

Grab the Lithium Bull by the Horns



Sean Brodrick

Oxford Resource Explorer

*Gold & Resource Profit
Hunter*

Energy & Resources Digest



What Is Lithium?

- Lithium was born in the Big Bang as a highly-reactive alkali metal.
- It is a soft, silver-white metal. A knife can slice through it like hardening taffy. Lithium is also a relatively good conductor of heat and electricity.
- Lithium is the least dense of all elements solid at room temperature. It is even less dense than any liquid element and is one of only three metals that will float on water.
- Importantly, Lithium makes batteries that last longer, are lighter, and can recharge over and over again.

Why Lithium Boom Is Still in Its Early Stages

- Energy Storage Revolution – batteries for cars, cellphones, other gadgets. Demand for longer-lasting batteries is insatiable.
- Annual demand for lithium rose 26% in 2016, and is set to climb 39% in 2018 and 73% by 2025. That's the conservative forecast.
- Goldman Sachs calls lithium 'The New Gasoline.' It says ...
 - For every 1% rise in electric vehicle market share, lithium demand rises by 70,000 tons annually.
 - Lithium market could triple in size from 2015 to 2025 – based only on electric vehicle demand.
- Only a half-dozen mines coming online in next few years.

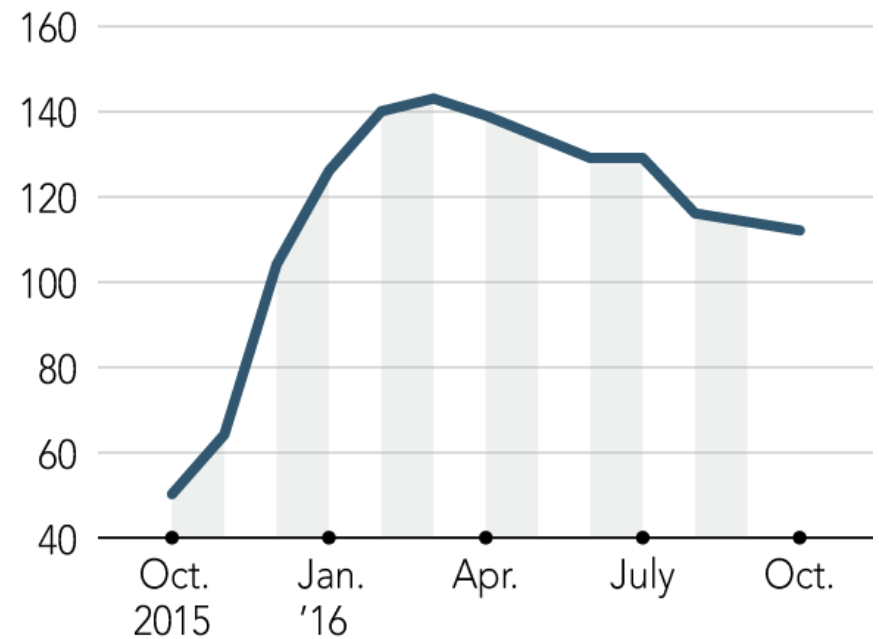
Challenges Facing Lithium Market

- New mines coming online could add surplus.
- Every liar who has staked out a salt flat is touting his project is the next big thing.
- Electric vehicles are more expensive than their gasoline counterparts, though the cost is coming down.
- Cheap gasoline may put off migration to electric vehicles. The market share for electric vehicles actually dipped in 2015 to nearly 2.9%.
- New battery innovation could replace lithium. But that's likely years away.

