



# Growth with Sustainable Lithium

Executive Guide

 Lithium Harvest

# Capitalize on Lithium's Growth

## Executive Summary

Turn produced water from a cost and liability into a decision-grade lithium revenue opportunity - with Lithium Harvest taking execution risk under DBOO.

### The opportunity

- **Asset monetization:** Produced water is typically a cost center, but many streams contain recoverable lithium and other critical minerals.
- **Parallel revenue:** A co-located lithium plant converts a disposal-driven stream into a revenue stream without adding operational burden to your core business.

### What Lithium Harvest does

- Integrates lithium extraction with advanced water treatment engineered for real-world produced-water variability.
- Deploys modular plants co-located with your existing water infrastructure.
- Runs the project end-to-end under a DBOO model: Design, Build, Own, and Operate.

### Why now?

- **Structural demand:** Lithium demand is accelerating, while new supply is constrained by long permitting timelines and capital intensity.
- **Strategic security:** Buyers reward domestic, credible, and traceable supply - not long-dated projects.
- **Resource shift:** Secondary resources (industrial brines) are becoming strategically vital as traditional mining is slow and struggles to scale.

### Why it's low-friction

- **Core focus:** You don't have to become a lithium company. Lithium Harvest owns execution and operations; you share the upside without building a new team.
- **Defined validation:** Feasibility is confirmed through project-specific validation (data review, sampling, and on-site testing) before any major capital commitment.

## The Lithium Market: Structural, Not Cyclical

The real risk in the lithium market isn't demand; it's whether credible supply can be brought online fast enough to meet the demand.

### Demand outlook

- Consensus forecasts suggest 2-3x 2024 demand by 2030 (16% CAGR).
- High-adoption scenarios project demand could reach 5x current levels by 2040.
- EV and grid storage are pulling lithium demand, reinforced by policy and corporate electrification.

### Supply can't scale fast enough

- **Legacy delays:** Hard-rock mining typically requires 10-17 years from discovery to first production. Evaporation ponds take 13-15 years to ramp.
- **The deficit window:** Base-case models show supply deficits beginning as early as 2026-2029, widening significantly into the 2030s.



### Supply chain concentration

- 77% of raw lithium comes from just three countries (Australia, Chile, China).
- 70% of refining is concentrated in China.
- The pivot: Western buyers and governments are aggressively pushing for regional, traceable supply to reduce single-point dependency.

### What the market rewards now

- **Local and secure supply:** Reducing geopolitical and logistics risk.
- **Fast-ramp projects:** Bringing tons to market in years, not decades.
- **Qualified product:** Consistent specification and full traceability.
- **ESG compliance:** Low-carbon production that meets policy and buyer standards.

## The Strategic Opportunity: From Waste to Profit

Produced water has traditionally been managed for cost and compliance. If lithium concentration and flow are sufficient, that same stream becomes a revenue-generating feedstock.

- **New profit pool** from an existing stream (diversification without new acreage).
- **Infrastructure Leverage:** The water already flows. The pads, pipelines, and disposal facilities are in place.
- **Shorter timelines:** Co-locating extraction reduces logistics and permitting friction compared to greenfield mining.
- **First-mover value:** Build a credible position in critical minerals without changing your core upstream or midstream focus.

## How the Partnership Works: DBOO

The Design, Build, Own, Operate (DBOO) model is designed to make lithium entry practical for energy and midstream operators. You provide the brine; we provide the lithium organization.

- **Low-friction entry:** No need to build a new operating function.
- **Clear accountability:** One party is responsible for uptime and delivery.
- **Scenario-based risk:** Choose the risk/upside profile that fits your balance sheet.

	Joint Venture	Royalty License
Overall benefits	A shared-ownership structure where we co-invest in a lithium plant at your site. You participate directly in project profits and position yourself as a pioneer in sustainable lithium and water management.	A service-style model where we invest in and own the lithium plant at your site. You earn royalties from your brine and strengthen your ESG profile through sustainable water and resource management.
Your contribution	Provide treated produced water or brine, site for co-location, SWD well access or equivalent, and an agreed capital contribution at the project level.	Provide treated produced water or brine, site for co-location, SWD well access, or equivalent - no capital contribution to the lithium plant in a standard setup.
Lithium Harvest role	We design, build, and operate the plant using our patented lithium extraction solution. We manage lithium offtake and sales into the battery supply chain and share project returns with you as partners.	We design, build, own, and operate the lithium extraction plant using our patented solution, and pay you agreed royalties linked to production from your brine.

