

BMW Probes Moroccan Supplier for Critical Mineral Compliance

written by Tracy Weslosky | November 15, 2023

BMW (Bayerische Motoren Werke AG (OTC: BMWYY)), the prominent German automaker, is currently investigating a Moroccan cobalt supplier, Managem, following a report that raised serious concerns over labor and environmental violations at a cobalt mine in Morocco. The report, which surfaced in the German daily newspaper Sueddeutsche Zeitung, in collaboration with broadcasters NDR and WDR, alleged that the mining operations at Bou Azzer, southern Morocco, were releasing excessive arsenic levels into the environment. This revelation has significant implications given the critical role of cobalt in manufacturing electric car batteries, a market in which BMW is a key player.

The Critical Minerals Institute October Report: A slowing global economy continues to temper demand

written by Matt Bohlson | November 15, 2023

Welcome to the October 2023 [Critical Minerals Institute](#) ("CMI") report, designed to keep you up to date on all the latest major

news across the critical minerals markets. Here is the IEA [list of Critical Minerals](#).

A slowing global economy continues to temper demand for critical minerals in 2023

High interest rates in most Western countries continue to be a drag on the global economy. Last month saw the U.S. Fed pause their interest rate hikes, with the [reserve rate still at 5.5%](#). However, U.S. inflation has been rising again and the Fed has indicated rates will need to stay higher for longer. The September [CPI was 3.7%](#), same as August's 3.7%, but up on the July 3.2% figure. Long-term bond rates have adjusted higher leading to higher borrowing rates. All of this is slowing the U.S. and much of the global economy therefore not helping EV sales. China's housing collapse is another negative drag on sentiment and has resulted in slower China EV sales growth in 2023.

Global critical minerals and electric vehicle ("EV") update

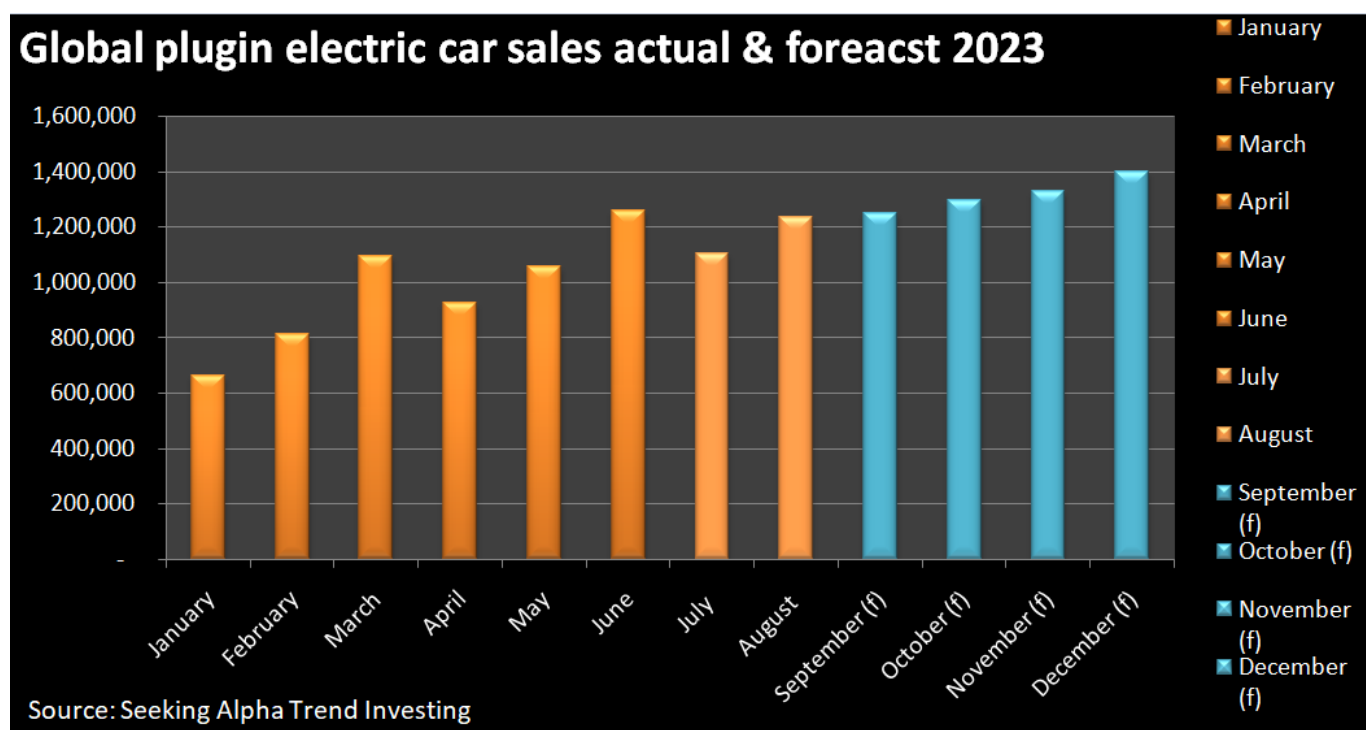
October 2023 saw some better results coming in for global plugin electric car sales which gives some hope that depressed EV metals prices may soon start to recover. Q4 is traditionally the strongest quarter for EV sales with December usually the best sales month of the year.

Global plugin electric car sales were [1,238,000](#) in August 2023, up 45% on August 2022 sales. Global plugin electric car market share in [August was 18%](#), led by China with [39% share](#), Europe with [30% share](#), and USA with [9.51% share](#). Reports to date

suggest that September sales look like being another strong month of about 1.25 million.

