Top 3 best valued lithium juniors, as lithium prices near a bottom

written by InvestorNews | December 13, 2023 Following an incredible 2022, the lithium sector has had a horrible 2023; however soon the pain should be over. The China lithium carbonate spot price is down 82.5% in the past year and is now below the marginal cost of production, meaning the lithium price fall should end very soon. This assumes the marginal cost producers continue to stop production and that EV sales continue to grow in 2024.

Lithium Royalty Corp.: Poised for Success as More Affiliates Reach Production

written by InvestorNews | December 13, 2023 Lithium demand continues to surge each year, despite some year on year ("YoY') volatility in demand and prices. In 2021 the IEA forecast lithium demand to increase from 13x to 42x from 2020 to 2040. Trend Investing forecasts lithium demand to increase 35x from 2020 to 2037 as we move to a 100% electric vehicle world. Rio Tinto Group (NYSE: RIO | LSE: RIO) forecasts that the world will need 60 new lithium mines the size of Jadar. BMI forecasts that we will need 78 new lithium mines from 2022 to 2035.

Jack Lifton on how the lithium shortage makes the EV dream — a nightmare.

written by InvestorNews | December 13, 2023

In this video, <u>Critical Minerals Institute</u>'s (CMI) Co-founder and Chairman Jack Lifton talks about the growing lithium demand from the electric vehicle industry. Discussing the current state of domestic American lithium supply, Jack explains why the target outlined by President Biden of 50% electric vehicle sales share in 2030 with 100% domestic content is impossible to achieve.

Speaking on the United States' Inflation Reduction Act, Jack discusses how the automotive industry has failed to accept the problem of an adequate domestic American lithium supply chain. He goes on to say, "If it is not even possible to buy enough lithium to make enough batteries in the United States for half of our own production, what about the rest of the non-Chinese world?"

To access the full episode, <u>click here</u>

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About The Critical Minerals Institute

The <u>Critical Mineral Institute</u> (CMI) is an international organization for companies and professionals focused on battery materials, technology metals, defense metals, ESG technologies

and practices, the general EV market, and the use of critical minerals for energy and alternative energy production. Offering an online site that features job opportunities that range from consulting roles to Advisory Board positions, the CMI offers a wide range of B2B service solutions. Also offering online and in-person events, the CMI is designed for education, collaboration, and to provide professional opportunities to meet the critical minerals supply chain challenges.

A look at the lithium market leaders as EV manufacturers face generational challenge to keep factories running

written by Matt Bohlsen | December 13, 2023 Investors are starting to realize the lithium boom is likely to last the next 1-2 decades. EV manufacturers are now facing a generational challenge to secure enough lithium supply to keep their factories running.

In 2021, the <u>IEA forecast</u> that the world will need **13-42x more lithium by 2040 (from 2020 levels)**. The 13x increase was based on the stated policies track (as of 2021) and the 42x increase was based on the sustainable development scenario (we move rapidly towards a world of zero emissions). Just this past week <u>Benchmark Mineral Intelligence forecast</u>: "Lithium has to scale **twenty times by 2050** as automakers face generational challenge". This was **based on 2021 levels**. Our exclusive research at <u>Trend</u> <u>Investing forecast</u> a **35x increase** in lithium demand **from 2020 to 2037**.

As of October 2022, the best positioned EV manufacturers are Tesla & BYD Co, and perhaps Ford & GM. These companies have made good preparations including multiple lithium off-take agreements and investments in the lithium companies or projects. Examples are Ford's July 2022 <u>off-take and A\$300 million debt facility</u> <u>agreement</u> with Australian lithium junior Liontown Resources Limited (ASX: LTR), and the August 2022 <u>GM off-take and US\$198</u> <u>million pre-payment</u> deal with Livent. Both these recent deals show the new reality of what it takes to secure future lithium supplies.

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Tesla Model 3 – A global leader in electric car sales the past 5 years

Who are the lithium leaders?

The lithium leaders are those lithium companies that are currently the leading producers and who have potential to significantly ramp their lithium production this decade.

Sociedad Quimica y Minera S.A. (NYSE: SQM) – A Chile company with a 51% share of the world's best lithium brine mine at the Atacama Salar in Chile. They also own 50% share of the Mt Holland spodumene project (with Wesfarmers) set to begin production in <u>04</u>, <u>2023</u>. SQM is targeting lithium carbonate equivalent ("LCE") sales in 2022 of <u>150,000t</u>, 210,000t in 2023, and 240,000t in 2024.