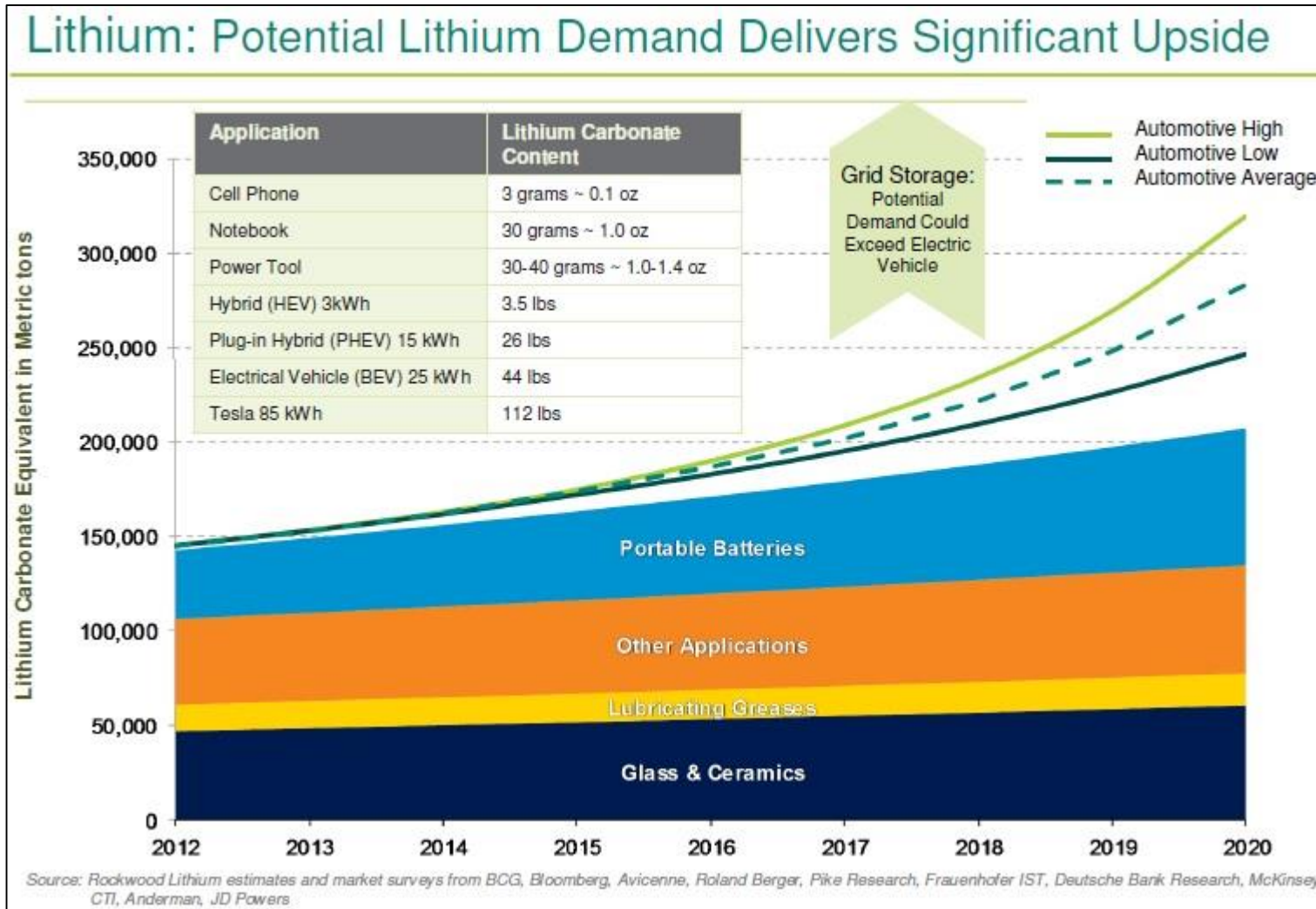
Headed for a Supply-Demand Gap

- Macquarie Research estimates the lithium market will show a deficit of about 4,500 metric tons this year.
- Contract prices remain strong, **BUT** ...
- Spot lithium carbonate price in China is down 20% from high in March.
- Lithium may slip into surplus in 2017-18, as new mines come online.
- But after that, another shortage looms. Macquarie expects a global annual shortage of almost 46,000 tons by 2021.

Lithium carbonate prices in China
(in thousands of yuan per ton)