2023 sales look set to finish at ~13.5 million and 17% market share, which would be a 28% increase on 2022 (10.522 million and 13% market share). A 28% growth rate in 2023 would be a significant slowdown on the 56% growth rate achieved in 2022.

Global plugin electric car 'monthly' sales in 2023



The West is working hard to build up EV and battery capacity rather than being too dependent on China

One of the biggest news of the last month was that Quebec, Canada is in talks with battery makers and automobile companies looking to invest about C\$15 billion (US\$11 billion) in Quebec over the next three years to support EV supply chains. The report [stated](#):

“Quebec has secured C\$15 billion over the past three years and another C\$15 billion is coming in the next three years...Over the past three years, Quebec has attracted investments from auto and battery makers such as General Motors, POSCO and Ford Motors. The biggest investment was announced on Thursday when Swedish battery maker Northvolt announced plans to build a \$5.2 billion plant in the province.”

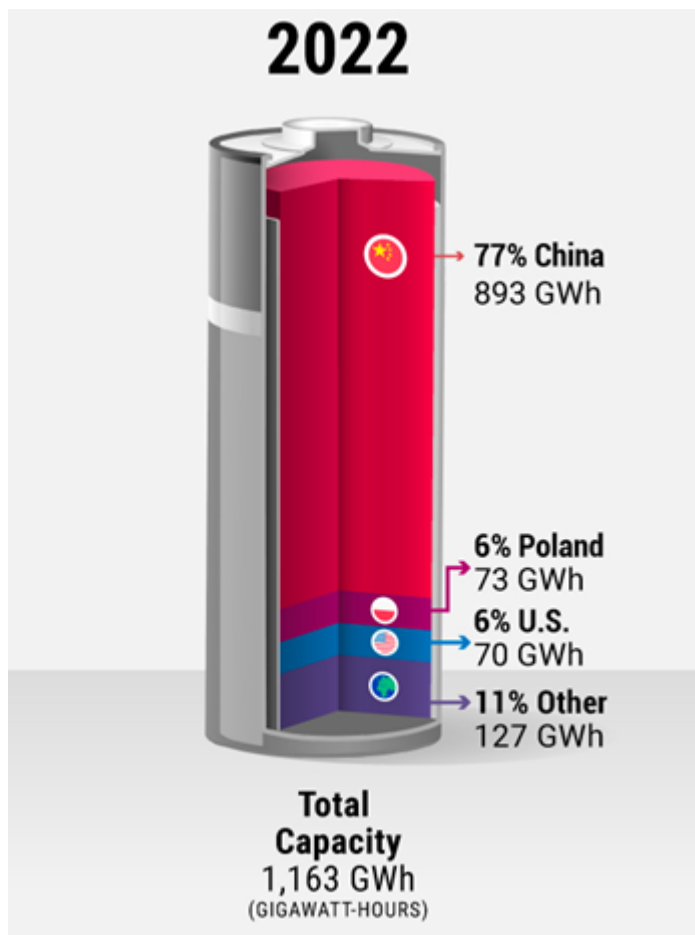
While this is good news for the EV and battery manufacturers it does nothing to support the mining industry. It is similar to the U.S. Inflation Reduction Act, where most funds are going to auto and battery companies and very little to the upstream miners. This will only boost demand for critical minerals needed to feed the EV and energy storage booms. Very little is being done to address the looming supply deficits of these critical materials in the second half of the decade.

For example, there are [18 gigafactories](#) planned to be built in the USA this decade, requiring 715,000tpa of lithium, but only 180,000tpa is currently planned. Similar mismatches of supply and demand exist in the pipeline for several other critical metals. Europe's critical minerals supply chain looks even more dire.

China continues to dominate the EV and battery manufacturing industry

Many people might be unaware that China manufactures ~75-80% of all new global plugin electric cars and [~77% of global lithium-ion batteries](#). China's BYD is the world's largest seller followed by Tesla, who makes over 50% of their cars in China.

In 2022 China had 77% of the lithium-ion battery global capacity



Source: [Visual Capitalist](#)

Lithium

China lithium carbonate [spot prices fell](#) so far in October 2023, with the price now at [CNY 166,500/t](#) (USD 22,781/t) and [down 68%](#) over the past year. At these prices, some of the marginal producers in China have begun shutting down. We did get a glimmer of hope for a bottom this week (mid October) as lithium carbonate futures contracts in Guangzhou [jumped by 7% to limit up](#) for the day.

Lithium takeovers and equity

interests are a leading trend in mid 2023

The biggest news the past month in the lithium sector has been the fight for control of Australia's Lontown Resources Limited (ASX: LTR), who 100% own the near production Kathleen Valley Lithium Project in Western Australia. U.S. lithium giant Albemarle Corporation (NYSE: ALB) is currently doing due diligence after upping their offer to [A\\$3.00 per share, or about A\\$6.6 billion \(US\\$4.23 billion\)](#) to purchase all of Lontown Resources. However, in recent weeks Australia's richest woman, Gina Rinehart, via her controlled company Hancock Prospecting, increased its stake in Lontown to [19.9%](#). Rinehart's motives are not yet known but it appears the iron ore magnate has become very interested in lithium.

