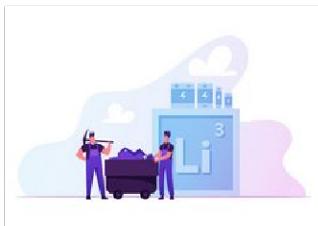


# The Market Will Run Out Of Lithium And Biden's Scheme To Avoid Hydrogen Fuel Cells Is Doomed By Asia's Lithium Blockade

## Summary

- Lithium prices were higher the past month.
- Lithium market news - Global EV battery sales surge as demand for clean cars booms. Global megafactory count hits 211 or 3,791 GWh by ~2030, enough for 70m e-cars pa.
- Lithium company news - Ganfeng offers to buy the balance of Bacanora Lithium shares at 67.5 pence. Orocobre expansion on track. Galaxy Resources Mt Cattlin back producing at full rate.
- I do much more than just articles at Trend Investing: Members get access to model portfolios, regular updates, a chat room, and more. [Learn More »](#)



Welcome to the June 2021 edition of the lithium miner news. June saw lithium prices rise again as demand for lithium surges on the back of booming electric vehicles [EV] sales, particularly in Europe ([15%](#) EV share) and China ([10.0%](#) EV share). The lithium producers are doing very well, with many working on ramping up further production.

The overall market is now starting to grasp the 10-11x lithium demand increase coming this decade. As stated in my latest Trend Investing article, "[Top Ten Lithium Producers As IEA And Others Forecast A Massive Increase In Lithium Demand To 2040](#)", the lithium demand to meet the current global megafactory of 211 (3,791 GWh) by ~2030 would "require 3.033 million tonnes pa of LCE...**8.7x higher** than 2020 levels". Of course the megafactory count is a moving target, and continues to move higher. A new [IEA report](#) forecasts a 15.9x lithium demand increase from 2020 to 2040, see the new chart below in the demand v supply section.

## Lithium spot and contract price news

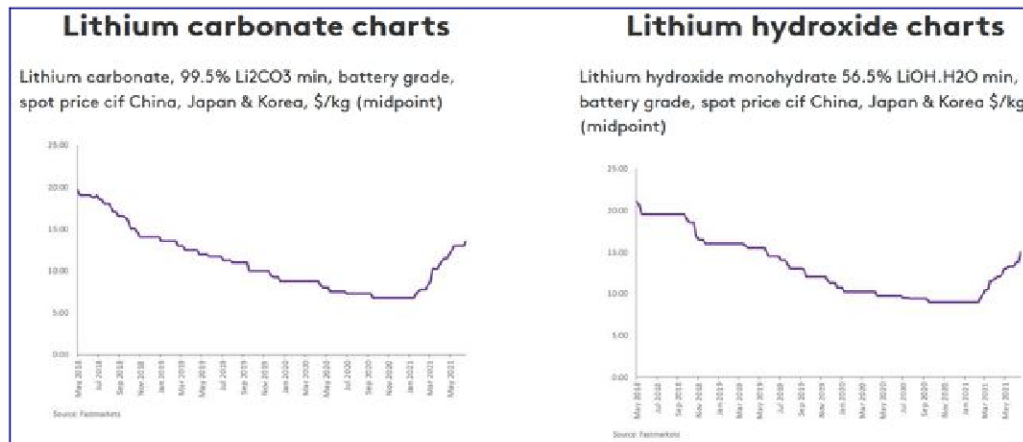
Asian Metal reported during the past 30 days, 99.5% lithium carbonate China spot prices were up [2.41%](#). Lithium hydroxide prices were up [4.42%](#). Spodumene (6% min) prices were up [6.15%](#) over the past month.

Fastmarkets (formerly Metal Bulletin) [reports](#) 99.5% lithium carbonate battery grade spot midpoint prices cif China, Japan & Korea of US\$13.50/kg (US\$13,500/t), and min 56.5% lithium hydroxide battery grade spot midpoint prices cif China, Japan & Korea of US\$15.00/kg (US\$15,000/t).

[Benchmark Mineral Intelligence](#) as of Mid-June reported China lithium carbonate prices of US\$12,875/t (technical grade) to US\$13,800 (battery grade), and for lithium hydroxide prices of US\$13,800/t, and for spodumene-6% no figure was quoted (I have heard US\$620-720/t).

[Metal.com](#) reports lithium spodumene concentrate (6%, CIF China) price of USD 720/mt, as of June 17, 2021.

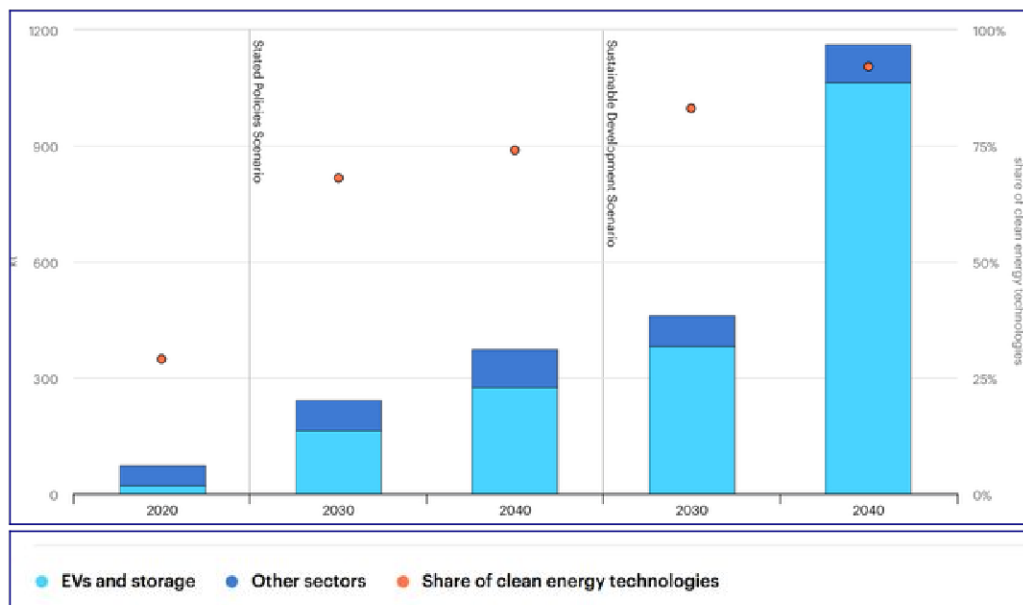
### Lithium carbonate & hydroxide, battery grade, cif China, Japan & Korea