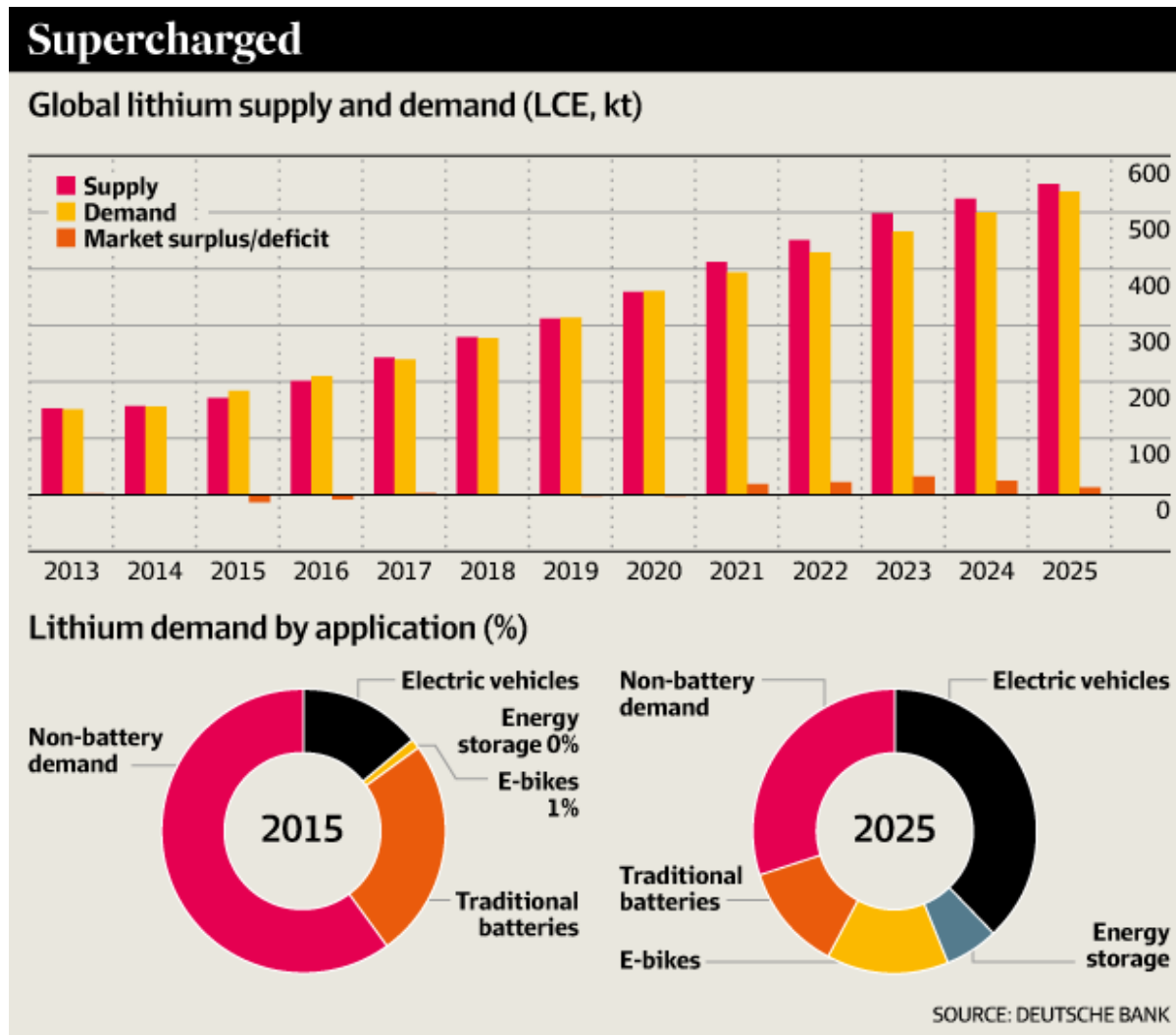


Demand Keeps Ramping Up



- Lithium is used in glass, ceramics, lubricants, many other industrial applications.
- Batteries are the biggest source of demand – and growing fast. Each electric car uses about 44 pounds of lithium.

OverSupply May Not Last



- Demand for lithium ion batteries is growing at a compound annual rate above 10% per year.
- This chart is from Deutsche Bank. It predicts a market in balance 2018-2020, then undersupplied again.

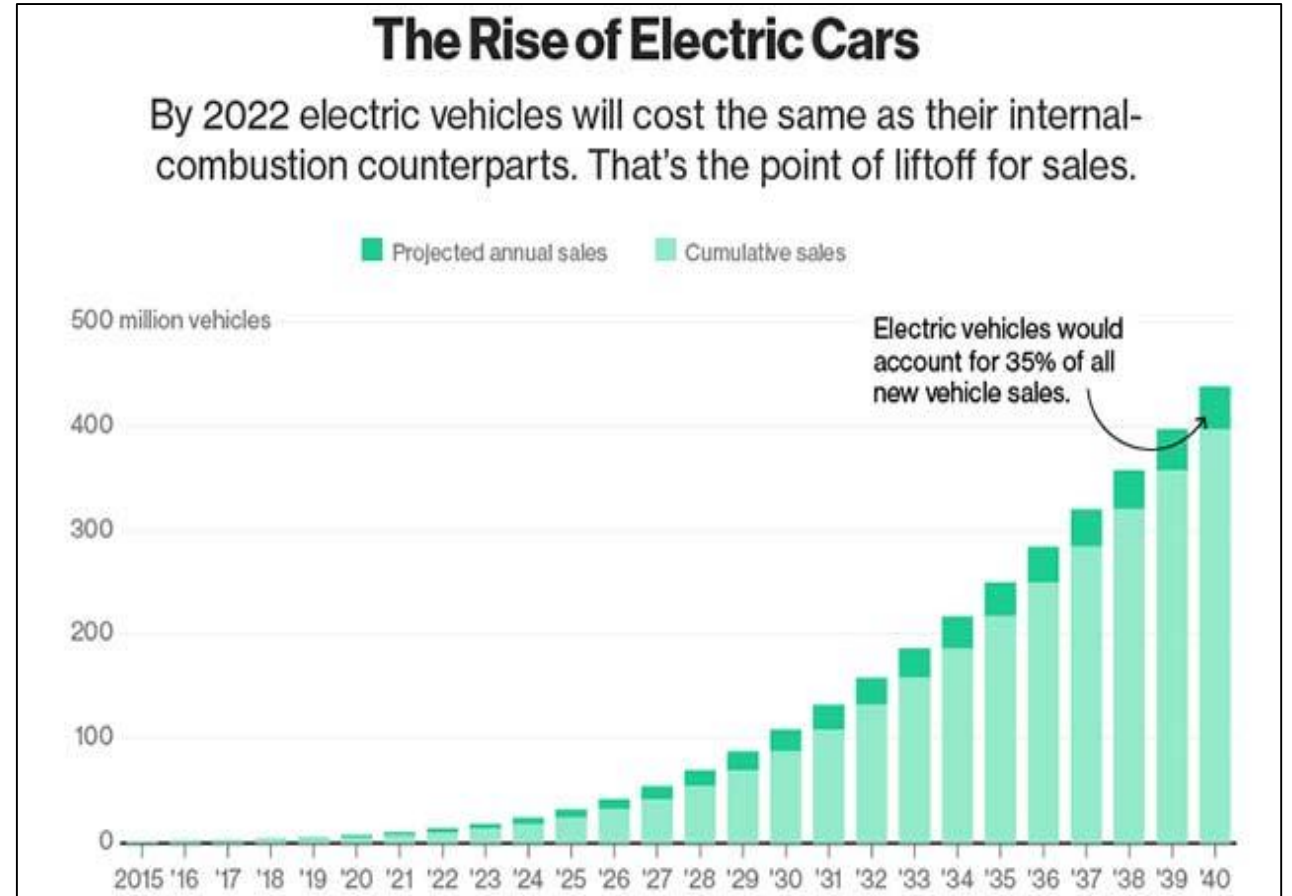
The Electric Car Conundrum

Researchers at Bloomberg say that EVs will cost the same as conventional internal combustion cars by 2022 - just six years from now!

By then, EVs should account for 35% of all new vehicle sales.