Only 2-3 months back Albemarle bought a [6.4% stake](#) in Canadian lithium junior Patriot Battery Metals Inc. (TSXV: PMET | ASX: PMT | OTCQX: PMETF). The purchase price paid was **C\$109 million** and it was made just one day after Patriot Battery Metals announced their Maiden Resource of 109.2 Mt @ 1.42% Li₂O Inferred, the largest lithium spodumene resource in the Americas. The interesting part is that Patriot Battery Metals market cap is only US\$866 million, 4.7x lower than Lontown Resources market cap of US\$4.068 billion. Lontown Resources resource is about 50% bigger (156Mt at 1.4% Li₂O) and about 4 years more advanced than Patriot Battery Metals Corvette Project. Nonetheless, if Albemarle decides to back away from the Lontown Resources takeover bid then there is a very good chance Albemarle will turn their takeover attention towards Patriot Battery Metals.

Mineral Resources Limited (ASX: MIN) has also been very active in 2023 in the lithium space. In September it was confirmed that

Mineral Resources is bidding for the liquidated Bald Hill Lithium Mine. Mineral Resources has also backed Develop Global's [takeover offer](#) for Essential Metals Limited (ASX: ESS) for A\$152.6 million (US\$101 million), plus *Mineral Resources has also bought equity stakes in Delta Lithium Ltd. (ASX: DLI) and Global Lithium Resources (ASX: GL1).*

Chile's SQM (NYSE: SQM) also recently made a [takeover offer](#) for Azure Minerals Limited (ASX: AZS) for US\$585 million.

All of this takeover activity from the major lithium companies suggests that we are near a bottom in the lithium price cycle and that the mid to long term outlook for lithium remains very strong.

Rare Earths

Rare earths supply disruptions have led to some price improvements recently. Neodymium ("Nd") prices continued their recent recovery so far in mid October 2023 after a rough 2023, currently sitting at [CNY 650,000/t](#).

Rare earths prices have been falling for most of 2023; however [recent supply disruptions in Myanmar](#) have caused most rare earth prices to strengthen. There have also been some reports that Malaysia is developing a policy to ban exports of rare earths raw materials so as to boost their domestic industry. There is no date given yet as to when a ban may start. In any event, Myanmar is a much more important supplier than Malaysia.

This month [Australian Strategic Materials Limited](#) (ASX: ASM) announced some world-class [test work results](#) with their terbium (Tb) and dysprosium (Dy) heavy rare earth separation test work. Pilot plant test work produced [">99.99% for Tb and > 99.95% for Dy1, at steady state"](#). Results like this from their Dubbo

Project ore should give some more impetus to getting the Dubbo Project financed with probable output of around 140tpa Dy and 20tpa Tb. ASM Managing Director, Miss Rowena Smith [stated](#):

“These excellent results demonstrate the strength of ASM’s advanced technical capability...Terbium and dysprosium oxides are not only scarce commodities they are very difficult to separate at high purity. With the continued expertise of the team at ANSTO and the welcome support of the NSW Government, we are positioning the Dubbo Project to be at the forefront of Australia’s rare earth and critical minerals evolution.”

Dysprosium is a key rare earth used in nuclear reactor control rods and neodymium-iron-boron permanent magnets used in many EVs and wind turbines. Terbium is used in fluorescent lamps and television and monitor cathode-ray tubes.

Cobalt, Graphite, Nickel, Manganese and other critical minerals

Cobalt prices (currently at [US\\$14.84/lb](#)) remained flat the past month and continue to be very depressed. China’s demand for NMC cathode material for EVs has been weak, not helped by the popularity of LFP cathodes that don’t use nickel or cobalt.

Flake graphite [prices](#) remain very weak with prices near the marginal cost of production. A combination of slower EV sales growth in 2023 and increased China graphite supply has led to a depressed graphite market. [Macquarie](#) and [others](#) forecast graphite to start heading into deficit from about 2024.

