

MICHAEL TAYLOR

An opportunistic Texas lithium-extraction strategy has me thinking

Efforts to pull the metal used in batteries from oil field waste has our columnist musing on supply and demand, price and opportunity.

By **Michael Taylor**, *The Smart Money S.A.*

Sep 18, 2024





International Battery Metals' mobile direct lithium extraction plant is seen in Lake Charles, Louisiana. Components of the system that extracts lithium from oil field brine snap together on skids like Legos, says CEO John Burba.

International Battery Metals

A very cool report in the latest edition of Texas Monthly hit me as a modern version of that memorable moment in the movie "The Graduate," like an investing tip uttered quietly by the pool during a cocktail party:

"I just want to say one word to you. Just one word."

Me: Yes, sir.

ADVERTISEMENT

Article continues below this ad

“Lithium.”

Me: Exactly how do you mean?

“There’s a great future in lithium. Think about it. Will you think about it?”

I thought about it.

The bull case

Oil and gas isn’t going away any time soon, but we are in the early years of rapidly ramping up alternative energy sources, especially here in Texas.

ADVERTISEMENT

Article continues below this ad

RELATED: Like it or not, Texas is at the forefront of U.S. energy transition. My proof? Batteries.

To get from here to there in the energy transition, we're on a path to use a lot more lithium, a central ingredient in the lithium-ion battery powering your utility-scale batteries for renewable-energy storage, your Tesla and your iPhone.

The chart showing demand for lithium is a one-way line going straight up. A [McKinsey & Co. study in 2023](#) suggested 27% annual growth in demand for lithium-ion batteries between 2022 and 2030.

The growth of batteries is closely linked to the increasing demand for lithium, of which 90% is for electric vehicles and battery storage. As a result, the [International Energy Association foresees](#) an eightfold increase in demand between 2023 and 2040.

The three largest sources of lithium mining are in Australia (33%), China (23%) and Chile (12%).

The U.S. hasn't opened a lithium mine since the 1960s, and, for a variety of good environmental reasons, maybe we shouldn't. Current techniques may make it impossible to bring lithium mining to the United States — due to [environmental concerns](#) such as water contamination and injury to the landscape.

RELATED: [Greg Abbott and Elon Musk celebrate construction of Tesla's lithium refinery in South Texas](#)

China currently dominates the lithium-ion battery industry, supplying 80% of batteries worldwide. It is also the largest lithium refiner in the world. Average prices for lithium were five times higher in 2022 than 2021.

The news

So, back to the Texas Monthly article, which is excitingly titled “The Lone Star Lithium Boom.” It, like a report that appeared in February in the Longview News-Journal, introduces a Baylor-trained chemist living in Northeastern Texas. He developed a process — a while ago — for extracting lithium from briny water and set up a company called International Battery Metals to commercialize his patented process.

The other weirdly exciting Texas angle is that a swath of southern Arkansas and Northeastern Texas is unusually rich in the briny water that makes for concentrated lithium extraction using his technique.

International Battery Metals opened its first commercial lithium-extraction operation this summer in Utah. Meanwhile, a Norwegian oil company has partnered with an Arkansas-based company that has a similar lithium-extraction method. They are aggressively leasing briny water acreage in East Texas. Exxon Mobil also has big plans in a section of Arkansas to begin lithium extraction.

Houston-based companies SLB and Occidental Petroleum, plus Saudi Aramco and the Abu Dhabi National Oil Co. all have indicated interest in lithium extraction, giving further credence to the scope of the opportunity. A further hope and claim of lithium extraction from briny water is that it avoids the high environmental impact of traditional mining.

RELATED: Exxon aims to become a top lithium supplier for EVs by 2030 with new operation in Southwest Arkansas

As a hot tip, is this a good investment?

In the specific sense of one man’s entrepreneurial quest to invent and perfect a process to respond to a global market opportunity, it’s undoubtedly super risky.