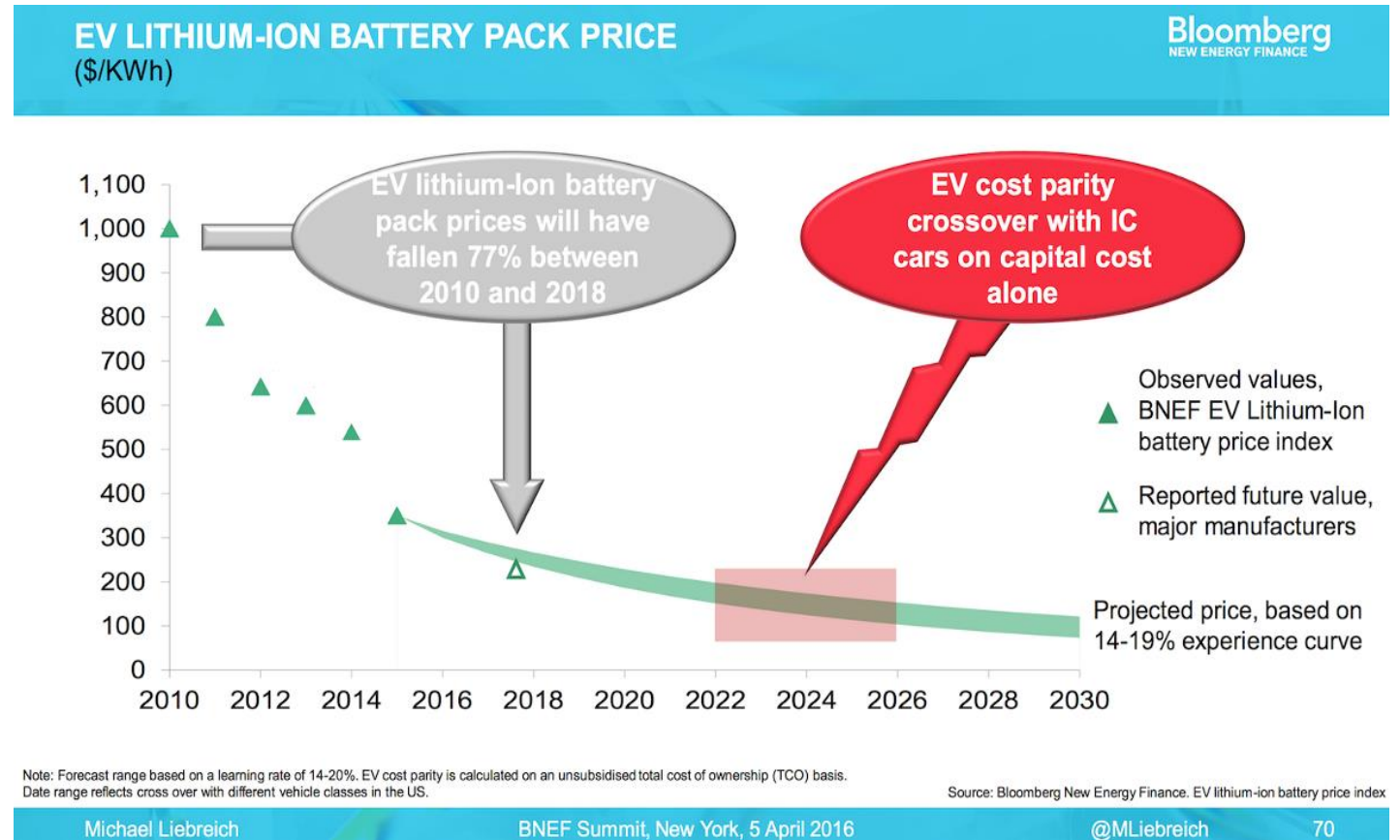
How is that possible if the price of lithium is rising?

Because lithium is a small part of EV batteries. Nickel, cobalt and aluminum are much larger proportions.



The Electric Car Conundrum

- We are on the cusp of a “green revolution” in automobiles.
- Starting in 2022 ... or maybe 2026 ... electric cars will be cheaper to buy than cars with internal combustion engines.
- EVs will be cheaper to operate, have higher safety. And “long refueling time” issue is already being solved.

