



Transcript: Green Metals Fully Charged: Lithium "Back In The High Life"

Featuring: Howard Klein and Jack Farley

Published Date: October 12th, 2021

Length: 01:10:50

Synopsis: Many lithium stocks have hit one year or even all-time highs recently. Howard Klein, founder and partner at RK Equity, joins Real Vision Live to discuss lithium and other battery metals such as graphite. He will argue why he thinks Lithium pricing will remain very strong and assets will only get more expensive as a surge in electric vehicle (EV) battery production will fuel a furious demand for Lithium. Klein shares his thoughts on major producers Albemarle (\$ALB) and Sociedad Quimica y Minera de Chile (\$SQM), as well as emerging projects Piedmont Lithium (\$PLL), Critical Element, and E3 Metals. Klein offers his thoughts of how investors should navigate the very risky EV startup market with insight into Freyr Battery (\$FREY) and Microvast Holdings (\$MVST). Klein will also discuss why Monde Graphite (\$NMG) has all the cornerstones of developing into a world-class, sustainable North American battery specialty metals company. Interviewed by Jack Farley, who will be taking live questions from Real Vision Plus members.

Video Link:

<https://www.realvision.com/rv/channel/realvision/videos/598797f453764a4ba57280cd45dc8ba7>

The content and use of this transcription is intended for the use of registered users only. The transcription represents the contributor's personal views and is for general information only. It is not intended to amount to specific investment advice on which you should rely. We will not be liable to any user for any loss or damage arising under or in connection with the use or reliance of the transcription.

JACK FARLEY: Welcome to Real Vision Live. I am Jack Farley. Today, we have the pleasure of being joined by Howard Klein of RK Equity, the founder and partner. Howard, welcome to Real Vision Live.

HOWARD KLEIN: Thanks for having me back, Jack. It's great to see you again.

JACK FARLEY: Great to see you too. As viewers can see from the T-shirt to your right, you are a self-described lithium bull. You're very passionate about lithium, a key ingredient into batteries that are in electric vehicles as well as the future of electrification. And you also cover, at RK Equity, other green metals like graphite, and the like. Can you just tell the viewers quickly your journey? How did you get to be so into lithium, which is a little bit of a niche space in the investment world?

HOWARD KLEIN: Yeah, it's interesting. So, RK Equity has been in business nearly 20 years. And about 12 years ago after the financial crisis, a client of mine who was very successful of building and selling a gold company in China, then turned his mine to lithium right around the time that Obama came to power. And we had what was-- there was the stimulus had Tesla got funded, and a number of other green things got funded during that stimulus boom. Warren Buffett invested in BYD, and that company was Western Lithium, which had a deposit that's now part of Lithium Americas in Nevada.

And I followed my client, successful client into a project and a new metal based on the promise of electric vehicles. So, that was 2009, we're now 2021, 12 years later and it's had its fits and starts. And I was clearly early then but it's now very much conventional wisdom. I was always telling the story that demand is going to come and now everybody understand that demand is here, and that stock has performed well. Lithium Americas has, but we built a portfolio of very successful other clients from early stages.

In the case of Western Lithium, we were representing that company from 10 or 15 million market cap very early on, less than \$1, penny stock land to now, it's north of \$20. And we've done that repeatedly in lithium and a few other commodities but along the way the past 12 years, I haven't only done lithium because like I said, there were fits in start so we have experience in copper, gold, iron ore, coal, oil, but the last five years, I've devoted myself exclusively to lithium and about 80%, 90% of my time in lithium.

And last year, we took on some additional graphite, nickel, as well as a battery company, FREYR, which had news today that just the pre-revenue companies focused on the battery storage, minerals, thematic, which has become incredibly popular and focus especially in the past year to two years.

JACK FARLEY: Can you walk viewers through the lithium space? There are the major companies that don't only make lithium, but they also make all sorts of other chemical products and then there are the smaller companies that haven't started producing yet but they have mines that if they do start producing, the market cap could go up extensively. So, just walk us through the landscape of the lithium world. Feel free to name names and then we'll get into it.