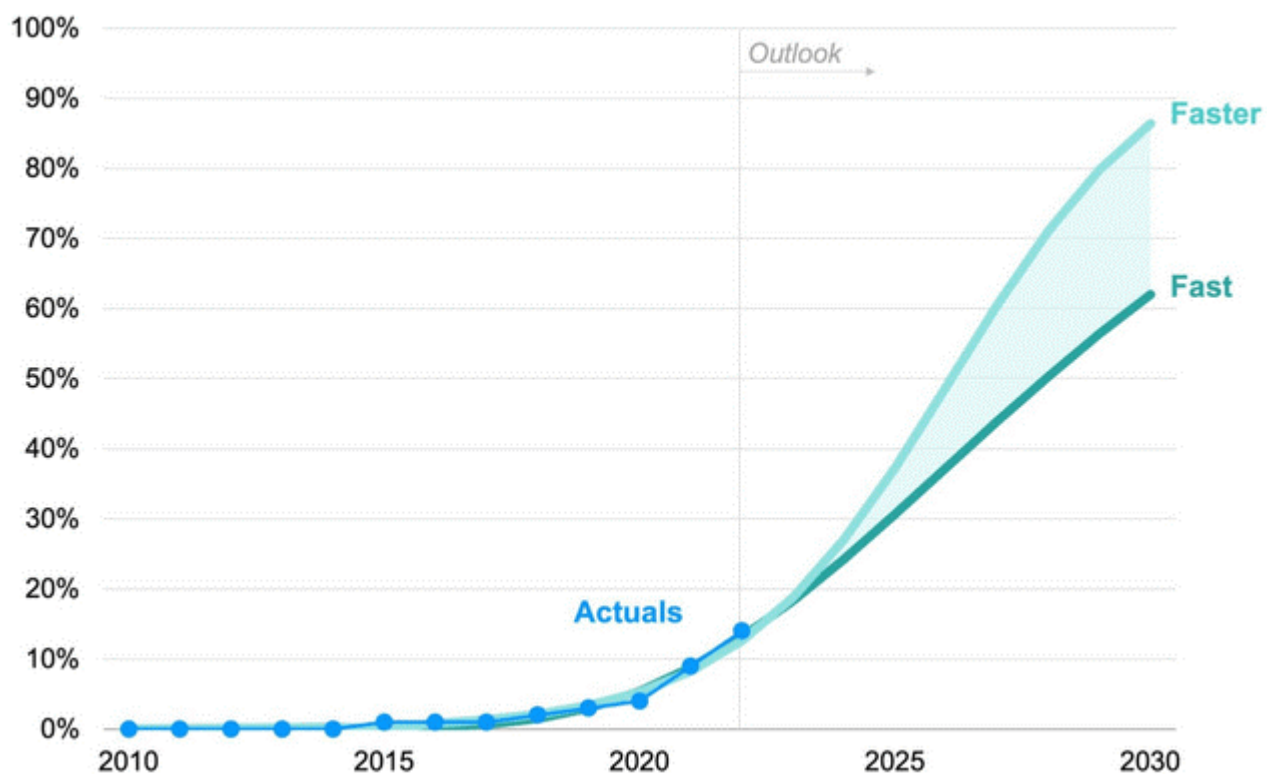
Nickel [prices](#) have recently weakened further due to oversupply concerns from Indonesia and a slowing Chinese property sector.

Manganese [prices](#) remain weak mostly due to weak Chinese demand

as the Chinese housing industry continues to rebalance after years of over construction and oversupply.

Longer term the outlook for the EV and energy stationary storage (“ESS”) sectors looks extremely strong. This is expected to lead to a huge surge in demand for the critical metals that supply these sectors.

EV sales are forecast to increase to somewhere between 62% and 86% market share of global car sales by 2030



Source: [CleanTechnica](#) courtesy Rocky Mountain Institute

Trend Investing v IEA demand forecast for EV metals

Increase in metal demand 2020 to 2037 (100% EV and sustainable energy world)

	Trend Investing (f) to 2037	IEA (f) to 2040		
Lithium demand	35	13 --42		
Cobalt demand	5.7	6--21		
Nickel demand	2.8	7--19		
Manganese demand	1.7	3--8		
Flake Graphite demand	17	8--25		
NdPr demand	5.9	3--7		
Copper demand	2.3	2--3		

Source: [Trend Investing](#) and the [IEA](#)

Latest CMI events

- Friday October 20, 2023 – **CMI Masterclass: Critical Minerals in the Congo**. Details and event tickets [here](#).

Russell Fryer on Critical Metals PLC's Strategic Moves in the DRC and Global Expansion Plans

written by InvestorNews | November 15, 2023

In a recent InvestorNews interview, host Brandon Colwell spoke with Russell Fryer, the Executive Director of Critical Metals PLC (LSE: CRTM), about the recent 'transformational' developments in their critical mineral operations in the Democratic Republic of the Congo ("DRC"). In addition to signing

an offtake agreement for a minimum of 20,000 tons of copper oxide ore, Russell said that Critical Minerals has also secured a hydrometallurgical plant for producing a finished product.

Ara Partners Acquires Vacuumschmelze: Critical in the Mission Vehicle Landscape Electric

written by Tracy Weslosky | November 15, 2023

In a game-changing move within the sustainable transportation sphere, Ara Partners announced its acquisition of Vacuumschmelze (VAC), a renowned global producer of advanced magnetic materials. This strategic partnership is set to reshape the future landscape of electric transportation, particularly given VAC's recent notable partnership with automotive giant, General Motors (NYSE: GM).

Lithium Ionic Charges Forward with a Growing Portfolio of

Lithium Deposits in Brazil

written by InvestorNews | November 15, 2023

InvestorNews discussed Lithium Ionic Corp. (TSXV: LTH | OTCQB: LTHCF) in June 2023 in an article [here](#), where we looked at who might potentially be the next successful lithium company in Brazil. Since then the stock has moved sideways, in part due to falling lithium prices and sentiment, yet the good news keeps coming from Lithium Ionic. The Company continues to advance at 'warp speed' with a Maiden Resource totaling ~19.43 MT at ~1.40% Li₂O already declared in June 2023, a PEA due out in Q3, 2023, and a DFS by the end of 2023. Added to this will be more drill results and Environmental Impact Assessment ("EIA") studies expected to be completed within H2 2023. Wow!

Fathom Nickel Provides Exploration Update for its 100% Owned Albert Lake

written by InvestorNews | November 15, 2023

Recent geophysical activities saw the conclusion of a time domain electromagnetic (TDEM) survey within the Tremblay-Olson Claims Area, unveiling a robust multi-element-in-soil anomaly. Notable TDEM highlights include a strong conductor around 1,000 meters south-southwest of the historic Rottenstone Mine, indicating a conductive body spanning approximately 450m x 150m located about 300 meters below the surface. This conductor is associated with significant geochemical and gravitational

anomalies, hinting at the presence of high-density rocks beneath.