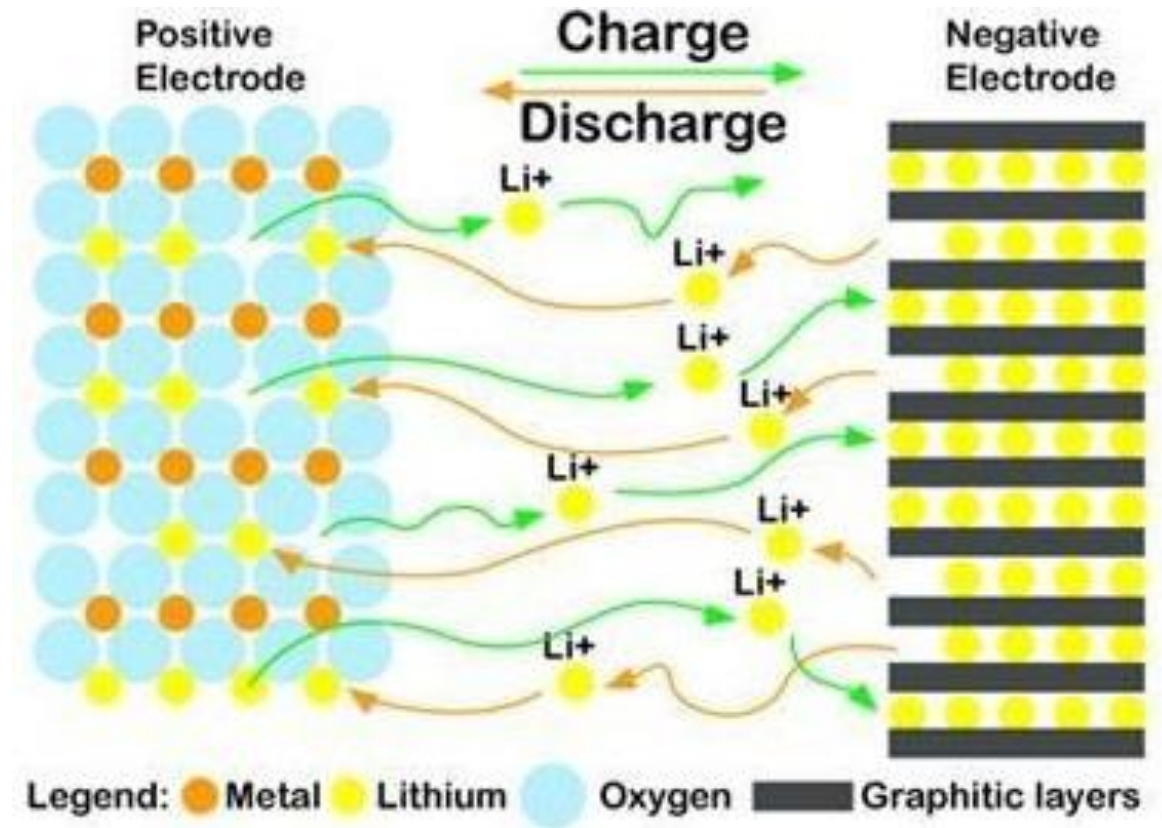


What's in a lithium battery, Anyway?

The lithium battery consists of three parts.

1. A cathode that contains nickel, cobalt, manganese oxide and lithium.
2. An anode that is graphite carbon.
3. An electrolyte solution that allows lithium ions to move between the cathode and anode.

When the lithium-ion battery is used, the lithium ions move from the anode to the cathode. When you recharge it, basically, you are moving the lithium ions back to the anode.



Worldwide Growth for EVs

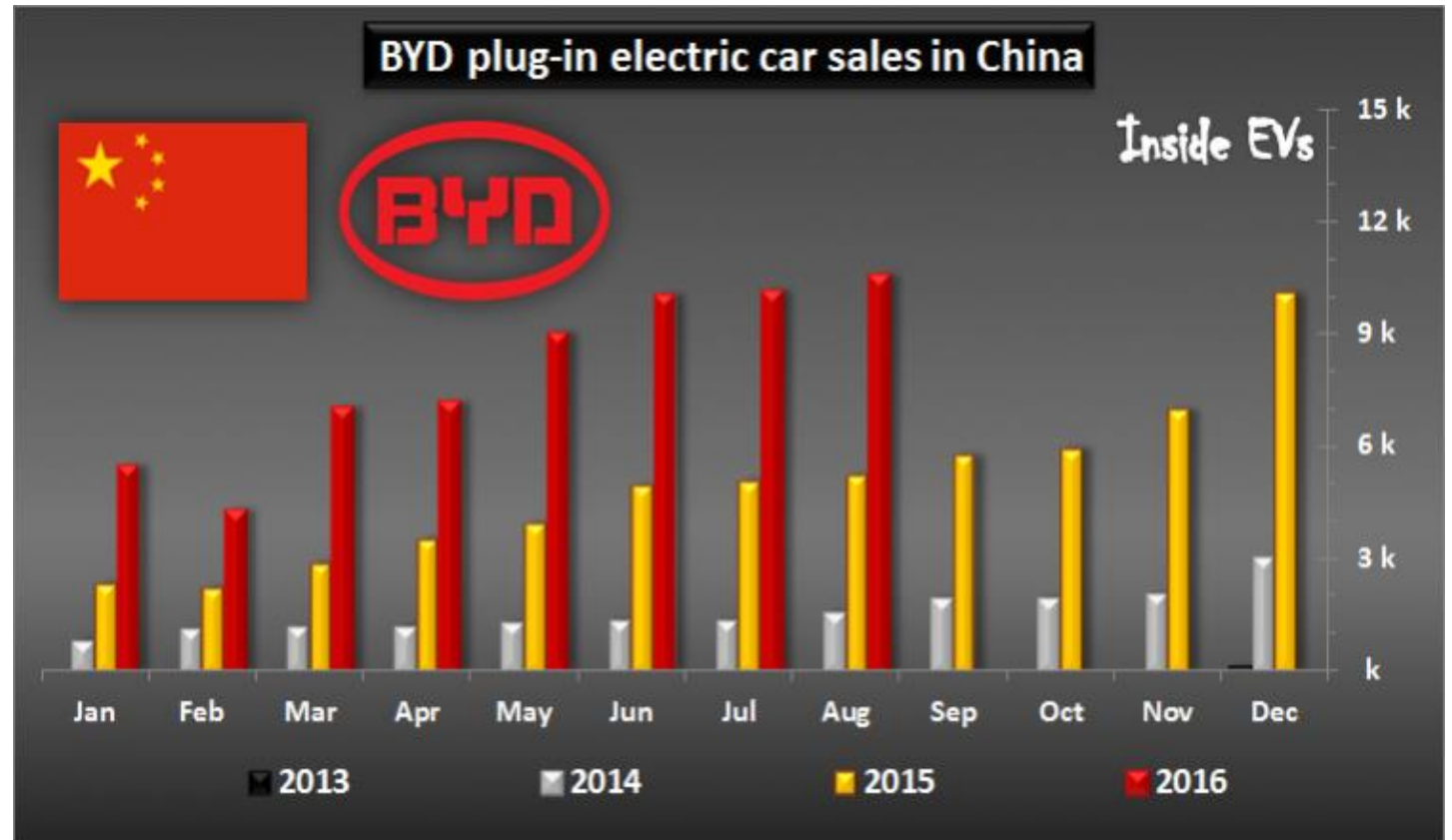
- Demand for electric cars is soaring in smog-choked China. China expects to see a half million electric vehicles (EVs) sold this year.
- Here in the U.S., CNN reports that Tesla is selling twice as many electric cars as it was a year ago! Sales in the third quarter are up 111% year over year.
- Tesla sold a record 24,500 EVs compared with 11,603 sold in the same quarter a year ago. By 2020, Tesla plans to make 1 million EVs.
- The Tesla Model S requires 10,000 times as much lithium as a smartphone.
- Global lithium demand is estimated to grow to about 280,000 tons by 2020 from 170,000 tons in 2015.