Source: Fastmarkets

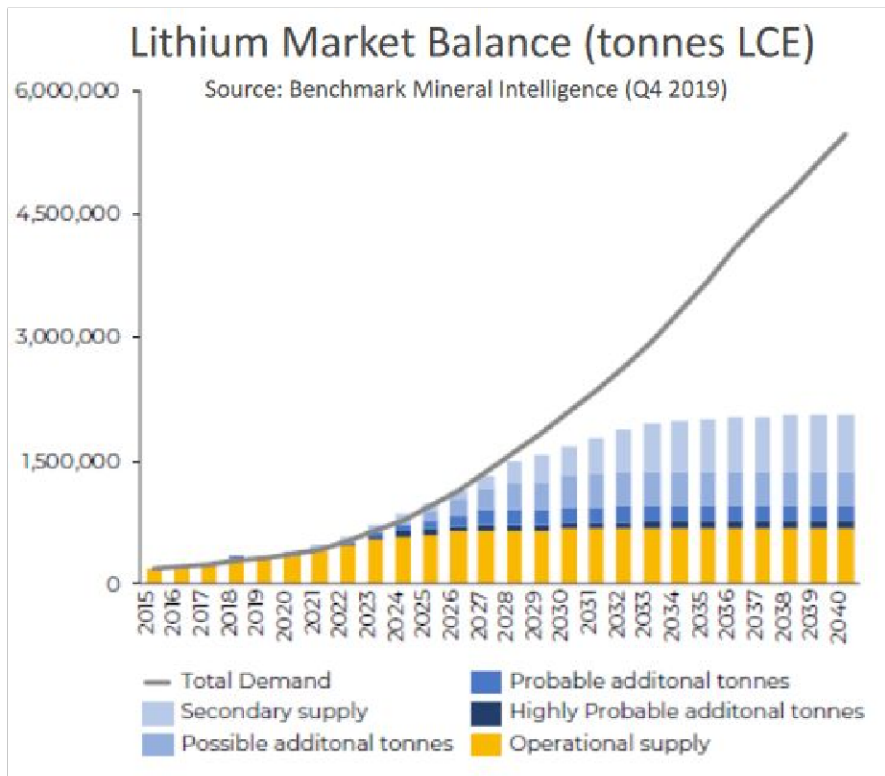
## Lithium demand versus supply outlook

IEA - Total lithium (metal) demand by sector and scenario, 2020-2040 - represents a 15.7x increase in lithium demand to 2040



Source: IEA

### Benchmark Mineral Intelligence lithium demand v supply forecast



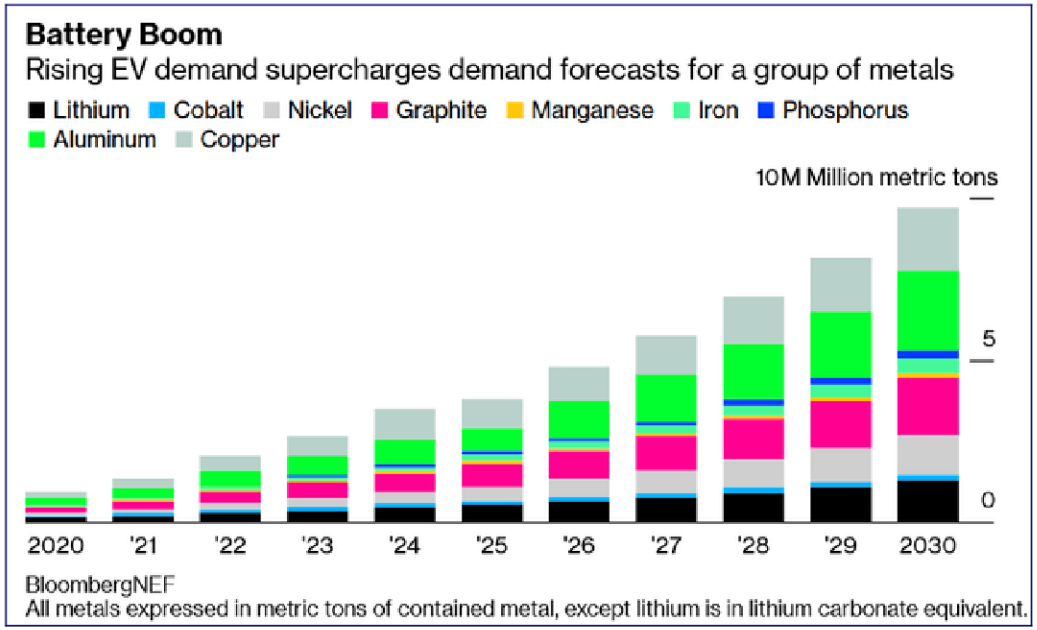
Source: Core Lithium courtesy of Benchmark Mineral Intelligence

