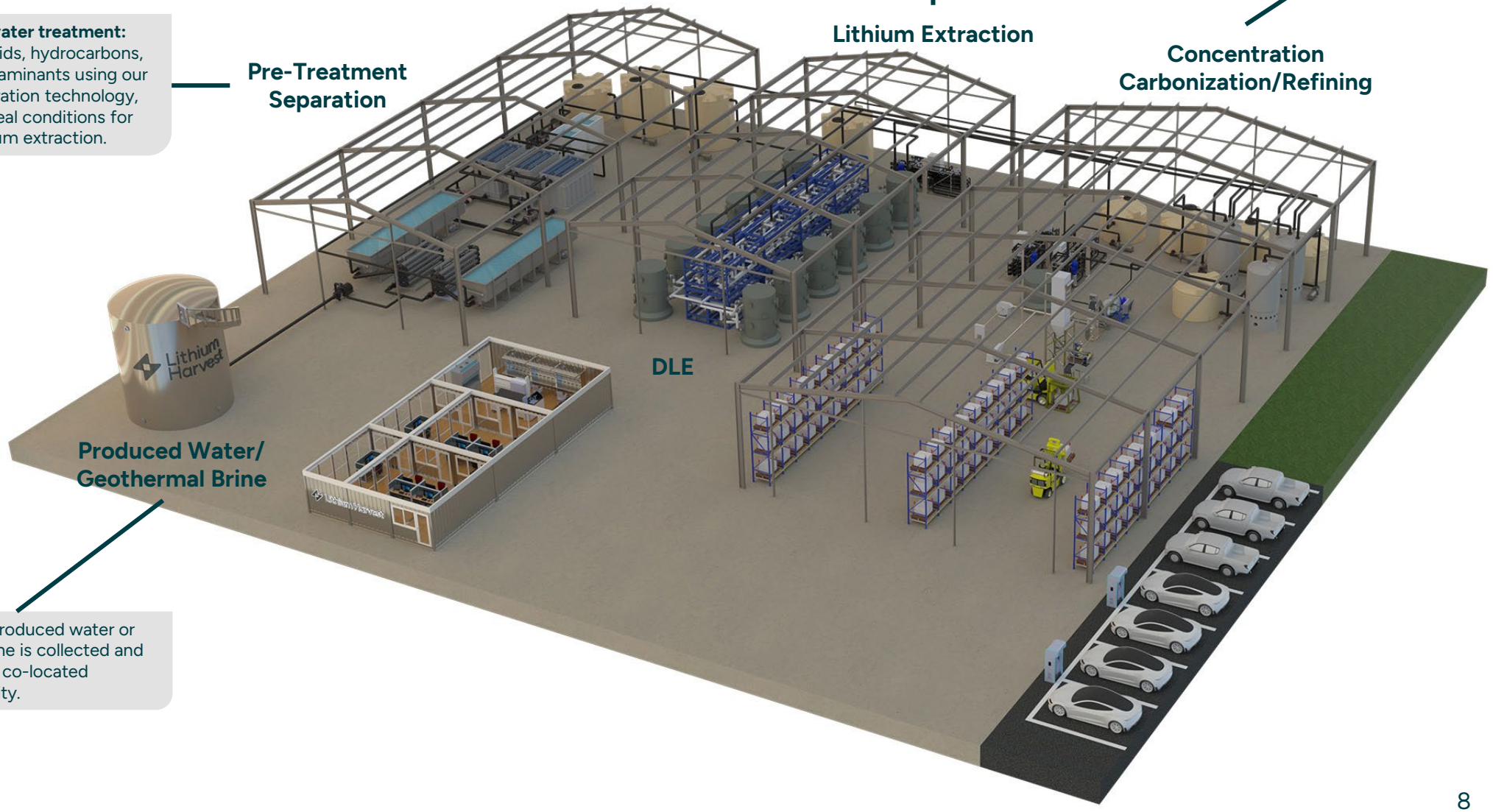
- **A patented solution** turns oilfield wastewater from a disposal cost into a cash flow and turns geothermal brine into a dual-revenue powerhouse.
- **Strategic co-location** with existing infrastructure for enhanced operational harmony - cuts CapEx up to 73% and OpEx up to 48%.
- **Decentralized, modular facilities** with onsite extraction and refining deliver the first lithium in just 12-18 months vs. 5-17 years and scale site-by-site with a minimal land and water footprint.
- **Turnkey DBOO model** - we design, build, own, and operate - so partners keep focus on core operations while sharing in the lithium upside.