Albemarle Corporation (NYSE: ALB) – An American company often seen as the lithium leader. They own 49% of the Atacama Mine (with SQM JV) and 49% of the world's best spodumene mine Greenbushes in Australia. They also have a 50% JV ownership (with Mineral Resources) of the massive Wodgina Mine in Western Australia, which recently began producing again with plans for a large ramp ahead. The JV also has a recently completed hydroxide conversion plant (60% ALB; 40% MIN) in Kemerton, WA. Albemarle's production is targeted to increase from $\sim 130,000t$ LCE in 2022 to $\sim 220,000t$ LCE in 2025.

Ganfeng Lithium Group Co., Ltd. (SHE: 002460 | HK: 1772 | OTC: GNENF) – A Chinese lithium company focused on lithium refining, however now has multiple projects around the world including 49% of Mt Marion in WA and a 50% JV with Lithium Americas at the massive Cauchari-Olaroz project in Argentina due to start production soon. Ganfeng aims to boost production from ~90,000t in 2022 to 200,000tpa by 2025.

The other leaders with large projects include Pilbara Minerals Limited (ASX: PLS) with their massive Pilgangoora Mine in Western Australia (~90,000tpa in 2022/23), Mineral Resources Limited (ASX: MIN), Tianqi Lithium Corporation, Livent Corporation (NYSE: LTHM) and Allkem Limited (ASX: AKE | TSX: AKE).

Together the names above represent the biggest eight lithium producers and they produce most of the world's lithium today.

Some others such as AMG Advanced Metallurgical Group NV and a few smaller Chinese producers make up the balance of global lithium production.

The next or near term producers set to come online include (in rough order) Argosy Minerals Limited (ASX: AGY), Lithium Americas Corp. (NYSE: LAC | TSX: LAC), Core Lithium Ltd (ASX: CXO), - SIGMA Lithium Corporation (NASDAQ: SGML | TSXV: SGML), Sayona Mining Limited (ASX: SYA | OTCQB: SYAXF)/Piedmont Lithium (Nasdaq: PLL | ASX: PLL) (NAL Project in Canada), and Liontown Resources Limited (ASX: LTR).

There are also a bunch of other very promising lithium junior miners with potential to become new lithium producers after 2025. Three of the biggest projects could be in Canada with Critical Elements Lithium Corporation (TSXV: CRE | OTCQX: CRECF), Patriot Battery Metals Inc. (TSXV: PMET | OTCQB: PMETF) and Frontier Lithium Inc. (TSXV: FL | OTCQX: LITOF).

Closing remarks

It may seem like there is a lot of lithium supply coming online in the next few years, but of course demand is rising faster than supply, assuming EV sales growth continues at a 50%+ growth rate as expected.

Could there be some periods of short term oversupply? Yes, but only likely if EV sales falter. Either way the decade or two ahead looks set to be a very exciting time for lithium investors and the lithium leaders discussed in this article.

Disclosure: The author is long Tesla, BYD Co and most of the lithium stocks mentioned in the article.

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Lithium demand is poised to create a supercycle of supply deficits and lasting high prices

written by Matt Bohlsen | December 13, 2023

The past two years has seen lithium prices rise about ten times from US\$7,000/t to US\$70,000/t both for lithium hydroxide and carbonate. Meanwhile, the lithium spodumene price has enjoyed a similar 10 fold increase from US\$500/t to US\$5,000/t. This has been caused by EV sales booming, resulting in a huge demand wave for lithium that literally swamped the small lithium industry.

The lithium carbonate price has risen as EV demand has taken off - Currently at CNY 510,500/t (~US\$70,000/t)

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<u>Source</u>: Trading Economics

What's next for the lithium sector?

Conventional commodity booms typically follow a rather fast boom and bust cycle as the cure for deficits is high prices, thereby encouraging new supply. However, every once in a while we get a commodity supercycle. That's where the demand wave is so big that it takes as long as a decade for supply to eventually catch up or for demand to subside. New mines can take 5-10 years to come online, yet a new EV and battery factory can be built in 1-2 years.

In the case of lithium, many EV metals experts agree we have only just entered a lithium supercycle. To better understand the size of the demand wave investors need to get a feel for how much lithium will be needed to feed the electric vehicle boom.

