



Sustainable lithium extraction

 Lithium Harvest

From waste to resource

Executive Summary

With demand for sustainable lithium surging, oil and gas companies are uniquely positioned to lead in the green energy transition. Lithium Harvest enables the extraction of some of the most sustainable lithium on the market by transforming produced water - a costly waste stream - into a valuable resource, aligning with circular economy goals and supporting ESG commitments.

Our solution provides a sustainable edge, future-proofing operations through compliance with environmental regulations while improving efficiency. By adopting Lithium Harvest's solution, your business strengthens community and investor relations, attracts socially conscious investors, and sets a new standard in responsible resource management.

Sustainability & Environmental Innovation

Lithium Harvest transforms produced water - a byproduct and waste stream of oil and gas operations - into a valuable asset through our advanced extraction technology. By turning waste into lithium and other critical minerals, we contribute to a circular economy that reduces waste and maximizes resource efficiency. This approach aligns seamlessly with waste-to-resource sustainability principles, demonstrating how oil and gas operations can contribute meaningfully to the green energy transition.

- **Future-Proofing Against Regulatory Changes:** Our sustainable technologies are designed to adapt to evolving environmental regulations, helping future-proof operations and ensure compliance with strict sustainability standards. This proactive approach keeps companies ahead of regulatory demands and mitigates potential risks.
- **Enhanced Community & Investor Relations:** Sustainable practices reinforce your company's reputation and build trust within local communities, fostering stronger public relationships. With Environmental, Social, and Governance (ESG) criteria increasingly important to investors, integrating Lithium Harvest's solution makes your business more attractive to socially conscious investors and institutional funds focused on sustainable growth. This approach positions your company as an industry leader in environmental stewardship.

We turn wastewater into high-value minerals



- **Unlocking the value of waste:** Transforming produced water into a valuable resource through resource recovery and a circular economy approach.
- **Energy-efficient and low-carbon footprint:** Minimizing environmental impact through advanced technologies and optimized operational efficiency.
- **Responsible water management:** Conserving water resources and minimizing freshwater consumption to support sustainable water practices.
- **Facilitating the clean energy transition:** Enabling the production of sustainable lithium for electric vehicles and renewable energy storage, contributing to climate change mitigation.

Redefining Green Lithium Extraction

Lithium Harvest vs. traditional lithium mining.



Up to 96%

lower water consumption



>90%

water recycled



500,000

gallons of freshwater saved



15,000 kg
of CO₂ saved



Neutral
CO₂ footprint



Up to 99%
smaller 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



Technology Benchmark



Lithium Harvest Solution



DLE from Brine



Solar Evaporation Brine Extraction



Hard Rock Mining

Feedstock	Produced water	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

Source: Columbia University, IEA, ICMM.

Sustainable, Efficient, and Low-Impact Lithium Extraction

Our solution offers an innovative alternative to traditional lithium mining, significantly lowering environmental impact and accelerating project timelines without the typical operational disruptions. Here's how Lithium Harvest sets a new standard in sustainable lithium extraction:

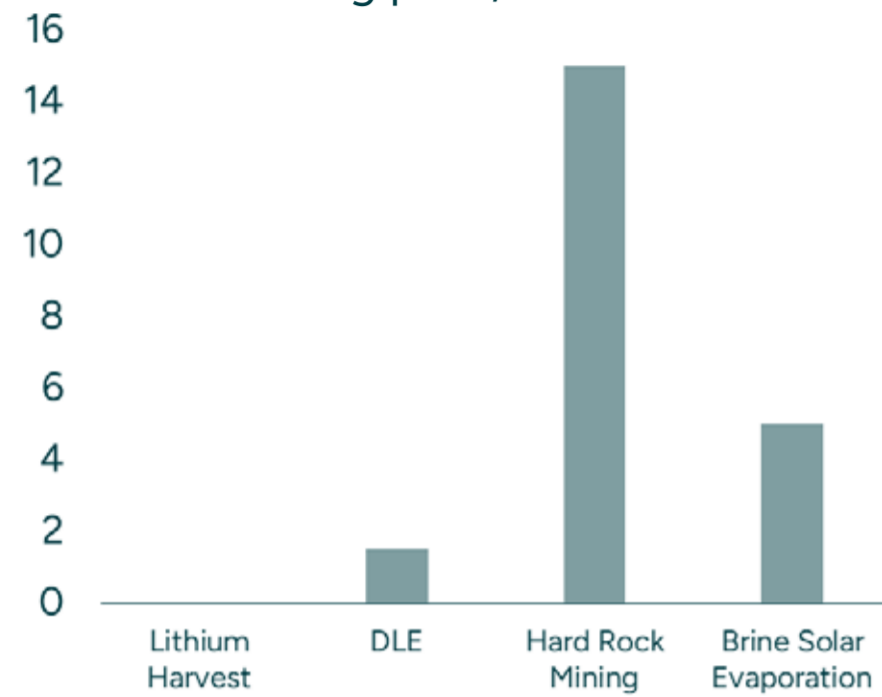
- Carbon-Neutral Operations:** Our process eliminates the need to transport materials to distant refining facilities, reduce emissions, and achieve a carbon-neutral footprint. Powered by a low-pressure, energy-efficient system with solar energy as a primary source, we prevent up to 15 million kg of CO₂ emissions for every 1,000 metric tons of lithium carbonate produced. While electricity usage in production creates a carbon footprint, it is offset by the significant emissions savings from oilfield wastewater disposal - making our operations carbon neutral.

- Compact, Eco-Conscious Facility Design:** Unlike traditional mining, our facilities are modular and compact, designed for direct integration with produced water treatment centers. This reduces land use by 99% compared to conventional mining and avoids the need for large ponds and pipelines, protecting local ecosystems and minimizing disruption to the environment.
- Water Conservation Excellence:** Our extraction process relies on produced water with minimal freshwater usage. By recycling over 90% of water within our system, we save up to 96% of the water required in traditional mining, conserving more than 500 million gallons per 1,000 metric tons of lithium carbonate. Our commitment to sustainability extends to wastewater treatment, allowing for secondary reuse post-extraction.

Lithium Harvest offers a sustainable, efficient lithium extraction solution that conserves water, reduces emissions, protects ecosystems, and provides a quick pathway to market for oil and gas partners.

Carbon Footprint

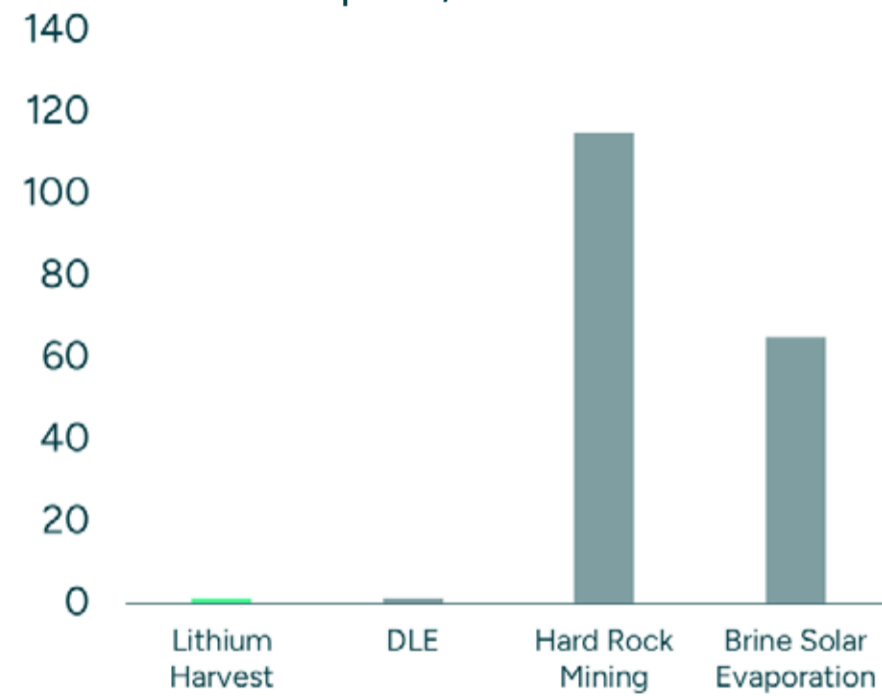
Millions kg per 1,000 mt LCE



- No transportation to a secondary site for refining
- Uses solar power as a primary energy source
- Low pressure/low energy technology
- Offsetting carbon savings from water handling