Our Process

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.



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

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

One Platform. Multiple Industries. Maximum Impact.

Oil & Gas Industry

Turn your wastewater into a revenue stream - with no disruption and maximum value.

Geothermal Operators

Turn your geothermal brines into a dual revenue stream - energy and lithium.

Other Lithium-Bearing Brines

Bring us your toughest fluids - turn them into new revenue and ESG wins.

Battery & EV Supply Chain

Secure sustainable supply with fast-to-market lithium - produced locally with a minimal footprint.

We’re Different from the Other 100 DLE Players

- **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.

Win-Win Value Creation for Partners & Markets

Two Partnership Paths, One Shared Upside

	Joint Venture (Co-location | co-investment)	**Royalty License** (Co-location | Lithium Harvest 100% investment)
Overall	A joint venture that generates profit and establishes our partners as pioneers in the sustainable lithium market, driving both profitability and environmental leadership.	Partner earns royalties from produced water/brine while boosting ESG profile by contributing to sustainable water and resource management through lithium extraction.
Partner contribution	Provide treated produced water or brine, location, SWD well/reinjection, and co-investment.	Supply location, treated produced water or brine, and SWD well/reinjection.
Lithium Harvest role	We design, build, and operate the plant, leveraging our patented solution for lithium extraction.	We design, build, and operate the plant, leveraging our patented solution for lithium extraction.

Advantages for Oil & Gas Operators

Waste to Profit
Transform wastewater into a lucrative asset

Versatile Reuse Options
Reuse treated water for re-injection or beneficial reuse

Hassle-Free Experience
We are operating the lithium extraction plant

Fast Deployment & Returns
A fast track to tap into the booming lithium market

Advantages for the Battery Value Chain

World's Most Sustainable Lithium
Setting new global sustainability standards

Competitive Pricing
The lowest cost of any lithium mining technology in the market

Fastest to Market
Rapidly converts wastewater into lithium compounds

Rapid & Scalable Production
Rapid market delivery and adaptability to meet increasing demands

Our Promises

A Promise to the World

Our Commitment to a Sustainable and Greener Future

We are committed to making a lasting, positive impact on our planet through innovative and responsible practices.

- **Circular Economy and Sustainability**: We are dedicated to advancing the circular economy by turning waste into valuable resources, striving for zero emissions and zero discharge. Sustainability isn't a goal; it's our way of doing business.
- **Green Energy Transition & Local Manufacturing:** We lead the global green energy transition by producing high-quality lithium compounds, ensuring the domestic supply of critical minerals, and promoting economic growth.
- **Equality, Equity, and Innovation**: We champion equality and equity, continuously innovate, drive economic growth, and ensure environmental stewardship to accelerate the green energy transition.

A Promise to Partners

Our Commitment to Strong, Transparent, and Dependable Relationships

We are committed to building trust and fostering collaborative relationships with our partners and communities.

- **Dependability and Commitment**: We are dependable and honor our commitments, ensuring timely responses, deliveries, and transparent communication. Our word is our bond.
- **Responsible Management and Accountability**: We manage your trust with utmost care, make timely and informed decisions, and maintain accountability in all our actions. Our principle: 'If you wouldn't invest your grandmother's pension in it, don't do it.'
- **Partnership and Community Engagement**: We are a strong community partner, investing in local well-being, creating jobs, and supporting joint growth and innovation with our partners.
- **Partnership Experience Excellence**: We align our values and goals with yours, delivering quality products and collaborative solutions that drive long-term success and mutual benefits.