A typical 50kWh battery electric car (roughly the global average size in 2022) requires about 45kgs of lithium carbonate equivalent. In 2022 global plugin electric car sales look set to grow by at least 50%+ year over year. Given 2021 global plugin electric car sales were 6.75 million, 2022 will likely end up at about 10.125 million, or 3.375 million additional new electric cars. This means lithium demand, only from plugin electric cars, will increase by roughly 152,000 tonnes ("t") of lithium carbonate equivalent ("LCE") in 2022 ((45/1000) x 3,375,000)). If we add in other sources of lithium the global lithium market will roughly increase by about 185,000t LCE in 2022, or about a 34% increase on 2021 levels of approximately 540,000t LCE.

Looking at lithium supply a typical new mine or mine expansion could possibly bring on 20,000t LCE in a year. This means the market needs about 9 new mines or expansion of existing mines, just to catch up with demand. This will be needed — and will grow larger — each year.

The scary part is that in a good year electric car demand can grow at 100%pa, as we saw with a 108% increase in 2021, which sent the lithium market into deficit. These days the demand is there but the supply is not, hence the global EV waiting list is now in the order of 3 million vehicles.

A lithium deficit can only mean lithium prices stay 'stronger for longer' this decade

Provided electric car sales growth remains at 30-50%+pa, all of this suggests we are likely to see constant lithium deficits this decade. Strong stationary energy storage sales are also pulling on lithium demand. A lithium deficit can only mean lithium prices stay 'stronger for longer', meaning about US\$50,000/t plus for lithium carbonate and lithium hydroxide and above US\$5,000/t for spodumene.

Yet despite this, some analysts are forecasting lithium prices to fall over the next 5 years. This completely contradicts forecasts of continual lithium deficits this decade. In a deficit, prices do not fall.

A contradiction: Many analysts currently forecast lithium prices to fall as lithium deficits continue this decade

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<u>Source</u>: Morningstar

What can go wrong with this forecast?

EV demand looks strong but in 2022 sales have been relying heavily on China, which has been responsible for 50-60% of global sales. This means any sales collapse in China will be heavily felt. European EV sales growth has weakened in 2022 due to events in Europe weakening their economy. USA EV sales have been growing quite well from a lower base, but the U.S economy is now slowing as interest rates are rapidly rising.

One plus for lithium demand is in the USA in 2023-24 we can expect to see new demand coming on from electric pickup trucks, which typically have a battery almost twice the size of an electric sedan, thereby requiring almost twice as much lithium.

Closing remarks

2022 has seen the West wake up to the need to source critical minerals and establish their own supply chain, or risk being left behind, as China grabs global electric car market share.

The <u>Inflation Reduction Act</u> and the EU Critical Raw Materials Act are designed to address this problem and bring supply chains back home or at least with free trade agreement countries.

Again this is further evidence to suggest that the rest of this decade will see a fight to source critical minerals, none more important than lithium.

We may need to get used to lithium chemical prices at, or north of, US\$50,000/t for the foreseeable future. This stronger for longer lithium pricing narrative should also flow through to the lithium miners many of which are currently priced at extremely low 2023 and 2024 earnings multiples, based on lithium prices falling back to US\$20,000/t. If analysts become a little braver and use US\$40-50,000/t in their models expect some very significant price target increases over the next year or two. Stay tuned.

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With lithium demand skyrocketing here are 5 earlystage lithium junior miners to watch

written by InvestorNews | December 13, 2023

With lithium demand projected to increase <u>10-11</u> fold this decade, there is a huge opportunity for successful lithium junior miners to prosper. Last year Rio Tinto was <u>quoted as</u> saying that "filling the supply gap will require over 60 Jadar projects".

Then just last month Tesla CEO Elon Musk said (Tesla Q1 2022 earnings call <u>transcript</u>): "...can more people please get into the lithium business? Do you like minting money? Well, the lithium business is for you..." Musk also <u>said on Twitter</u>: "Price of lithium has gone to insane levels! Tesla might actually have to get into the mining & refining directly at scale unless costs improve."

Of course, industry experts have been warning of EV metals supply deficits for some years, but it appears these warnings mostly fell on deaf ears. With this background in mind, today we take a look at some early-stage lithium junior companies with the potential to help fill the lithium supply gap in the second half of this decade.