Facility Footprint

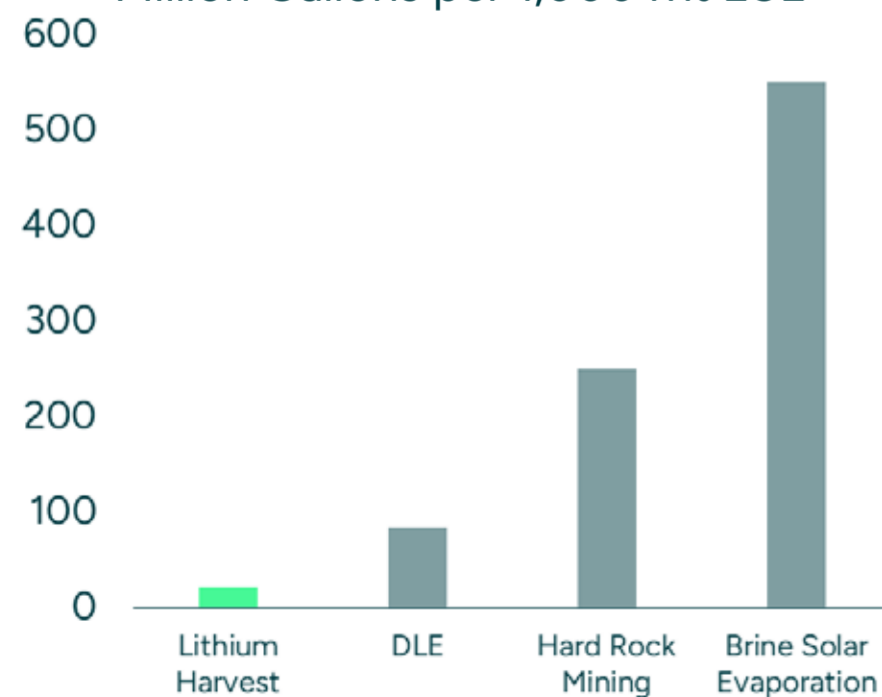
Acres per 1,000 mt LCE



- Co-located with produced water treatment facility
- Modular and compact facility
- No ponds and pipelines
- No additional impact on the environment and wildlife