A Promise to Ourselves

Our Commitment to a Vibrant, Inclusive, and Innovative Workplace

We are committed to fostering a diverse, healthy, and creative work environment where everyone can thrive.

- **Equality, Diversity, and Fairness**: We uphold equality, embrace diversity, and ensure fairness in all our interactions, creating an inclusive workplace where everyone feels valued. Our employees are the fuel driving the green energy transition.
- **Healthy Work Environment and Family Values**: We prioritize the physical and mental health and personal growth of our employees. We are a family supporting each other, ensuring mutual success and support.
- **Innovation and Creativity**: We promote a culture of innovation and creativity, making our workplace fun and ambitious and encouraging outside-the-box thinking.

Our Story

Solving a Decade-Old Waste Problem - And Scaling to Revenue Inside Six 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 had 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 transitioning from concept to first commercial deployments - a key step from a pre-revenue story to an operating, cash-generating producer.

Year	Milestone	Business 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
2026	Uplist to a major U.S. exchange	Elevates corporate profile and liquidity, strengthens governance credibility
2026-2030	Commercialization stage	Multi-site rollout to material nameplate capacity - scaling domestic LCE 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 McKinsey & Company
- 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

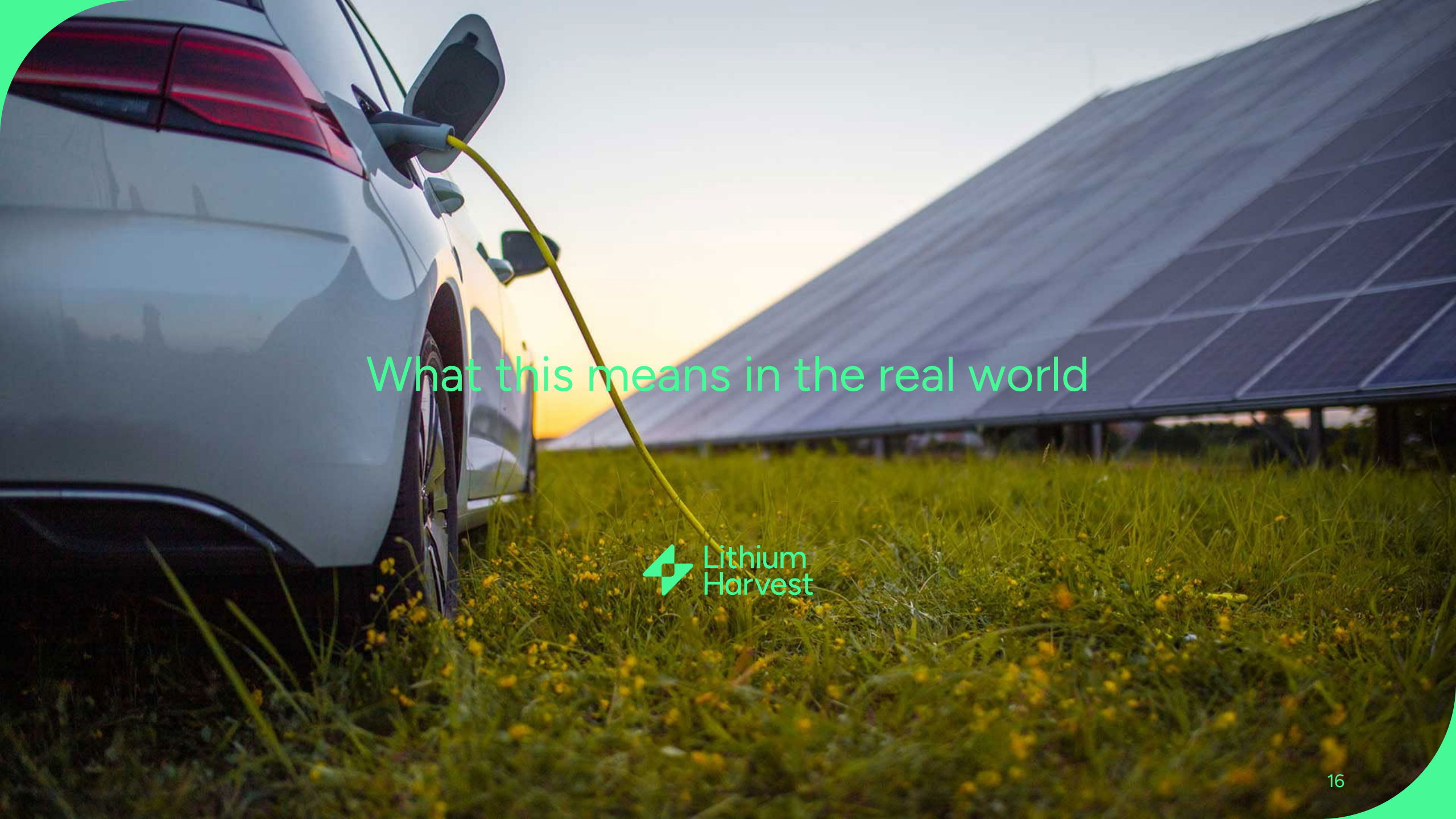
- 400+ plants built - founders designed, engineered, and commissioned large-scale water treatment systems on 5 continents, on budget and to spec.
- Proven automation - our proprietary, fully automated control algorithm, deployed across 400+ industrial systems, runs the modular lithium units for safe, 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 Lithium Harvest and our partners.