China Aim is to Run on Batteries

“Chinese government is still focused on combating air pollution ... It will continue to promote electric vehicles, which means demand for lithium will remain solid.”

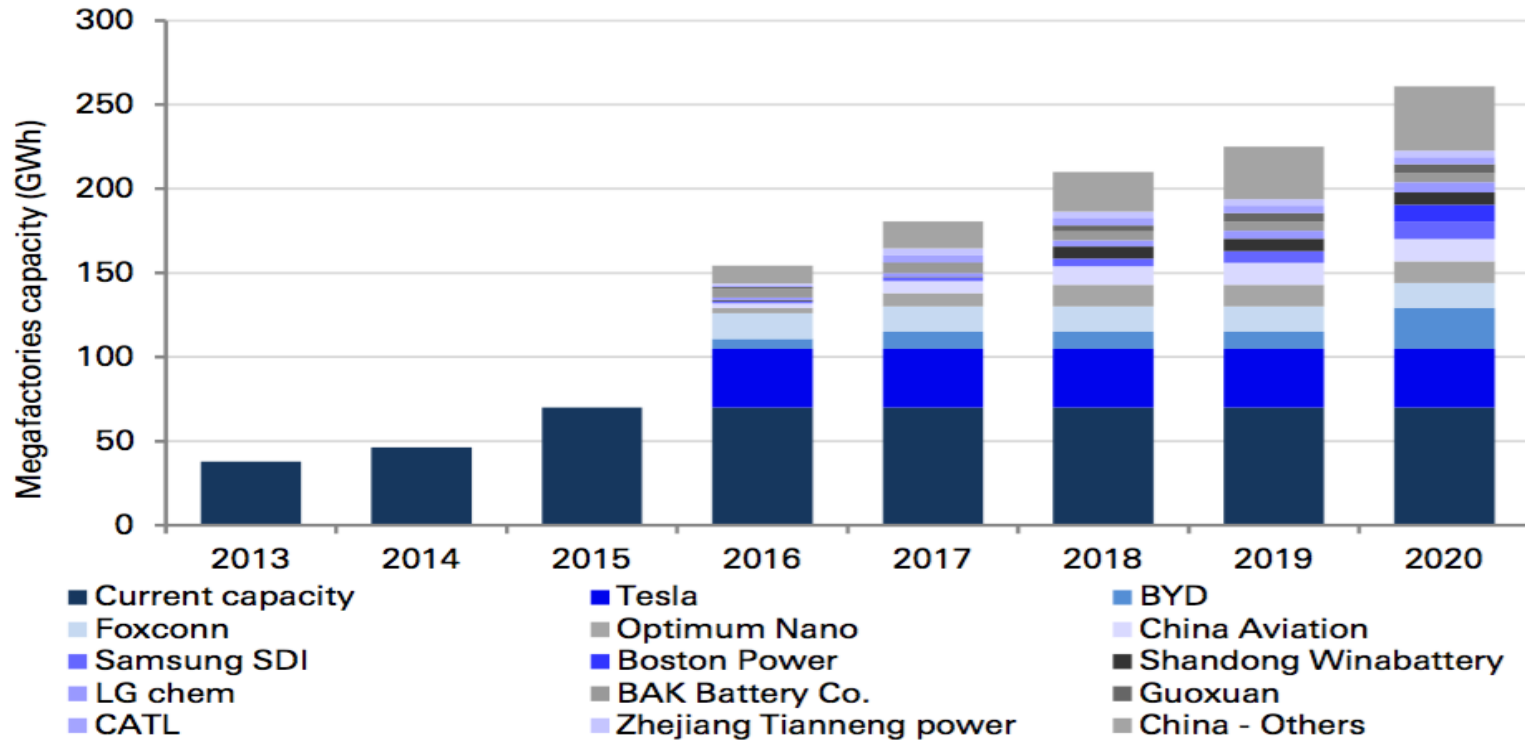
BYD sold more than 10,000 EVs last in May through August. The company is on track to sell more than 100,000 EVs in one year!