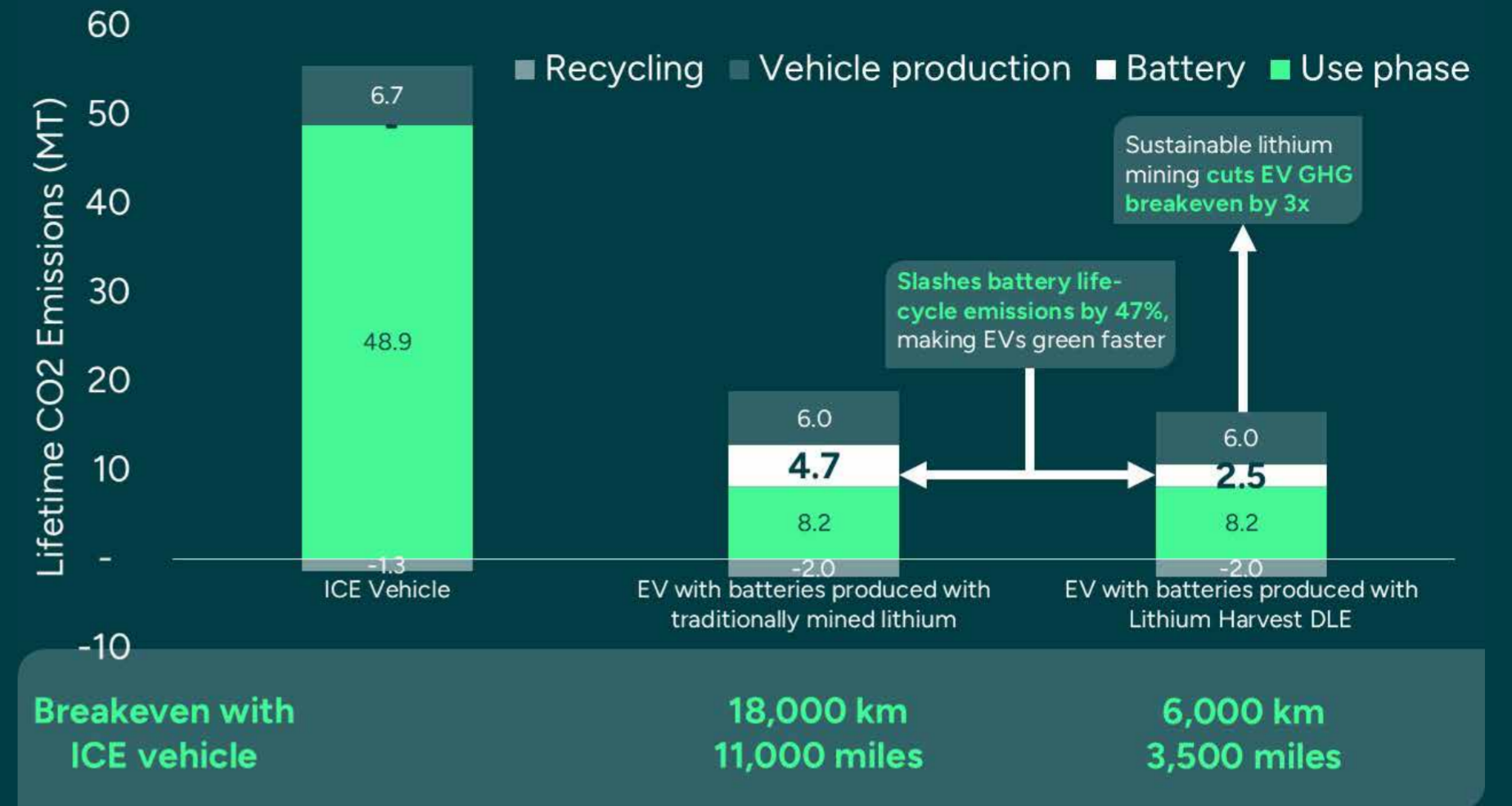
Water Consumption

Million Gallons per 1,000 mt LCE



- >90% of water re-used
- Minimal freshwater consumption
- No pollution of water resources
- No additional waste product

How We Make EVs Even Greener



Lithium Harvest is at the forefront of making EVs even greener. Our patented solution, which responsibly extracts lithium from oilfield wastewater, is poised to slash up to 47% of battery lifecycle emissions.

This advancement not only accelerates the environmental breakeven point of EVs, reducing it from 18,000 km to just 6,000 km, but it also brings substantial water and land conservation benefits - saving approximately 15-20 cubic meters of water and freeing up 50-100 square meters of land per EV produced.

The World Needs More Sustainable Lithium

The demand for lithium is surging, driven by the rapid growth of electric vehicles and renewable energy storage. However, traditional methods such as open-pit mining and brine evaporation pose serious environmental risks. Meeting the world's increasing demand for lithium without compromising the planet requires a shift toward sustainable extraction methods.

Partnering with Lithium Harvest presents a unique opportunity for a double sustainability win: advancing your ESG goals through improved water and resource management, while also setting new standards in lithium extraction. By leveraging your existing infrastructure with our water treatment engineering expertise and innovative solution, we can revolutionize lithium extraction - making it more sustainable and profitable. Together, we will drive the green energy transition and establish responsible resource management for the future.

Turning waste into sustainability



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 Lithium Harvest