### Another lithium demand v supply chart



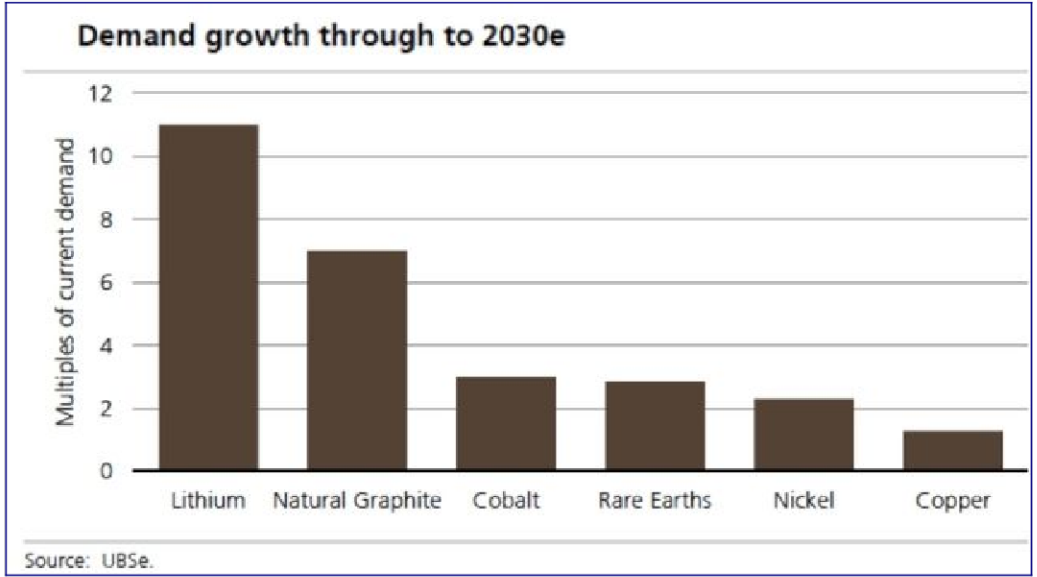
Source: Lithium South company presentation

### BloombergNEF EV metals demand forecast



[Source:](#) BloombergNEF

**UBS's EV metals demand forecast (from Nov. 2020)**



[Source](#)

**UBS forecasts Year battery metals go into deficit**



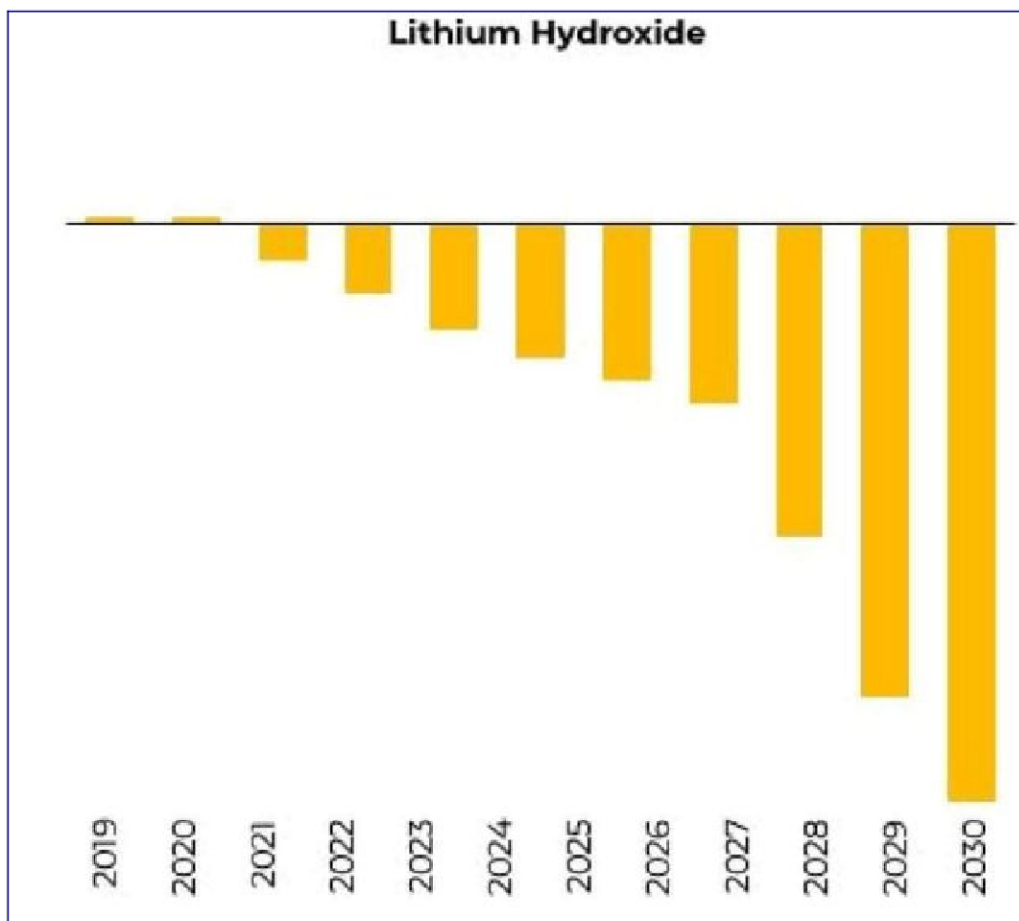
**Figure 11: 2030 market balance projections**

	Deficit Emerges	Size of Deficit in 2030e	Deficit as a % of Market
Cobalt	2023	170kt	42%
Copper	2024	10.9Mt	31%
Lithium	2024	2.1Mt	50%
Natural Graphite	2024	3.7Mt	37%
Nickel	2021	2.2Mt	37%
Rare Earths	2022	48kt	47%

Source: UBSe.

Source: UBS courtesy Carlos Vicens LinkedIn

### BMI forecasts lithium deficits growing this decade



Source: Benchmark Mineral Intelligence (no link as via email)