Danny Huh of NEO Battery on EV Industry Attention as it Revolutionizes Silicon Anode Technology

written by InvestorNews | November 15, 2023

In this InvestorIntel interview, Tracy Weslosky talks with [NEO Battery Materials Ltd.](#)'s (TSXV: NBM | OTCQB: NBMFF) Strategy and Operations Manager Danny Huh about achieving a significant [technology milestone](#) in the nanocoating manufacturing process of silicon anodes that can increase the driving range of electric vehicles and enable ultra-fast charging.

Speaking about the high performance and cost-reduction capabilities of their uniform nanocoating technology, Danny discusses how there is an increased interest from ten companies, including global battery and electronic manufacturers and EV automakers, to use NEO Battery Materials' silicon anodes in their lithium-ion batteries.

Providing an update on its South Korean Commercial Plant construction that has completed the Request for Quote ("RFQ") process, Danny also discusses filing NEO's [6th patent](#) to Korean Intellectual Property Office for one-step nanocoating technology for silicon anodes.

Danny also talks about the recent [appointment](#) of Dr. S. G. Kim, a silicon/polymer material and chemical technology development expert, as NEO's Chief Technology Officer. Dr. Kim is the former Executive Vice President and Head of R&D of Hanwha Solutions Corporation (KSE: 009830), a multi-billion South Korean chemical manufacturing conglomerate.

To access the full InvestorIntel interview, [click here](#)

Don't miss other InvestorIntel interviews. Subscribe to the InvestorIntel YouTube channel by [clicking here](#)

About NEO Battery Materials Ltd.

NEO Battery Materials Ltd. is a Vancouver-based company focused on electric vehicle lithium-ion battery materials. NEO has a focus on producing silicon anode materials through its proprietary single-step nanocoating process, which provides improvements in capacity and efficiency over lithium-ion batteries using graphite in their anode materials. The Company intends to become a silicon anode active materials supplier to the electric vehicle industry.

To learn more about NEO Battery Materials Ltd., [click here](#)

Disclaimer: NEO Battery Materials Ltd. is an advertorial member of InvestorIntel Corp.

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Any projections given are principally intended for use as objectives and are not intended, and should not be taken, as assurances that the projected results will be obtained by the Company. The assumptions used may not prove to be accurate and a potential decline in the Company's financial condition or results of operations may negatively impact the value of its securities. Prospective investors are urged to review the Company's profile on [Sedar.com](https://www.sedar.com) and to carry out independent investigations in order to determine their interest in investing in the Company.

If you have any questions surrounding the content of this interview, please contact us at +1 416 792 8228 and/or email us direct at info@investorintel.com.

Lithium Royalty's Lithium-

focused Royalty Portfolio of Sustainable and ESG “Friendly” Projects

written by InvestorNews | November 15, 2023

In [late February](#), I opined that perhaps we had seen a near-term top for the price of lithium. Hindsight suggests that was a pretty good call. However, that was more of a short-term trading view on lithium as opposed to an overall investing view.

Generally speaking, I still believe that the overall lithium market is reasonably bullish over the next several years barring some sort of technological breakthrough that obsoletes the lithium battery.

In fact, if you believe what the [IEA published](#) on lithium (along with other critical minerals), you’d be very bullish based on the IEA view that the lithium market will see a 33% compound annual growth rate (“CAGR”) for the next decade.

Another stat that puts future lithium demand into perspective is the fact that Tesla is targeting the manufacture of 20 million electric vehicles (“EVs”) per year by 2030 and in order to produce that many vehicles in a year, Tesla would need more lithium than was produced in the world in 2021.

Assuming lithium prices have now stabilized or perhaps even bottomed before another move higher, the question becomes how best to play lithium going forward.

Lithium Royalty Corp. overview

One option to get more broad-based exposure to the market is the newly listed [Lithium Royalty Corp.](#) (TSX: LIRC).

Lithium Royalty is a lithium-focused royalty company with a globally diversified portfolio of 30 high-grade revenue royalties on mineral properties around the world that supply, or are expected to supply, raw materials to support the electrification of transportation and decarbonization of the global economy.

The Company's portfolio is focused on high-grade and low-cost mineral projects that are primarily located in Australia, Canada, South America, and the United States. Lithium Royalty is a signatory to the United Nations Principles for Responsible Investment.

There are two key takeaways from that corporate description.

- First off, they have focused on “friendly”, stable jurisdictions with 46% (based on acquisition costs) of their projects in North America, 62% comprise OECD nations, and no Russian, Chinese, or African asset exposure. Their non-OECD assets are primarily in Brazil and Argentina, which are both stable enough at present.
- Secondly, the integration of ESG factors and sustainable mining are important considerations in Lithium Royalty's investment analysis and royalty acquisitions. This includes a focus on the use of renewable power in extraction and processing; infrastructure benefits to remote communities; environmental and economic impact on local communities; water use; surface disruption and remediation plans as well as tailings management.

I've noted as recently as [last week](#) that I strongly believe a premium will start to be placed on sustainable miners with responsibly sourced materials and a low-carbon footprint. Lithium Royalty definitely ticks that box.

Royalty portfolio and upside potential

But ultimately it comes down to whether you can also make money while being responsible. The royalty that excites me the most at present in the Company's portfolio is one that has just transitioned from construction to production.

In all Lithium Royalty now has 3 producing royalties but their 90% interest in a 1.0% Net Smelter Royalty (NSR) in [SIGMA Lithium Corporation's](#) (NASDAQ: SGML | TSXV: SGML) Grota do Cirilo project is about to start generating returns with its inaugural shipment of approximately 15,000 tonnes of spodumene concentrate in May 2023. Sigma is now focused on ramping up to full production capacity for Phase 1 of the project, which is expected by July 2023.