Who is a major investor in BYD? (OTCPink: BYDDF)



Battery Demand Forecast

Figure 3: The battery supply chain is rapidly increasing

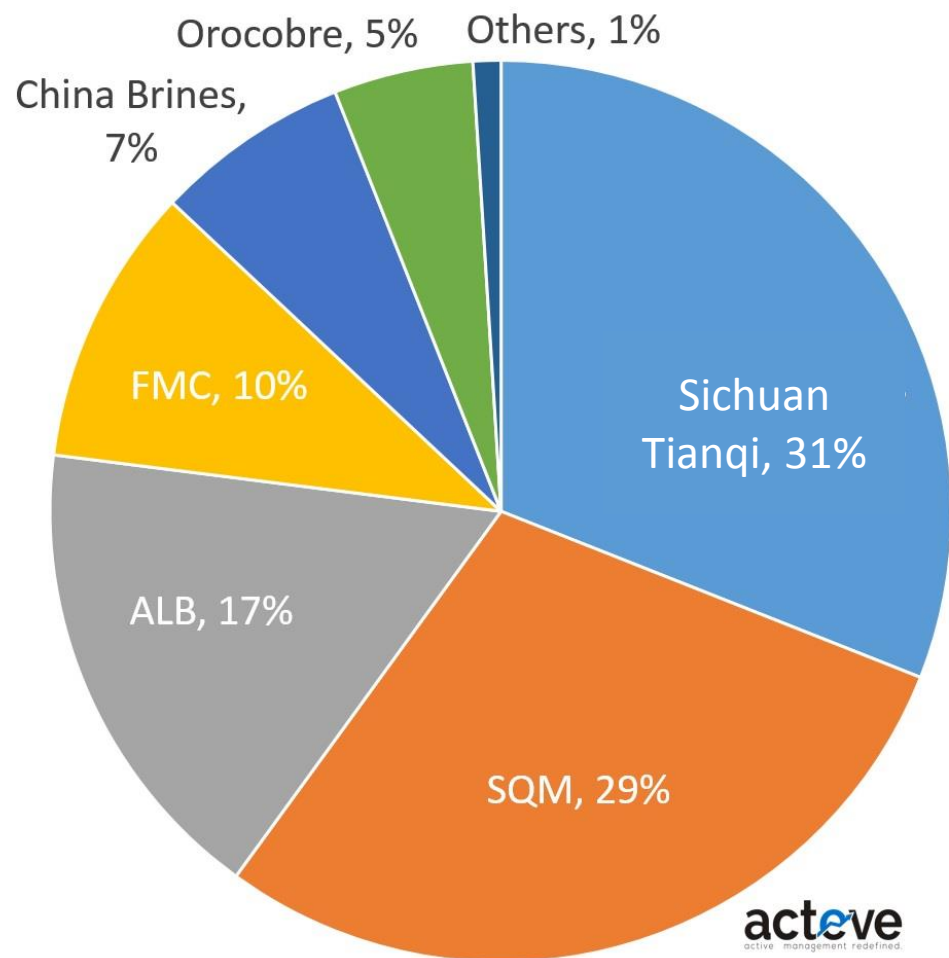


Source: Deutsche Bank, company data

A dozen battery “gigafactories” being built around the world.

Batteries account for 40% of lithium market ... may be 65% in less than a decade.

The 'Big Sisters' of Lithium Supply



- **Albemarle (NYSE:ALB), FMC Corp. (NYSE:FMC), Chile's Sociedad Quimica y Minera de Chile (NYSE:SQM) and China's Sichuan Tianqi** together accounted for 83% of global supply in 2015
- On the other hand, lithium only accounts for <20% of each company's business.

Reminder on OTC-listed stocks

- There are four levels of OTC-listed stocks. From highest to lowest ...
- OTCQX is the highest level of OTC-listed stock. Companies must meet financial standards, demonstrate compliance with U.S. securities laws, be current in their disclosure, and be sponsored by a professional third-party advisor.
- OTCQB is called “The Venture Market,” and is for entrepreneurial and development stage companies that don’t qualify for OTCQX. Current reporting, annual verification and management certification required. Companies must also meet a minimum \$0.01 bid price test and may not be in bankruptcy.

Reminder on OTC-listed stocks (pt 2)

- OTCPink is most everything else. It is for “companies that are there by reasons of default, distress or design.” Foreign companies without U.S. sponsors can end up here.
- Other OTC or “Grey Market” is a security that is not currently traded on the OTCQX, OTCQB or Pink markets. Broker-dealers may not publicly quote these securities because of low investor interest, information availability or regulatory compliance.

The Up-and-Comers

- **Orocobre** (ASX: ORE; OTCPink: OROCF) is building what it says will be the world's largest lithium mine, Olaroz, in Argentina. Olaroz has a nameplate capacity of 1,458 tons per month (17,500 tons per year). CEO says it is currently running at 80% of that. Full production targeted for November. There have been delays.
- **Galaxy Resources** (ASX:GXY; OTCPink: GALXF) Producing from Australian mine, developing other projects in Argentina & Canada.
- **Neometals** (ASX: NMT; OTCPink: RDRUY) owns 13.8% of the Mt. Maron Lithium Project in Australia. It has proprietary "Eli" lithium processing technology. Should start shipping spodumene concentrate this month. May build a downstream chemical processing plant with a partner.

A Strong Field of Lithium Potential

- **Lithium X Energy Corp.** (TSX-V: LIX; OTCQB: LIXXF) has the 50% owned Sal de los Angeles project in the prolific “Lithium Triangle” in Salta Province, Argentina. It is earning an 80% stake in the project. It has partnered with another company to do pilot production now, concurrent with a feasibility study for larger production. This gives the company cash flow. And its Clayton Valley North Project in Nevada is right next to the only producing lithium mine in the U.S.
- **Nemaska Lithium** (TSX:NMX;OTCQX:NMKEF) owns the Whabouchi Spodumene Mine project in Quebec, Canada. Estimated to be the second richest and largest lithium deposit in the world. Production expected Q4 2016.