## Lithium market and battery news

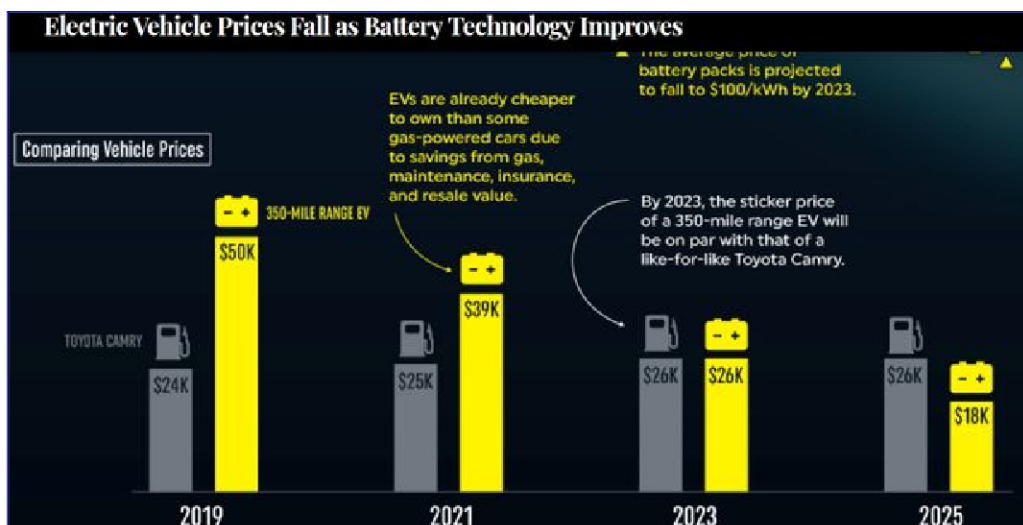
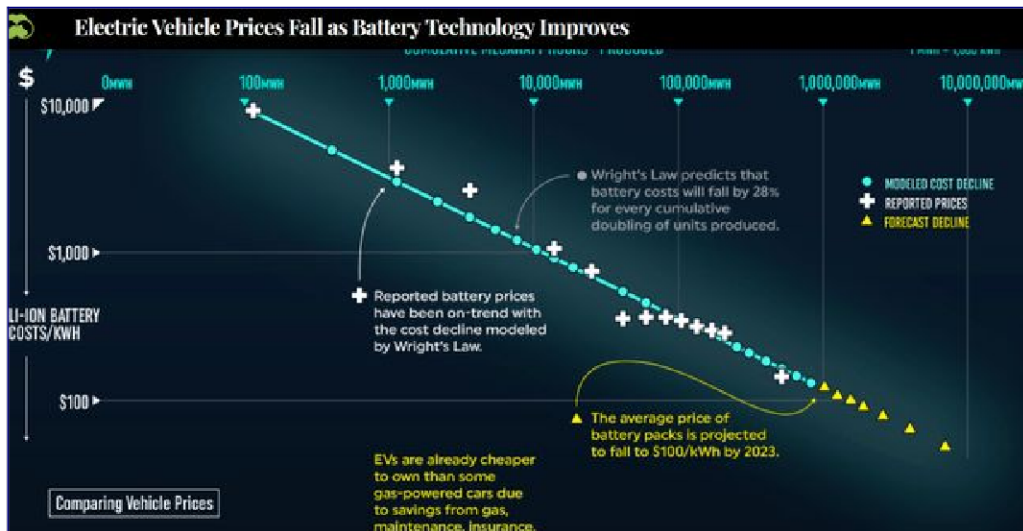
Roskill recently released their ['Lithium Outlook to 2031, 18th Edition'](#), stating:

The lithium industry continues to be at the forefront of the transition to battery power, with demand growth closely linked to vehicle electrification rates, the installation of power storage utilities and the sales of personal transportation equipment and electronics. In Q1

2021, battery grade lithium carbonate prices in China have increased by 72% Q-o-Q to >US\$11,500/t and have continued to rise exceeding US\$13,800/t in May 2021. Lithium hydroxide has followed the same trend, albeit delayed, increasing 32% to US\$9,400/t in Q1 2021 and on further to >US\$12,750/t in May 2021.....Refined lithium supply was reported to have exceeded 350kt LCE in 2020, which is forecast to increase by >20% in 2021 supported by strong demand and higher lithium prices. Lithium hard-rock sources remain the predominant source of lithium feedstock in 2020, forming 53% of feedstock supply, led by Australian spodumene concentrate production. Other sources were largely lithium brine operations in South America, with a small but growing contribution from recycled sources of lithium compounds....By 2031, demand is expected to exceed 2.0Mt LCE from all end-use applications, which will require fundamental changes in the scale and types of lithium projects in operation to meet.

An April 25 Visual Capitalist article I stumbled upon this month [reported](#):

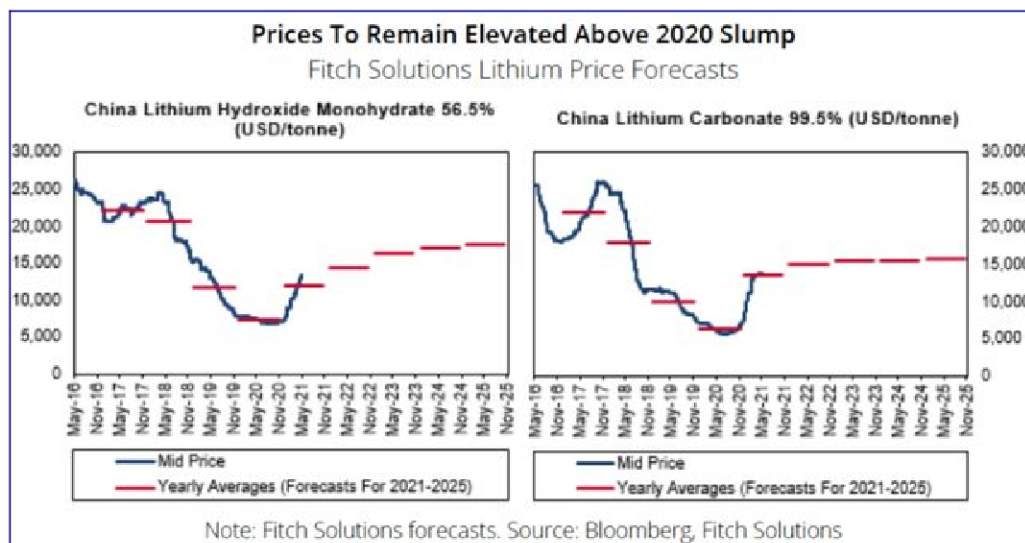
Electric Vehicle prices fall as battery technology improves. **By 2023**, the cost of Li-ion batteries is expected to fall to around \$100/kWh—the price point at which EVs are as cheap to make as gas-powered cars.



[Source](#): Visual Capitalist courtesy Ark Invest

On May 28 Mining.com [reported](#):

Lithium outlook ‘bright as ever’ – report (by Fitch Solutions).....The global acceleration towards decarbonisation, the electrification of vehicles and energy storage continues.....*Fitch* forecasts global lithium production will more than triple from 442,000 tonnes of lithium carbonate-equivalent (LCE) in 2020 to 1.5 million tonnes of LCE by 2030.....*Fitch* forecasts Chinese lithium carbonate 99.5% prices to average \$13,450 per tonne this year and at \$15,025 per tonne in 2022, and Chinese lithium hydroxide monohydrate 56.5% prices to average \$11,950 per tonne in 2021 and \$14,300 per tonne in 2022.