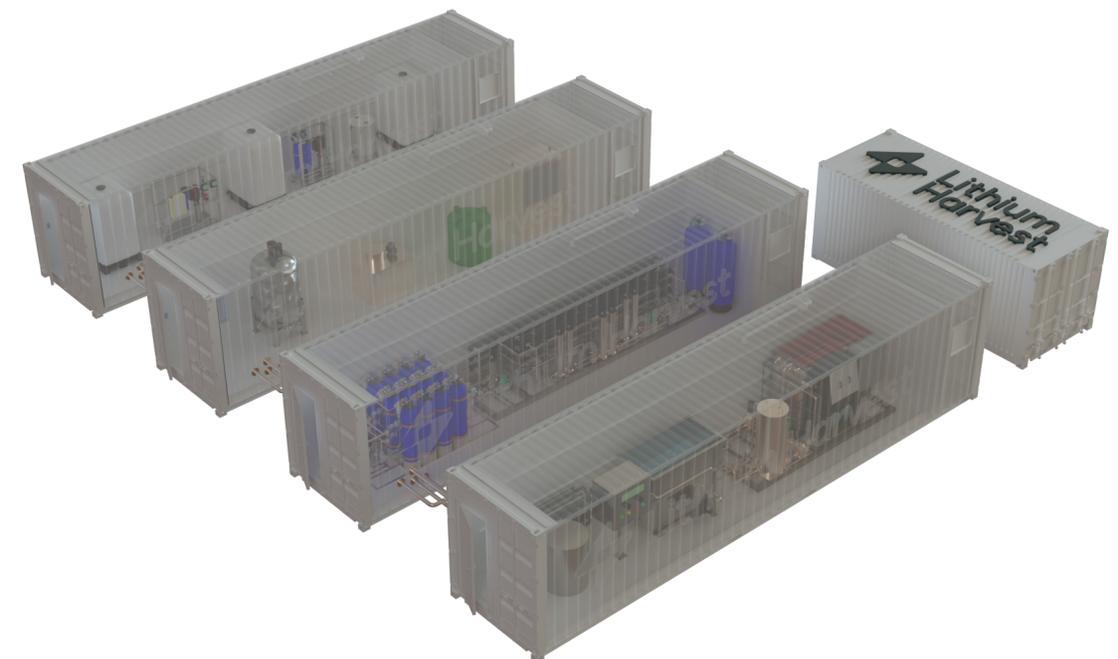
## From Brine Sample to Bankable Project

**We don't guess. We validate.**

The Lithium Harvest Mobile Site-Validation Unit (SVU) runs your specific brine on a scaled-down commercial train at your site. This generates decision-grade performance data.

Those results are fed into a digital twin to create a site-specific design basis and defensible economics. This process moves the project from "interesting" to an FID-ready package with clear decision gates.

- **Validated on your brine:** Our Site-Validation Unit (SVU) runs on your actual brine under real site conditions. We will prove recovery, product quality, and operating windows before you sign an agreement.
- **Modeled in our Digital Twin:** SVU results calibrate our Digital Twin, which converts your brine data into flowsheets, mass and energy balances, and unit economics. This gives you FID-grade insight in months, not years.
- **Performance-tied contracts:** Our economics are linked to plant performance and availability, not just the delivery of equipment. We win when the plant produces as promised.



## Business Case (Illustrative)



Produced water	40,000 bbl./d
Lithium concentration	125 ppm
Lithium price	\$14,175 (Consensus price 1-revenue year)
CapEx	\$26M
OpEx	\$3,647/t
Lithium production	1,200 tpa
Gross margin	74%
Revenue	\$17.1M
1-year result	\$12.7M
Payback period	2 years

How Lithium Prices Impact Payback Time



### Economic feasibility - primary drivers

- Lithium concentration
- Water volume and flow continuity
- Infrastructure leverage
- Commercial structure
- Lithium price/offtake terms

*Disclaimer: This example is illustrative to show the value logic. Actual outputs and economics are site-specific and must be confirmed through project-specific validation. Any pricing used in this business case is an illustrative assumption and is provided for modeling purposes only. The price assumption references the consensus price for the first revenue year as presented in the Lithium Harvest Investment Memorandum (2026). No representation or warranty is made regarding the accuracy, completeness, or future realization of any price, output, cost, or economic outcome.*

## Why Lithium Harvest?

- **DBOO execution:** We remove the execution burden so you can focus on your core business.
- **Engineered for variability:** Produced water is a variable. We don't sell a "black box"; we engineer an integrated treatment-and-extraction system tailored to your specific chemistry.
- **Proven discipline:** Our team has 20+ years in industrial water treatment and has designed/installed over 400 large-scale systems.
- **Scale confidence:** We use commercially proven unit operations that we have operated at full scale - not just lab pilots.
- **Scenario flexibility:** JV vs royalty structures let you choose the right risk/upside profile.

## What We Need to Assess Feasibility

- **Water composition data:** Full water analysis confirming lithium concentration, ion composition, key impurities, and any available variability history.
- **Flow data:** Typical volumes, ranges, and continuity (seasonal/operational swings).
- **Site context:** Preferred co-location point (midstream facility or disposal well), footprint constraints, and available utilities.
- **Current water handling:** Base-case disposal/reinjection route and any known constraints or bottlenecks.

## Let's Evaluate Your Produced Water Opportunity

Turn produced water into a decision-grade lithium revenue opportunity without building a lithium organization.



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