Other assets currently generating income for the company are both in Australia, including [Allkem Limited's](#) (ASX: AKE | TSX: AKE) Mt. Cattlin project with a royalty of A\$1.50 per tonne of ore mined and [Core Lithium Limited's](#) (ASX: CX0) Finniss mine where the Company expects to receive its first royalty payment for its 2.5% Gross Overriding Royalty (GOR) as a result of Q1/2023 sales.

In total, Lithium Royalty has 30 royalties in its portfolio, of which 29 are summarized in the slide below. Additionally, the acquisition pipeline currently has 10 additional royalty targets with the opportunity to deploy over US\$130 million of new capital.

FIGURE 1: Lithium Royalty's Current Portfolio of Royalties

Current Royalty Portfolio

Operator	LRC Royalty	Asset					
		Name	Country	Type	Product	Stage	Report
1	Alkem	AS1.5/1 Treated	Australia	Hard Rock	Spodumene	Production	FS
2	Core Lithium	2.50% GOR ¹	Australia	Hard Rock	Spodumene	Production	DFS
3	Sigma Lithium	1.00% NSR ²	Brazil	Hard Rock	Spodumene	Construction	FS
4	Zijin Mining	1.00% GOR ²	Argentina	Brine	Carbonate	Construction	FS
5	Ganfeng	0.50% NSR ²	Argentina	Brine	Chloride / Carbonate	Construction	PEA
6	Sinova Global ³	8.00% - 4.00% GOR ⁴	Canada	Silica Quartz	Silica Quartz	Construction	FS
7	Sayona Mining	2.50% - 1.50% GOR ^{5,6}	Canada	Hard Rock	Spodumene	Development	- ⁹
8	Sayona Mining	2.00% NSR	Canada	Hard Rock	Spodumene	Development	IGR
9	Euro Lithium	Various ⁷	Serbia	Clay	Carbonate / Boric Acid	Development	PEA
10 & 11	Winsome Resources	4.00% GOR ⁸ & 1.00% NSR	Canada	Hard Rock	Spodumene	Development	IGR
12 & 13	Winsome Resources	4.00% GOR ⁸ & 2.00% NSR	Canada	Hard Rock	Spodumene	Development	IGR
14	Winsome Resources	4.00% GOR	Canada	Hard Rock	Spodumene	Development	IGR
15	Grid Metals	2.00% GOR	Canada	Hard Rock	Spodumene	Development	- ¹⁰
16	Grid Metals	2.00% GOR	Canada	Hard Rock	Spodumene	Development	-
17	Lithium Springs	1.50% GOR	Australia	Hard Rock	Spodumene	Development	-
18	Noram Lithium	1.00% GOR	United States	Clay	Carbonate	Development	PEA
19	Bradda Head	2.00% GOR	United States	Clay	Hydroxide	Development	MRE
20	ACME Lithium	2.00% GOR	Canada	Hard Rock	Spodumene	Development	-
21	Red Dirt	1.00% GOR	Australia	Hard Rock	Spodumene	Development	-
22	Morella	1.50% GOR	Australia	Hard Rock	Spodumene	Development	-
23	Morella	1.25% GOR	Australia	Hard Rock	Spodumene	Development	-
24	Morella	1.25% GOR ⁸	Australia	Hard Rock	Spodumene	Development	-
25	Green Technology	1.00% GOR	Canada	Hard Rock	Spodumene	Development	MRE
26	Green Technology	1.00% GOR	Canada	Hard Rock	Spodumene	Development	-
27	Green Technology	1.00% GOR	Canada	Hard Rock	Spodumene	Development	-
28	Larvotto	1.00% GOR	Australia	Hard Rock	Spodumene	Development	-
29	Ano Lithium	1.25% GOR	Finland	Hard Rock	Spodumene	Development	-

1. Initially assessed at 2.185% of gross revenues. Once Core Lithium achieves certain milestones and LRC makes a contingent payment, each of which is anticipated to occur no later than June 2023, the royalty rate will increase to 2.5%.

2. Altius Minerals Corporation has a 10% indirect interest in this royalty.

3. Pilot production at the Horse Creek quarry took place in the third quarter of 2021. Commercial production is anticipated to commence in 2023.

4. 8.0% of annual gross revenues up to \$49M and 4.0% on any portion of annual gross revenues in excess of \$49M.

5. 2.5% of gross revenues for the first 10 Mtpa and 1.5% of gross revenue for any tonne of ore produced thereafter.

6. Royalty is payable only on production attributable to the ownership interest of the royalty payor in the relevant property, which ownership interest is less than 100%.

7. See detailed description in the prospectus.

8. Certain tenements comprising the property are assessed at 3.0% of quarterly gross revenues.

FS - Feasibility Study

DFS - Definitive Feasibility Study

PEA - Preliminary Economic Assessment

IGR - Independent Geologist's Report

MRE - Mineral Resource Estimate

9. While Mobian has a historical technical report, it is currently in the process of preparing a new and updated Preliminary Feasibility Study, with a Definitive Feasibility Study to follow.

10. Grid Metals has indicated that Mineral Resources declared at Donner Lake are historical in nature and not NI 43-101 compliant. The historical resource estimate is not considered as a current Mineral Resource estimate. A qualified person has not done sufficient work to classify the historical estimate as a current Mineral Resource or Mineral Reserve.