[Source](#): Mining.com courtesy Bloomberg Fitch Solutions

On June 1 Bloomberg Hyperdrive [reported](#):

Global EV battery sales surge as demand for clean cars booms. CATL sales almost quadrupled in first four months of the year. Consumers are embracing electric vehicles as costs tumble. Global electric-vehicle battery sales more than doubled in the first four months of the year as the switch to environmentally-friendly cars gathers pace. Sales of EV batteries rose to 65.9 gigawatt-hours in the January-April period, from 26.8 gigawatt-hours a year earlier, SNE Research said Tuesday.

## Top 10 EV Battery Makers

CATL's sales almost quadrupled in the first four months of 2021

	Jan.-April 2021	Jan.-April 2020	2021 Market Share
CATL	21.4 GWh	5.5 GWh	32.5%
LG Energy Solution	14.2	6.1	21.5
Panasonic	9.7	6.4	14.7
BYD	4.5	1.6	6.9
Samsung SDI	3.5	1.9	5.4
SK Innovation	3.4	1.4	5.1
CALB	1.8	0.3	2.7
AESC	1.3	1.3	2.0
Guoxuan	1.3	0.3	2.0
PEVE	0.8	0.6	1.3

Source: SNE Research

[Source: Bloomberg Hyperdrive](#)

On June 1 Mining News [reported](#):

Volkswagen to 'get actively involved in the raw materials business'. Carmaker Volkswagen is contemplating a spin out of its battery division and sees a need to start sourcing the raw materials itself.....In the battery field, however, we now have to go deeper into the supply chain, in other words to the upstream suppliers of the major suppliers. The decisive factor in battery cells are the raw material costs, their share is around 80 percent. So we have to take care of the raw materials right now. "[We] are looking at the entire process chain from the mine to recycling. **We have to get actively involved in the raw materials business.**

On June 2 Reuters [reported](#):

Tesla to buy more than \$1 billion of Australian battery minerals a year.... given the country's reliable mining industry and responsible production practices....."We expect our spend on Australian minerals to increase to more than \$1 billion per annum for the next few years," Denholm, an Australian, told a Minerals Council of Australia event. Tesla already sources three quarters of its lithium feedstock from Australia and over a third of its nickel, Denham said, without specifying a dollar figure.

On June 8 S&P Global [reported](#):

US unveils plans for supply of batteries, critical minerals, semiconductors.....many of the proposals for the semiconductor and battery sectors will require Congress to sign off on funding decisions, such as allocating at least \$50 billion in investments for domestic semiconductor manufacturing and providing \$50 billion to fund a federal supply chain resilience program. Other concepts floated in the document were similar policies to those launched under former President Donald Trump, including quickly releasing U.S. Energy Department clean energy funding for mines and mineral processing and identifying key domestic locations for mining and processing battery metals such as copper, **lithium** and cobalt.....Excluding legislative requests, the most prominent recommendation the White



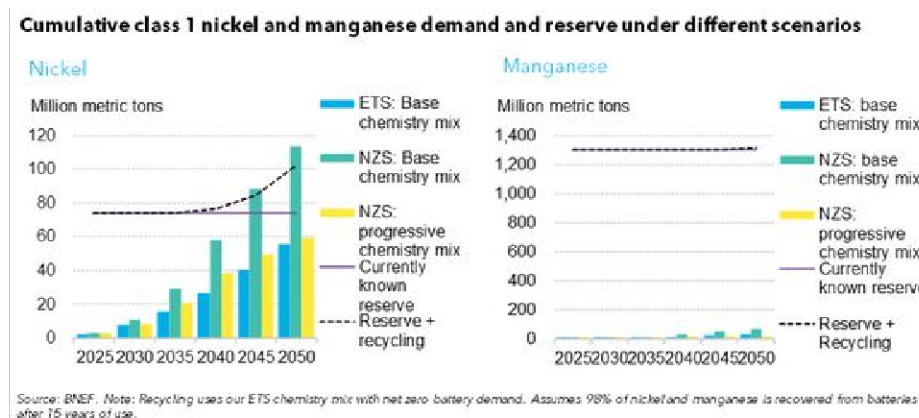
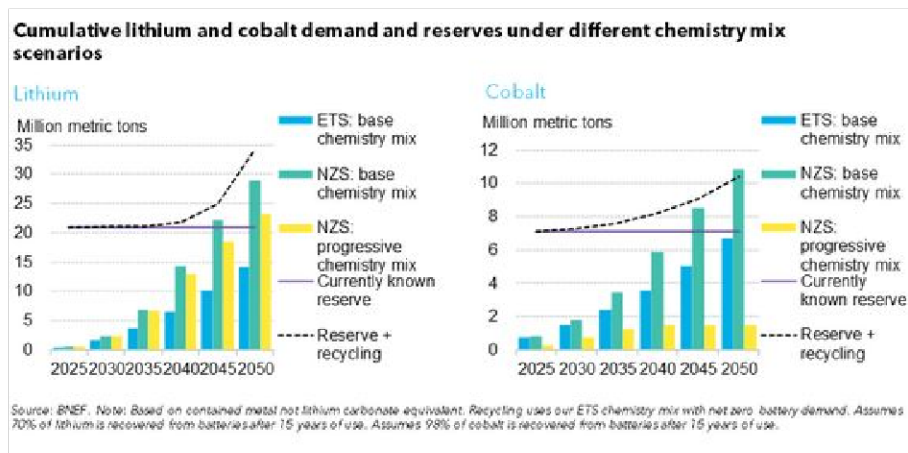
House made addressing the critical and battery mineral sectors was for the U.S. Energy Department Loan Program Office to "expeditiously" review applications from U.S. facilities that are refining and processing critical minerals as well as projects focused on the domestic production of advanced technology vehicle battery cells and packs. The loan program contains approximately \$17 billion in loan authority under the Advanced Technology Vehicles Manufacturing Loan Program.

On June 9 The Korea Times [reported](#):

Samsung SDI reviews setting up battery joint venture project. Samsung SDI CEO Jun Young-hyun said Wednesday that the company is reviewing whether it will establish a rechargeable battery manufacturing plant in the U.S.