International Battery Metals in particular is a penny-stock company listed on the Canadian Securities Exchange, a situation that always gives me the ick.

On the other hand, you can't help but cheer for a guy who was super early in developing a process that might respond to a megatrend of the next decade and has giant companies looking to get in the game.

Malthus vs. reality

My biggest takeaway from this yarn is renewed optimism. A few years ago, a frequent complaint about the energy transition was that the rare metals required to make large-scale batteries and other high-tech hardware were located in dangerous or unfriendly countries, creating a choke point against progress.

But you know what? When demand gets high enough and prices respond, entrepreneurs get busy finding new ways to solve most any choke point.

In the late 18th century, economist Thomas Malthus proposed a view — totally wrong as it turns out — that scarcity and increasing shortages of vital goods would be the fate of humanity as population increased. The Malthusian worldview — proven wrong over and over again — often dominates our expectations for the future.

“Peak oil” has been declared numerous times since the 1970s. Decelerationists and anti-growth people often adopt a Malthusian mindset — this idea that the world is running precipitously toward a commodities cliff, after which declining living standards will follow scarcity and shortages. Instead, our actual lived experience — decade after decade, century after century — has been one of increasing abundance. It's abundance not just of food but fresh water and sources of electricity

and all the things that make humanity materially better off generation after generation.

RELATED: Tesla takes a step forward on 'first of its kind' lithium refinery to be built near Corpus Christi

This is the right framing of the lithium story:

- Step 1: Demand explodes for lithium due to the rollout of batteries to solve a huge number of human problems in the 21st century.
- Step 2: Prices of lithium rise fivefold in response to the demand.
- Step 3: Some clever chemistry Ph.D. develops novel extraction techniques.
- Step 4: If prices get high enough and the technology gets good enough, he could be rewarded handsomely.
- Step 5: Meanwhile, others will follow his lead, improve upon the technology, provide massive amounts of capital if the price is right and the need is there, and discover commercially profitable ways to get the thing we need.

Incidentally, after a huge spike in price and demand for lithium in 2022, prices actually have dropped 75% since the beginning of 2024. Commodity prices are notoriously volatile. As exciting as the future opportunity for lithium is, don't go investing everything just yet based on the "one word" whispered to you at a cocktail party.

Michael Taylor is author of "The Financial Rules for New College Graduates" and host of the podcast "No Hill for a Climber."

michael@michaelthesmartmoney.com | twitter.com/michael_taylor

Sep 18, 2024



Michael Taylor

BUSINESS COLUMNIST



Michael Taylor is a business columnist for the Express-News. He can be reached at mtaylor@express-news.net.

In addition to producing the weekly Smart Money column, Taylor is the author of *The Financial Rules for New College Graduates: Invest Before Paying Off Debt and Other Tips Your Professor Didn't Teach You*. Through his column and blog www.bankers-anonymous.com, he pursues the mission of making complex financial topics simple.

MOST POPULAR



LIFESTYLE

George Strait to perform at military gala in San Antonio. Here's when.

The Patriot Awards Gala, part of the Congressional Medal of Honor Celebration, will salute Chuck Norris, Jerry Jones.

NEWS

Pit bull owners get lengthy prison terms for deadly attack on Air Force vet



FORECASTS

Chance of Gulf tropical storm rises to 50%. Could it hit Texas?



TEXAS

Rare critter caught on camera at Palo Duro Canyon State Park

The animal typically ventures out at night to forage for fruits and to hunt birds, rodents, small reptiles and amphibians.



BUSINESS

X marks its spot: Elon Musk picks Bastrop County for site's headquarters

POLITICS

Ted Cruz and Colin Allred to debate in October



SAN ANTONIO REAL ESTATE

Closed Pig Stand diner near Pearl could be razed to make way for hotel



Let's Play



Really Bad Chess



Flipart



Cross|word



SpellTower

San Antonio Express-News

Top ^



About



Contact



Services



Account