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Source: Lithium Royalty [Corporate Presentation](#)

Final thoughts

Given the Company just reorganized into the publicly traded entity we have today, my numbers could be a little off. My math suggests the Company finished 2022 with US\$35 million in cash, raised a net amount of C\$100 million as part of the go-public transaction, and acquired its 30th royalty position (not included in the above table) for US\$1.8 million. Using today's exchange rate that puts cash available to pursue additional royalties at roughly US\$108 million.

There are currently just over 55 million shares outstanding which puts Lithium Royalty's market cap at C\$818 million (US\$604 million).

Auto OEMs are heading to Indonesia to secure nickel for their EV batteries, but what about North America & Australia?

written by Matt Bohlson | November 15, 2023

In recent months the rush to secure nickel has begun, with Indonesia taking the main stage. What does this mean for the nickel market? And what about Western sources of nickel, have they been forgotten?

The nickel rush to Indonesia

Recent news highlights the rush and includes:

- February 1, 2023 – [Reuters](#) – “Exclusive: President Jokowi “confident” Tesla will invest in Indonesia.”
- March 30, 2023 – [Reuters](#) – “Ford in \$4.5 billion deal for EV battery materials plant. Ford has joined PT Vale Indonesia and China’s Zhejiang Huayou Cobalt’s as their new partner in a \$4.5 billion nickel processing plant in Indonesia...”
- April 17, 2023 – [Reuters](#) – “Volkswagen to partner on Indonesia EV battery ecosystem.....Volkswagen.....will work with Vale, Ford, Huayou (Cobalt), French miner Eramet and several Indonesian firms like Merdeka Gold Copper, the parent company of Merdeka Battery, and energy firm Kalla Group.”

As many readers would know, Indonesia has the world's largest nickel reserves and is working to develop the downstream to produce batteries and EVs. Indonesia does NOT have a free trade agreement with the USA, meaning nickel coming from Indonesia would not qualify for the Inflation Reduction Act ("IRA"). As a result, Indonesia is currently pushing for a limited free trade deal with the US on critical minerals.

Will Tesla invest next in Indonesia or will they choose North America or Australia? The latter two are safer and qualify under the IRA



Source: iStock

What does this mean for the nickel market?

The boom in interest in Indonesian nickel means we will likely see a burst of investment into Indonesian nickel miners and an

increase in nickel supply out of Indonesia. We already saw this when on March 28 it was [reported](#) that “[Merdeka Battery](#) Plans Indonesia’s 2nd-Largest 2023 IPO..... Merdeka Battery is tapping into the surging global demand for electric cars by refining its nickel into battery materials.” Interestingly the largest 2023 IPO in Indonesia looks like being another nickel company, with the IPO of Harita Nickel at about US\$659 million.

Market experts are mostly forecasting [a nickel surplus in 2023](#), mostly Class 2 nickel used in stainless steel. The [Class 1 nickel market](#), used in EV batteries, looks much tighter. Later this decade it is looking like we will see [significant Class 1 nickel deficits](#) as the EV boom continues to gain traction.

What about Western sources of nickel, have they been forgotten?

The short answer is yes, to some degree. Due to the problems or permitting it appears the auto OEMs are choosing Indonesia over North American or Australian nickel supply. Ford is a classic example. On March 26, 2023, [Ford](#) (NYSE: F) CEO Jim Farley [stated](#): “Batteries are the constraint.....Both lithium and nickel are really the key constraining commodities. We normally get those from all over the world – South America, Africa, Indonesia. We want to localize that in North America, not just the mining but the processing of the materials.” Then on March 30, 2023, Ford announced their \$4.5 billion deal for EV battery materials plant in ‘Indonesia’.

What is going on? Ford says they want to “localize that in North America” and 4 days later their actions are to invest US\$4.5 billion in Indonesia!!! North American and Australian junior nickel & cobalt miners must be shouting out loud – “What about us?”

One great example would be [Jervois Global Limited](#) (ASX: JRV | TSXV: JRV) with their Idaho Cobalt Project shutdown [announced on March 29](#), just weeks before production began. Admittedly their operation is a cobalt-copper project, but it still paints a similar picture. Another would be Australia's [Ardea Resources Limited](#) (ASX: ARL) with their massive nickel and cobalt resource (one of the largest in the Western world with [5.9 million tonnes of contained nickel and 384,000 tonnes of contained cobalt](#)), still on hold for several years waiting for funding. Western junior miners face a much tougher road to make it to production and they are not getting anywhere near the same support as the refiners or battery factories.

USA, Canada, and Australia have [numerous nickel and cobalt projects](#) just waiting for funding or permitting. These obstacles remain despite all the rhetoric of sourcing from home.

Closing remarks

Congratulations to Indonesia. They now look like getting huge funding and support from Western OEMs to develop nickel and cobalt mining and refining in 'Indonesia'.

Commiserations to most western nickel and cobalt junior miners as they get nothing. The exception to date would be [Talon Metals Corp.](#) (TSX: TL0) who got a [nickel supply agreement from Tesla](#) and a [US\\$114 million U.S. government grant](#). It should be noted that Vale Canada [signed an off-take deal](#) with General Motors (NYSE: GM) in 2022.

If the West truly wants a safe independent supply chain then it needs to fix the mining problems, namely permitting is too slow and funding is too little. There has been much talk about getting this fixed, but time is running out as China dominates and now Indonesia moves to become a key part of the EV supply

chain.