China lithium carbonate spot prices — up about 6x over the past year due to lithium shortages

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Source: Trading Economics

5 early-stage lithium junior miners to watch out for in 2022 (in no particular order)

- 1. Essential Metals Limited (ASX: ESS)
- 2. Green Technology Metals Limited (ASX: GT1)
- 3. Metals Australia Ltd. (ASX: MLS)
- 4. Lithium South Development Corporation (TSXV: LIS | OTCQB: LISMF)
- 5. Winsome Resources Limited (ASX: WR1)

Essential Metals Limited (ASX: ESS)

Essential Metals is an Australian exploration company with 9 projects (lithium, gold, gold JV, and nickel JV) all in Western Australia (WA). Three of the projects are 100% owned and 6 are JV's with other companies, with ESS retaining a 20-30% interest (see below).

Essential Metal's flagship project is their 100% owned <u>Pioneer</u> <u>Dome Lithium Project</u> in WA. The Project is located in a known lithium corridor and the gold-rich Eastern Goldfields region of WA, which contains the Mt Marion, Bald Hill and Buldania lithium mines/projects. The Project has a reasonable sized JORC compliant <u>Total Resource of 11.2Mt at 1.21% Li20</u>, still with exploration upside. The Resource starts from or near surface. Drill assay results from the recent campaign are due out by the <u>end of May 2022</u>.

Essential Metals also has two other 100% owned gold projects in WA, namely the <u>Golden Ridge Project</u> (100% owned), 20kms from the Kalgoorlie super pit and the <u>Juglah Dome Project</u>, 60km east-southeast of Kalgoorlie. In addition, the Company has numerous JV projects including <u>Acra Gold Project JV</u> (25% interest), <u>Kangan Gold Project JV</u> (30%), <u>Balagundi Gold Project Farmin/JV</u>

(25%), Larkinville Gold Project Farmin/JV (25% gold interest) (hosts a JORC Resource of 19,700 t @ 3.02 g/t for 11,600 oz. Au), Blair-Golden Ridge Nickel Farmin/JV (25% nickel interest) and Wattle Dam Nickel Joint Venture (20% nickel interest).

Essential Metals trades on a market cap of <u>A\$162 million</u>.

Essential Metals summary showing the Pioneer Dome Lithium Project location near other successful lithium mines and projects in WA

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Source: Essential Metals company presentation

Green Technology Metals Limited (ASX: GT1)

Green Technology Metals (GT1) has multiple lithium projects (options to acquire, some at 80% interest others at 100% interest) spread over <u>39,982</u> hectares in Ontario, Canada. GT1's most advanced project is the Seymour Lithium Project with a JORC Total Mineral Resource of <u>4.8Mt @ 1.25%</u>. Within the Seymour Project, drill results include an impressive <u>40m @ 1.54% Li20</u>. When combining all GT1's Ontario Lithium Projects the target resource is 50-60 MT @ 0.8-1.5% Li20.

An updated resource estimate is targeted for Q2, 2022. Management is top tier and highly experienced.

Green Technology Metals trades on a market cap of <u>A\$212 million</u>.

GT1's portfolio of multiple lithium projects in Ontario Canada

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Source: <u>GT1 website</u>

Metals Australia Ltd. (ASX: MLS)

Metals Australia is an Australian junior miner with several projects. Their most advanced project is the Lac Rainy Nord Graphite Project in Quebec, Canada with an Indicated and Inferred Resource of 13.3Mt at 11.5% TGC for 1.529M tonnes of contained graphite.

With regards to lithium, Metals Australia 100% owns the promising Manindi Lithium and Zinc Project in WA. The Project has several lithium-cesium-tantalum (LCT) pegmatites spread over a total <u>3km strike length</u>. Individual pegmatites have strike lengths of over 300m and widths of up to 25-30m. Past drilling includes intersections of <u>15m @ 1.2% Li20, 117 Ta205 from 34m</u>. Drilling is ongoing notably at the Foundation pegmatite where consistently high grade lithium grab samples (<u>1% Li20 and >0.4%</u> Rb) have been detected over the entire 500m strike length. Assay results are expected shortly. Manindi also has an existing JORC 2012 Resource estimate of <u>1.08Mt at 6.52% Zn, 0.26% Cu and</u> <u>3.19g/t Ag</u>.

Metals Australia trades on a market cap of <u>A\$54 million</u>.

Lithium South Development Corporation (TSXV: LIS | OTCQB: LISMF)

Lithium South Development Corporation (Lithium South) is already quite advanced at their 100% owned Hombre Muerto North Lithium Brine Project in Argentina. The Project lies near several billion-dollar projects such as Livent's lithium mine, Allkem's Sal de Vida project, and POSCO's quite new project purchased for US\$280 million. Hombre Muerto is the premiere salar in Argentina, known for very high grade lithium and very low impurities.