The recently released BNEF 2021 EV Outlook report [stated](#):

EV battery demand is also rising quickly, with 2020 shipments 45% higher than in 2019. By 2030, demand grows almost 15-fold to 2,576GWh in the Economic Transition Scenario. Manufacturers have announced plans totaling 2,539GWh of annual capacity due by 2025. China still dominates, but capacity is growing in other regions....Average battery pack prices go below \$100/kWh on a volume-weighted average basis by 2024.....Demand under the Economic Transition Scenario for battery metals, such as lithium itself, cobalt, nickel and manganese, will also soar – the relative increases depending on the chemistries that are chosen. But supply of metals is projected to be adequate to meet that, although more investment will be needed, both in mining and refining.



[Source](#): BNEF 2021 EV outlook

On June 9 Caixing Global [reported](#):

CATL and BYD in talks with Apple for EV battery supply.....(Apple) aims to start production of a passenger vehicle in 2024, Reuters [reported](#).

On June 9 Reuters [reported](#):

Sweden's Northvolt raises \$2.8 bln to supercharge EV battery output. Lithium-ion battery maker Northvolt has raised \$2.75 billion in equity to expand capacity at the factory it is building in northern Sweden to meet increasing demand for electric cars. Northvolt said the private placement, one of the biggest in Europe, was led by four Swedish pension funds and OMERS Capital Markets, alongside existing investors Goldman Sachs and Volkswagen, with other shareholders also participating. The latest fundraising values Northvolt at \$11.75 billion, a source familiar with the matter said.

On June 11 FREYR LinkedIn [reported](#):



FREYR in negotiations for building battery production facilities in the United States! As we move towards our business combination with Alussa Energy and the NYSE listing, we are disclosing some information related to an ongoing process: FREYR is in negotiations with a major multinational industrial conglomerate (the JV Partner) for a potential joint venture to be formed with the purpose of preparing a project to build battery production in North America at a targeted scale at least 50 GWh in annualized battery cell production by 2030.....FREYR has strong U.S. bonds through our technology partner 24M Technologies and the upcoming business combination with Alussa Energy and NYSE listing.

On June 18 Benchmark Mineral Intelligence [released](#) (video): "Building the UK's lithium ion economy; Benchmark's G7 presentation."

The global lithium ion battery megafactory count is **now at 211**, up from 142 a year ago, and 84 two years ago. The numbers refer to existing and committed projects. The figure of **3,791 GWh** is enough annual capacity to build about 70 million electric cars pa (based on ~54 GWh battery size). Regionally the 3,791 GWh capacity is 69.6% China, 15.9% Europe, 10.8% America, and 3.3% Asia.



**The global battery arms race continues**

	May 2019	May 2020	May 2021
 <b>No. of plants</b>	84	142	211
 <b>Total capacity</b>	1859.0 GWh	2551.1 GWh	3791.9 GWh

Source: Benchmark Minerals Lithium Ion Battery Megafactory Assessment

Source: Benchmark Mineral Intelligence

## Lithium miner news

### Albemarle (NYSE:[ALB](#))

On June 1, Albemarle [announced](#):

Albemarle completes sale of fine chemistry services business to W. R. Grace & Co.....for approximately \$570 million, consisting of \$300 million in cash, and the issuance to Albemarle of preferred equity of a W. R. Grace & Co.....

On June 2, Albemarle [announced](#): "Albemarle releases sustainability report and environmental target commitments."

Upcoming catalysts:

H2 2021 - 50ktpa Kemerton Lithium Hydroxide Plant converter in WA due for completion (60:40 joint venture between Albemarle and Mineral Resources Limited).

### Sociedad Quimica y Minera S.A. (NYSE:[SQM](#))

On June 15, SQM [announced](#): "SQM ratifies its commitment to sustainability in report on its 2020 performance."

Investors can read the company's latest presentation [here](#).

### Jiangxi Ganfeng Lithium [SHE:002460] [HK: 1772] (GNENF), Mineral Resources [ASX:MIN] ([OTCPK:MALRF](#)), International Lithium Corp. [TSXV:ILC] ([OTCPK:ILHMF](#))

On June 1, International Lithium Corp. [announced](#):

International Lithium Corp. drilling returns 2.69% lithium oxide (11,900ppm), 4210ppm rubidium and 997ppm caesium at Raleigh Lake Lithium Project, Ontario, Canada.

On June 3, Jiangxi Ganfeng Lithium [announced](#):

PUSU extension. Bacanora Independent Directors and Ganfeng International Trading (Shanghai) Limited ("Ganfeng") announced that Bacanora Lithium PLC ("Bacanora") and Ganfeng had entered into an agreement regarding the terms of a possible cash offer by Ganfeng for the entire issued and to be issued share capital of Bacanora, other than that which it already owns, at a price of 67.5 pence per Bacanora Share (the "Offer Price") (the "Possible Offer"). The Possible Offer remains subject to a number of pre-conditions as set out in the 6 May 2021 announcement.

On June 11 Mining.com [reported](#):

Ganfeng Lithium exercises participation right in Sal de la Puna. Ganfeng Lithium has exercised its project participation right to acquire a 35% interest in the Sal de la Puna [SDLP] lithium brine project, in Argentina, Arena Minerals reported on Thursday. The project covers 11,000 hectares of the Pastos Grandes basin. The Chinese lithium producer will fund \$7.79 million of the acquisition costs. Samples from a 2019 pumping test averaged 532 mg/l lithium, with a Mg/Li of 4.8. Ganfeng Lithium said on Friday it would sell around HK\$4.9 billion (\$630 million) in new shares to boost capacity and fund potential investments. The Chinese company in March announced an ambitious plan to increase its lithium production capacity roughly fivefold to 600,000 tonnes of lithium carbonate equivalent a year

### **(Chengdu) Tianqi Lithium Industries Inc. [SHE:002466]**

On June 22, Reuters, [reported](#):

China's Tianqi Lithium inches nearer to Australian stake sale close. China's Tianqi Lithium [002466.SZ] said on Monday it would close the sale of a stake in its Australian operations by June 30 after winning conditional approval on restructuring from Canberra and agreeing to split a possible tax bill with buyer IGO Ltd [IGO.AX].