Come on western governments, auto OEMs, support your local nickel & cobalt miners as we have seen happen with lithium in the past year.

It is a win-win situation for all.

Will the EU Critical Raw Materials Act be Too Little Too Late?

written by Matt Bohlsen | November 15, 2023

As [announced](#) on March 16, the European Commission released its proposal for the European Union's ("EU's") Critical Raw Materials Act. The response from investors in European battery metal stocks was underwhelming, to say the least. Many European lithium stocks have fallen in price, not risen as would have been expected. The question is why?

I think the answer is probably in the timeline and questions around enforcement. There are some positive incentives such as selected strategic projects getting "shorter permitting timeframes" and "support for access to finance".

Below is a brief snapshot of the key measures announced.

EU Critical Raw Materials Act proposal

The following is an excerpt from the EU's press release:

“Setting clear priorities for action: In addition to an updated list of critical raw materials, the Act identifies a list of **strategic raw materials**, which are crucial to technologies important to Europe’s green and digital ambitions and for defense and space applications, while being subject to potential supply risks in the future. The Regulation embeds both the critical and strategic raw materials lists in EU law. The Regulation sets clear benchmarks for domestic capacities along the strategic raw material supply chain and to diversify EU supply by 2030:

- At least 10% of the EU’s annual consumption for **extraction**,
- At least 40% of the EU’s annual consumption for **processing**,
- At least 15% of the EU’s annual consumption for **recycling**,
- **Not more than 65%** of the Union’s annual consumption of **each strategic raw material at any relevant stage of processing** from a single third country.

Creating secure and resilient EU critical raw materials supply chains: The Act will reduce the administrative burden and simplify permitting procedures for critical raw materials projects in the EU. In addition, selected Strategic Projects will benefit from support for access to finance and shorter permitting timeframes (24 months for extraction permits and 12 months for processing and recycling permits). Member States will also have to develop national programs for exploring geological resources.”

Next Steps

“The proposed Regulation will be discussed and agreed by the European Parliament and the Council of the European Union before its adoption and entry into force.”

The EU’s list of 34 critical (strategic) raw materials

CRM list as **strategic raw materials** in line with the Critical Raw Materials Act.

Aluminium/Bauxite	Coking Coal	Lithium	Phosphorus
Antimony	Feldspar	Light rare earth elements	Scandium
Arsenic	Fluorspar	Magnesium	Silicon metal
Baryte	Gallium	Manganese	Strontium
Beryllium	Germanium	Natural Graphite	Tantalum
Bismuth	Hafnium	Niobium	Titanium metal
Boron/Borate	Helium	Platinum group metals	Tungsten
Cobalt	Heavy rare earth elements	Phosphate Rock	Vanadium
		Copper	Nickel

[Source](#): European Commission

Will the EU’s Critical Raw Materials Act be too little too late?

The main concern with the current Critical Raw Materials Act proposal is the timeline with the measures to be implemented “by 2030”. By comparison to the U.S. policy, the Inflation Reduction Act (“IRA”) measures commence in some cases immediately and in terms of the supply chain “from 2024”. Little wonder investors were underwhelmed by the 2030 timeline.

By 2030, we should already be close to [60-70% market share](#) for global electric car sales. By 2030, the European car manufacturers may be bankrupt if they have not secured an

adequate supply of EV and battery materials. China is already a decade ahead. The USA is moving fast to catch up. But Europe appears to think if they move in 2030 everything will be ok. But it will not be ok. China and other countries will already have taken control of the EV, energy storage, and renewable energy supply chains. Today China already holds a dominant position.

The U.S Inflation Reduction Act requires changes by 2024 in order to get the clean vehicle tax credit

Clean Vehicle Credit (30D)

- Maintains the existing \$7,500 consumer credit for the purchase of a qualified new clean vehicle, including electric vehicles, plug-in hybrids, and hydrogen fuel cell vehicles.
 - Credit is reduced or eliminated if a certain percentage of the critical minerals utilized in battery components are not extracted or processed in the U.S. or a Free Trade Agreement country or recycled in North America. The percentage required increases from 40% in 2024 to 80% in 2026.
 - Credit is reduced or eliminated if EV is not assembled in North America or if the majority of battery components are sourced outside of North America. The percentage increases from 50% in 2024 to 100% in 2028.

Source: [Bipartisan Policy Center](#)

Note: Red oval annotated by the author.

Closing remarks

The EU's plan is a significant positive move in the right direction. But with no targets or deadlines until 2030, I feel it will be "too little too late". By 2030, the automotive industry will look completely different from today, where German and Japanese manufacturers dominate.

Europe needs a 2025 deadline and it needs clear measures in place, similar to what President Biden has done with the IRA. If the EU fails to amend its Critical Raw Materials Act proposal then it will remain at the mercy of the China supply chain. And

China will use that power to steadily take market share with China-made EVs selling into Europe.

Furthermore, Europe needs to build its own supply chains to help maintain full employment and security of supply. This includes directly down to the mining level, where Europe has a very small mining industry. For example, today Europe produces insignificant amounts of lithium, yet lithium is a critical element needed in the green revolution. Perhaps we can discuss more on that topic in another article.

The European Parliament gets the final say and let's hope Europe can modify the proposal to bring in an earlier deadline and truly build up a European supply chain for EVs, energy storage, and renewable energy.

All are vitally important for the future of Europe's economy.