The Hombre Muerto North Project has an <u>M&I Resource of 571,000t</u> <u>contained LCE</u>, with an excellent grade of 756mg/L, and a very low Mg/Li ratio of 2.6:1. <u>Drilling is about to begin</u> at their Alba Sabrina claim with results to follow most likely later in Q2, 2022. The Resource has potential to grow significantly from here.

Lithium South trades on a market cap of only <u>C\$68 million</u>.

Winsome Resources Limited (ASX: WR1)

Winsome Resources is a lithium explorer focused on their 4, 100% owned, projects spread over 50,000 Ha in Quebec, Canada. The Projects are Cancet, Adina, Sirmac-Clappier, and Decelles (option to acquire 100%).

The flagship Cancet Lithium Project has had outstanding previous drilling success and boasts a JORC <u>Exploration Target of 15-25Mt</u> <u>@ 1-2% Li20 + 100-250ppm Ta205</u>. The past drilling includes 59 holes for 5,216m averaging ~70m drill depth defining a shallow high-grade lithium deposit. Drilling will continue in 2022 with a substantial maiden Resource estimated expected later this year.

Winsome Resources trades on a market cap of <u>A\$66 million</u>.

Summary of Winsome Resources 4 lithium projects in Quebec, Canada

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Source: <u>Winsome Resources company presentation</u>

Closing remarks

Investing in early-stage lithium juniors carries higher risk and reward.

Of the 5 companies discussed in this article three (Essential Metals, Green Technology Metals, Lithium South Development Corp.) already have a lithium resource, one (Winsome Resources) has defined a lithium deposit with a resource estimate due later

in 2022, and the other (Metals Australia) has a graphite and a zinc-copper-silver resource with an exciting lithium project with drill results out soon.

I could also include <u>Avalon Advanced Materials Inc.</u> (TSX: AVL | OTCQB: AVLNF) in this group, but I already wrote on them recently <u>here</u>, discussing their lithium projects, lithium resource, and plans for a JV lithium refinery in Thunder Bay which were given a huge boost recently as you can read <u>here</u>.

Finally to answer Elon's question: "Can more people please get into the lithium business?" The problem is it takes at least 5-10 years to build a lithium mine from scratch. I will finish with two key quotes last month from lithium market experts:

- Benchmark Mineral Intelligence was quoted stating:
 "Battery capacity is currently growing at twice the speed of lithium raw material supply."
- Mr. Lithium, Joe Lowry was quoted stating: "I believe there will be a day in the future when lithium is in oversupply, but it won't be in this decade.....You can build a battery factory in two years, but it takes up to a decade to bring on a lithium project."

Disclosure: The author is long ALL the lithium companies mentioned in this article and intends to hold long term.

Lithium by the numbers, is

there enough to deal with battery-powered electric vehicle demand?

written by Jack Lifton | December 13, 2023 Understanding the looming lithium supply crisis is perhaps the cure for the environmentalists' movement's bipolar approach to the profligate use of <u>critical materials</u>. On the one hand, they want to believe that everyone can have an electric car and on the other hand they refuse to understand the practical and economic limits of natural resource recovery and fabrication for use.

The earth's resources available to us are only those we can afford to recover because we get more value from them than the cost of obtaining them. Up until now the actual use per person of critical technology metals has been small enough so that the extremely high cost of obtaining them and processing them into useful forms can be distributed widely enough across their enduses in the market to justify and recover that cost.

This distributed cost of critical technology metals has served to make the use cost per manufactured product low enough to enable the mass production and use of miniaturized electronic devices such as mobile phones, personal computers, and entertainment devices accessible almost universally across the contemporary economic classes of mankind.

The rechargeable lithium-ion battery and the <u>miniaturization of</u> <u>electronics</u>, so that on an individual basis they use very little power and very little material, and so can be kept operating for hours, even days, has severed the need for massive devices using large amounts of materials and needing to be wired to a main power distribution hub (a wired home, fed from the grid, with wall sockets).

Rechargeable batteries themselves underwent a long evolution from the lead-acid behemoths to nickel-iron, nickel-cadmium, nickel metal hydride (rare earth based), to today's lithium-ion chemistry. Each step in the evolution of rechargeable batteries allowed for smaller lower mass devices delivering the same power.