### **Livent Corp. (LTHM)[GR:8LV] - Spun out from FMC Corp. (NYSE:FMC)**

On June 10, Livent Corp. [announced](#):

Livent announces pricing of offering of 13,000,000 shares of common Stock.....at a public offering price of \$17.50 per share....

### **Orocobre [ASX:ORE] [TSX:ORL] (OTCPK:OROCE)**

On May 24, Orocobre [announced](#):

Quarterly report of operations for the period ended 31 March 2021. Olaroz Lithium Facility (Olaroz) operations increased the Gross Cash Margin more than \$1,800/tonne with the sales price up more than 50%. Costs remained near all-time lows despite a much greater proportion of sales being battery grade material which has higher production costs.....Naraha Lithium Hydroxide Plant construction has continued throughout the period and is now approximately 94% complete.

### **Ponds under construction for Olaroz Stage 2**



**New carbonation plant & soda ash facility footings for Olaroz Stage 2**



**Naraha Lithium Hydroxide Plant is 94% complete**



[Source](#)

Upcoming catalysts include:

- Mid 2021 - Proposed merger with Galaxy Resources.
- Q1 2022 - Naraha lithium hydroxide plant (10ktpa) commissioning (ORE share is 75%).
- H1 2022 - Olaroz Stage 2 commissioning followed by a 2 year ramp to 25ktpa. When combined with Stage 1 total capacity will be 42.5ktpa.

You can read the latest investor presentation [here](#).

**Galaxy Resources [ASX:GXY] (OTCPK:GALXF)**

On June 3, Galaxy Resources [announced](#): "Mt Cattlin update." Highlights include:



- "Mt Cattlin is producing at full rate with over 40,000 dry metric tonnes (“dmt”) of spodumene concentrate produced in Q2 so far.
- 33,500 wet metric tonnes (“wmt”) shipped in May and pricing for Q3 scheduled shipment likely to exceed US\$750/ mt CIF.
- Infill drilling at the 2NW deposit undertaken to increase confidence in the deposit and to optimise the mine plan.
- Acceleration of 2NW mining with first phase of pre-strip to commence in H2 2021.
- Updated Mineral Resource and Ore Reserve statement prepared as a result of drilling information and depletion at Q1 2021.
- Revised Mt Cattlin Mineral Resource Estimate of 11.0Mt @ 1.2% Li<sub>2</sub>O and 151 ppm Ta<sub>2</sub>O<sub>5</sub>.
- Revised Mt Cattlin Ore Reserve Estimate of 8.0Mt @ 1.04% Li<sub>2</sub>O and 139 ppm Ta<sub>2</sub>O<sub>5</sub>."

### Mt Cattlin back producing at full production rate

#### Mt Cattlin

**2020 production targets achieved**

- | **108,658 dmt**  
Spodumene produced
- | **5.95% U<sub>2</sub>O**  
Grade of concentrate produced
- | **US\$ 447/ tonne**  
Cash cost per tonne produced

- Successfully operated in campaign mode at 50-55% of capacity
- Ore sorter circuit enabled consumption of stockpiled ore
- Record quarterly sales in December
- FY2020 concentrate shipped 151kt dmt



### Sal de Vida early stage construction is underway

#### Stage 1 early construction underway

Targeting pond construction by late 2021 and first brine production in late 2022





**Piloting operations**

- Pilot ponds and plant commissioned in 2020 and successfully produced LC
- Battery grade quality achieved and locked in for Stage 1
- Continued piloting in 2021 to fine tune operational parameters and conduct staff training
- Generating further battery grade samples for customer testing



**Production well drilling**

- 4 out of 8 production wells drilled and cased
- First 2 wells drilled to greater depth ~300m and yielded high grade U<sub>2</sub> ~930 ppm<sup>1</sup>
- Resource & Reserve increased by 27% and 13% respectively<sup>1</sup>
- Results from remaining wells will be incorporated into a revised Resource & Reserve statement in late 2021

<sup>1</sup> Refer to Appendix and ASX announcement: Sal de Vida Resource & Reserve Update Released on 14 April 2021



**Delivery Activities**

- Tendering for material supply, installation and earthworks
- Accommodation camp upgrade and key roads completed in May
- Detailed design for plant and non process infrastructure underway





Source: Company presentation May 2021

Upcoming catalysts include:

- Mid 2021 - Proposed merger with Orocobre.
- 2021 - Construction progressing at SDV.

Investors can read my recent article "[Galaxy Resources Plan To Be A 100,000tpa Lithium Producer By 2025](#)", and my CEO interview [here](#), and the latest company presentation [here](#).

### **Pilbara Minerals [ASX:PLS] (OTC:PILBF)**

On June 16, Pilbara Minerals [announced](#): "Towards net zero emissions lithium."

On June 23 Pilbara Minerals [announced](#): "Further exceptional drilling results at Pilgangoora. Strategic exploration and resource extensional drilling program adjacent to the historical Altura tenement boundary identifies further defined zones of high-grade pegmatite mineralisation."

- "10,158 drill metres completed with an extension to the initial program currently underway.
- Further promising assay results received for the first 32 Reverse Circulation holes of the 62-hole program, with select new intercepts indicating:
- 20m@ 1.83% Li<sub>2</sub>O and 36 ppm Ta<sub>2</sub>O<sub>5</sub> from 28m (PLS1328).....
- Drilling continues, with an update to the Pilgangoora Project Mineral Resource on track for delivery in the September Quarter 2021."

Pilbara Minerals now has two spodumene mines and plants - Pilgan (producing, capacity 330ktpa and increasing each year to ~800-850ktpa) & Ngungaju Plant (care & maintenance from the Altura Mining takeover) - potential to reach a combined total of 1Mtpa +



[Source](#): Company presentation - May 2021

Upcoming catalysts:

- 2022 - Possible Stage 2 commissioning timing to depend on market demand.
- ?2022/23--> Possible plans for a lithium hydroxide facility JV with Calix.

Investors can read my article "[An Update On Pilbara Minerals](#)", and an interview [here](#).