A Strong Field of Lithium Picks

- **Altura Mining** (ASX: AJM; OTCPink: ALTAF): Developing Pilgangoora lithium project in the Pilbara region of Western Australia. Targeted production in Q3 2017.
- **Pilbara Minerals** (ASX: PLS; Other OTC:PILBF) Its Pilgangoora Project is the second largest spodumene (lithium pyroxene) and tantalite project in the world. It should start producing at the end of next year.
- **Lithium Americas Corp.** (TSX:LAC; OTCQX:LACDF) has large-scale lithium carbonate project at the Salar de Cauchari-Olaro with its 50-50 partner and industry giant, Chile's SQM. Should start production in 2019.

A Strong Field of Lithium Picks

- **Bacanora Minerals** (TSXV:BCN; Other OTC: BCRMF) is producing from a pilot project in Sonora, Mexico. It already has a long-term contract with Tesla. Feasibility study due Q1 2017. Should be a few years to full-scale production.
- **Critical Elements Corp.** (TSX-V: CRE; OTCQX: CRECF) is developing the Rose lithium/tantalum project in Quebec. Production target 2021.
- **Nevada Energy Metals** (TSX-V: BFF; OTCQB: SSMLF) is an explorer/project generator with 7 properties in Nevada's hottest lithium areas. Just spun out one project.
- Nevada explorers **Dajin Resources** (TSX-V: DJI; OTCPink: DJIFF) and **Pure Energy Minerals** (TSX-V: PE; OTCQB: PEMIF).

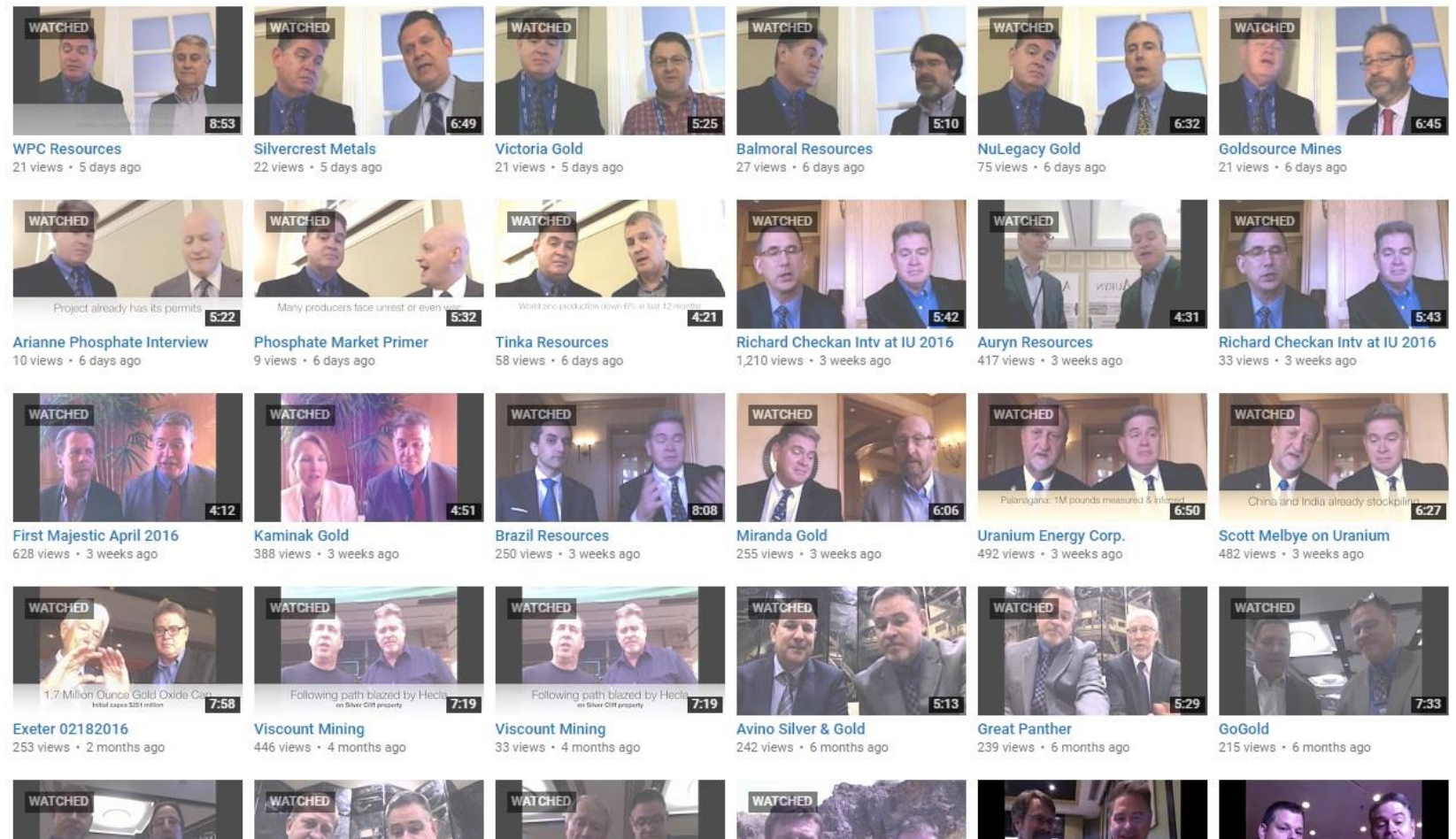


Boots on the Ground Interviews

Go to Youtube and search for my channel to see videos I've filmed with mining CEOs and reps.

<http://bit.ly/29Nfp5C>

There are 152 of them. These small companies are potentially titans of tomorrow.



The future Is Electric ... Be Ready for It



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