+20 Years
Executive management experience

+20 Years
Water treatment experience

+400
Successful water treatment systems installed


What this means in the real world
Lithium
Harvest

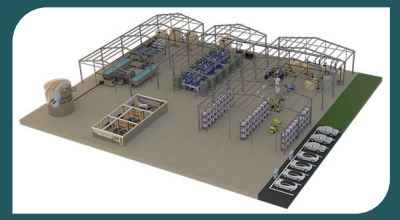
We Make EVs Even Cleaner

	ICE	EV (Traditional Mining)	EV (Lithium Harvest)	Impact
Battery CO_2	-	4.7 tonne	2.0 tonne	-57%
Lifetime CO_2	54.3 tonne	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	5.7× sooner - 83% fewer km
Water saved per car	-	-	17.6 m^3	70,000 cups of coffee or 120 bathtubs
Land saved per car	-	-	141 m^2	11-12 parking spaces or ½ a tennis court

IEA, ICCT, EDGAR Community Database, and Lithium Harvest Internal Analysis

From One Ton to Market-Scale Impact

Per-ton savings are nice. Scaling them is what moves the needle



	One plant, one year - 15,000 t LCE
CO_2e avoided	306,000 t - about 66,000 passenger cars a year
Water saved	1,442,220,000 gallons - about 2,180 Olympic pools
Land impact avoided	589,365,000 ft² - about 10,200 football fields

Lithium Harvest lithium extraction facility

	A 50,000-EV fleet you can picture
CO_2e avoided	135,000 t - about 29,500 passenger-cars a year
Water saved	232,500,000 gallons - about 3.7 billion cups of coffee
Land impact avoided	7.05 km² - about 1,000 soccer pitches

EVs with lithium from Lithium Harvest instead of a traditional supply

And remember: We may need more than 3,300,000 t of LCE in 2030 and more than 6,000,000 t in 2040. We won't supply all the world's lithium. But every ton of lithium we bring online moves the needle.

One of the world's most sustainable lithium

Lithium Harvest

Let’s Continue the Conversation

Headquarters

USA
2800 Post Oak Blvd., Suite 1910
TX 77056 Houston
+1 (346) 446-5728
info@lithiumharvest.com

Technology Center

Denmark
Tankedraget 7
DK-9000 Denmark
+45 3164 6400
info@lithiumharvest.com

lithiumharvest.com