**AMG Advanced Metallurgical Group NV [NA:AMG] [GR:ADG] ([OTCPK:AMVME](#))**

No news for the month.

You can view the latest company presentation [here](#).

Upcoming catalysts:

2021 - Progress on lithium projects in Zeitz, Germany and in Zanesville, Ohio, both in the planning stage.

2021--> - Stage 2 production at Mibra Lithium-Tantalum mine (additional 40ktpa) planned.

2023--> Lithium hydroxide facility in Bitterfeld-Wolfen Germany with production set to begin [in 2023](#).

**Lithium Americas [TSX:LAC] ([LAC](#))**

On May 28, Lithium Americas [announced](#): "Lithium Americas and Ganfeng Lithium commence expansion planning at Caucharí-Olaroz." Highlights include:

Stage 2 Expansion Plan - The Caucharí-Olaroz Stage 2 expansion is targeting the following development parameters:

- "Production capacity of at least 20,000 tpa LCE to commence in 2025.
- Construction commencing in H2 2022, following the commissioning and start-up of the initial 40,000 tpa operation ("Stage 1").
- Infrastructure additions to support long-term expansions beyond Stage 2."

Stage 1 Construction Update - Construction on the initial 40,000 tpa Stage 1 operation remains on track for first production in mid-2022.

- "There are currently over 1,000 workers on site, following the completion of additional camp capacity to ensure compliance with strict COVID-19 health and safety protocols. No positive cases of COVID-19 have been reported at site in eight months.
- In Q2 2021, senior members of Ganfeng Lithium's commissioning and construction team arrived in Argentina to assist the project through to start-up. Ganfeng Lithium's team brings recent experience constructing and commissioning lithium carbonate plants in China.
- All major equipment and the majority of bulk materials have been delivered to site, reducing risk of supply chain delays.
- The evaporation ponds are well advanced with sufficient brine inventory to support production ramp up.
- Mechanical construction of the lime plant is completed and the piping work to connect the lime line is more than 95% complete."



## LAC/Ganfeng Olaroz project construction progressing on schedule for a mid 2022 production start



[Source](#)

### CAUCHARÍ-OLARÓZ CONSTRUCTION UPDATE

On track for production by mid-2022

- Experienced senior members of Ganfeng Lithium's commissioning and construction team arrived in Q2 2021 to assist through to start-up
- All major equipment and majority of bulk materials have been delivered to site
- Construction of the lime plant is complete
- Solar evaporation ponds are well advanced with sufficient brine inventory to support production ramp up



The complex block contains a title, a status update, a list of key milestones, and seven small images illustrating different parts of the construction site. The images are labeled: 'Project Site' (top right), 'Solid/Liquid Separator' (middle left), 'Thickener' (middle center), 'Solvent Extraction' (middle right), 'Dilution Water' (bottom left), 'Project Site' (bottom center), and 'KCl' (bottom right).

[Source](#): Company investor presentation - June 2021

Upcoming catalysts:

- 2021 - Cauchari-Olaroz plant construction.
- 2021 - Thacker Pass DFS.
- Early 2022 - Thacker Pass construction planned to commence.
- Mid 2022 - Cauchari-Olaroz lithium production to commence and ramp to 40ktpa. From 2025 a Stage 2 20ktpa+ expansion planned.

- 2023 - Possible lithium clay producer from Thacker Pass Nevada (full ramp by 2026).

NB: LAC owns 49% of the Cauchari-Olaroz project and partners with Ganfeng Lithium (51%).

Investors can read my article "[An Update On Lithium Americas.](#)"

**Global X Lithium & Battery Tech ETF (NYSEARCA:[LIT](#)) - Price = [US\\$70.25](#).**

The LIT fund was significantly higher in June. The current PE is [30.99](#). My updated model forecast is for lithium demand to increase 4.1 fold between end 2019 and end 2025 to ~1.2m tpa, and 10.0x this decade to reach ~3.5m tpa by 2030.

Note: A Nov. 2020 [UBS forecast](#) is for "lithium demand to lift 11-fold from ~400kt in 2021 through to 2030."

### LIT Fund 10 year price history



[Source](#): Seeking Alpha

[The Amplify Lithium & Battery Technology ETF \(BATT\)](#) is currently on a PE of [32.7](#). It is a broad based fund also worth considering. On their website they [state](#): "BATT is a portfolio of companies generating significant revenue from the development, production and use of lithium battery technology, including: 1) battery storage solutions, 2) battery metals & materials, and 3) electric vehicles. BATT seeks investment results that correspond generally to the [EQM Lithium & Battery Technology Index \(BATTIDX\)](#)."

## Conclusion

June saw lithium prices rise again the past month.

Highlights for the month were:

- Roskill - "By 2031, demand is expected to exceed 2.0Mt LCE from all end-use applications, which will require fundamental changes in the scale and types of lithium projects in operation to meet."
- EV prices fall as battery technology improves, ICE/EV parity forecast by 2023.
- Global EV battery sales surge as demand for clean cars booms.
- Volkswagen to 'get actively involved in the raw materials business'.
- Tesla to buy more than \$1 billion of Australian battery minerals a year.

- US unveils plans for supply of batteries, critical minerals, semiconductors.
- CATL and BYD in talks with Apple for EV battery supply.....(Apple) aims to start production of a passenger vehicle in 2024, Reuters [reported](#).
- Sweden's Northvolt raises \$2.8 bln to supercharge EV battery output.
- FREYR ([ALUS](#)) in negotiations for building battery production facilities in the United States
- The global lithium ion battery megafactory count is now at 211 (3,791 GWh), up from 142 a year ago, and 84 two years ago.
- Ganfeng Lithium exercises participation right in Sal de la Puna. Ganfeng offers to buy the balance of Bacanora Lithium shares at 67.5 pence.
- Orocobre - Stage 2 Olaroz making good progress and Naraha Lithium Hydroxide Plant construction 94% complete.
- Galaxy Resources Mt Cattlin is back producing at full rate.
- Pilbara Minerals further exceptional drilling results at Pilgangoora.
- Lithium Americas construction on the initial 40,000 tpa Stage 1 operation remains on track for first production in mid-2022. Plans for a 20,000+ tpa Stage 2.