But, with the advent of the <u>battery-powered electric vehicle</u> (BEV) a threshold has been approached. The barrier to the widespread manufacturing and use of BEVs is the need for kilograms, not grams, per BEV, certainly of lithium and probably of copper, nickel, cobalt, and the magnet rare earths, in that order. Moving one or two tons of steel up to 500 km before its power source needs to be refreshed requires an irreducible minimum of scarce raw materials. That "minimum" in the case of lithium is thousands of times more mass than are needed to power a mobile phone for days!

The accessible and economically available resources of those metals simply do not exist on the scale that would be required to convert even the contemporary global internal combustion engine (ICE) transportation fleets of 1.5 billion motor vehicles alone, to BEVs.

The case of lithium is the one I will discuss here because its supply is the necessary prerequisite for a <u>BEV revolution</u>.

There is not enough lithium produced today to convert more than a tiny fraction of the global fossil-fueled internal combustion engine fleet of cars, trucks, railroad engines, boats and ships, aircraft, home utilities (generators), and industrial equipment (earth movers, trains, lift-trucks, etc) to rechargeable battery electric power. In addition, the other existing uses of rechargeable lithium-ion batteries for personal electronics, such as mobile phones, personal computers, digital cameras, play stations, and other toys need a significant fraction of global lithium production, and the use of lithium-ion batteries for stationary storage also needs a growing fraction of global production.

So, how much lithium is there actually for BEV manufacturing now and in the future, and just where, geographically, can and will that manufacture take place?

The electronic properties of lithium require that it takes 160g of lithium, measured as metal, to have one kilowatt hour of storage. Therefore a 100-kWh lithium-ion battery needs 16 kg of lithium. This is the irreducible minimum amount of lithium required to move two tons of steel on low friction tires at 60 kph for 500 km.

Global production of lithium in 2020 was 86,000 tons, or 86,000,000 kg, measured as metal.

If ALL the lithium produced in 2020 had been used to make 100 kWh batteries for BEVs then a total of 5.375 million such vehicles could have been (**but were not**) built.

But, according to the USGS, the use of lithium for batteries in 2020 was just 65% of global production.

So, only 56,000,000 kg were turned into batteries, so if this were entirely devoted to 100 kWh units for vehicles then 3.5 million could have been built.

Global production of vehicles in 2020 was 78,000,000 units, but the average of the three previous years was 95,000,000, so 2020 was an anomaly due to Covid.

One more thing: What percentage of global lithium for batteries

is available outside of China? The answer is 40%. China today processes 60% of global lithium into battery and other use grades and produces 82% of the Li-ion batteries manufactured.

Therefore, the world is today totally dependent upon Chinese owned or based manufacturers for its supply of lithium chemicals used in batteries and for lithium-ion batteries of all types for all uses!

It is predicted that China will produce only 50% of lithium-ion batteries for BEVs by the end of the decade, but predictions as to the percentage of lithium processing that will be done in China are less optimistic.

Today's lithium producers say that they can double annual lithium production by 2025 to, perhaps, 200,000 tpa, measured as lithium. I'm going to predict that lithium used for vehicle batteries will reach 75% of that total by 2025. But China will still process 60% of all the lithium for batteries, so that if all of the Chinese lithium industry's output were devoted to BEVs then the 120,000,000 kg of Lithium produced could be used to make 7.5 million vehicles leaving the rest of the world with just enough lithium for about 2 million BEVs.

The Chinese have mandated that 20% of their new vehicle production in 2025 be BEVs. This would be about 5 million BEVs. Thus the rest of the world will be left with just enough lithium to make 4.5 million BEVs. This means that Chinese BEVs as a proportion of total OEM automotive production will be 20% while the rest of the world will have an aggregate 7% proportion. I predict that the European and Japanese automakers will produce the lion's share of non-Chinese BEVs with most of the American OEM domestic production being that of Tesla.

The nonsensical, really just ignorant, predictions of the financial analysts of skyrocketing production of lithium are not

even remotely possible due to the unbearable costs of increasing production from declining grade deposits and the fantasies of large high-grade new deposits being miraculously found and developed. All of this while keeping lithium prices in line, of course.

The financialization of the stock market is now complete. Value has been divorced entirely from momentum.

Until politicians wake up to the fact that they are being played by the financializers investing in lithium and other "battery metals" will be a good idea, since the supply can never meet the (political) <u>demand</u>.

Rare earths, by contrast, will always be a good investment, because personal motor transportation will always use rare earth permanent magnets and to get the best mileage per kWh the lightest traction motors for vehicles will always be the rare earth permanent magnet type.

More on this next week....