HOWARD KLEIN: Okay. I think you have in front of me one of my scoreboards here which is broken down into chemical producers, spodumene producers and then emerging projects. Chemical producers, lithium, chemicals, there's largely five or six big producers in the world, two of which are Chinese, Ganfeng

and Tianqi, two of which are American, Albemarle and Livent, and one of which is Chilean, SQM, and a company which used to be more of an emerging project but has now grown into a producer is called Allkem, which is a merger of Orocobre and Galaxy, two players who started their lives around 2009 and 2010, but have progressed to finance and build greenfield projects and are now, some 5 billion market cap.

RK Equity								
Lithium Market Scoreboard Sept 30, 2021		USD Mkt (\$m)	Share Price 9/30/21	1 Mo	3 mo	YTD	Location	Type
Chemical Producers		\$ 81,827						
Ganfeng (HKSE)	\$ 33,988	\$ 138.40	-23%	19%	49%	China, Aus, Arg, Mex	Rock, Brine	
Albemarle Corporation	\$ 25,609	\$ 218.97	-7%	30%	48%	US, Chile, Aus, China	Rock, Brine	
SQM	\$ 15,344	\$ 53.72	3%	14%	9%	Chile, Aus	Brine, Rock	
Tianqi Lithium	\$ 23,275	\$ 101.58	-25%	64%	159%	China, Aus	Rock	
IGO Limited	\$ 4,842	\$ 8.88	-8%	16%	39%	Aus	Rock	
Livent	\$ 3,733	\$ 23.11	-7%	19%	23%	US, Arg, China, Quebec	Brine, Rock	
Orocobre Limited	\$ 3,989	\$ 8.69	-5%	34%	94%	Arg, Japan	Brine	
Spodumene Producers		\$ 5,653						
Mineral Resources Limited	\$ 6,093	\$ 44.81	-18%	-17%	20%	Aus	Rock	
Pilbara Minerals Limited	\$ 4,333	\$ 2.05	-8%	41%	136%	Aus	Rock	
AMG Advanced Metallurgical	\$ 1,017	\$ 27.98	-7%	-3%	14%	Brazil	Rock	
Emerging Projects		\$ 17,136						
Lithium Americas (NYSE)	\$ 2,693	\$ 22.33	12%	50%	78%	Arg/Nevada	Brine, Clay	
Compass Minerals	\$ 2,278	\$ 64.40	-4%	9%	4%	Utah	DLE Brine	
Liontown Resources	\$ 1,981	\$ 1.44	48%	69%	324%	Aus	Rock	
Vulcan Energy Resources	\$ 1,160	\$ 13.03	-9%	69%	372%	Germany	DLE Brine	
Standard Lithium (TSX.V)	\$ 1,146	\$ 10.33	60%	103%	262%	Arkansas	DLE Brine	
Piedmont Lithium (NASDAQ)	\$ 864	\$ 54.46	-8%	-30%	105%	Carolina/Quebec/Ghana	Rock	
Ioneer	\$ 864	\$ 0.63	15%	80%	125%	Nevada	Rock	
AVZ Minerals Ltd.	\$ 776	\$ 0.335	37%	109%	97%	DRC	Rock	
Sayona Mining Ltd.	\$ 772	\$ 0.175	17%	101%	1844%	Quebec	Rock	
Sigma Lithium	\$ 677	\$ 10.25	4%	54%	243%	Brazil	Rock	
Neo Lithium Corp	\$ 506	\$ 4.53	4%	57%	128%	Argentina	Brine	
Lake Resources	\$ 504	\$ 0.615	1%	84%	742%	Argentina	DLE Brine	
Core Lithium	\$ 474	\$ 0.425	29%	77%	193%	Australia	Rock	
Firefinch Ltd (Mali Lithium)	\$ 404	\$ 0.610	5%	54%	270%	Africa	Rock	
Bacanora Lithium	\$ 350	\$ 0.675	2%	14%	5%	Mexico	Clay	
American Lithium	\$ 346	\$ 2.48	16%	34%	103%	Nevada	Clay	
Millennial Lithium	\$ 278	\$ 3.60	10%	29%	40%	Argentina	Brine	
Rock Tech Lithium	\$ 228	\$ 4.91	-3%	-2%	191%	Ontario	Rock	
Galan Lithium	\$ 197	\$ 1.010	-5%	10%	162%	Argentina	Brine	
Critical Elements Corporation	\$ 197	\$ 1.36	3%	4%	97%	Canada	Rock	
Argosy Minerals Limited	\$ 185	\$ 0.21	17%	107%	156%	Argentina	Brine	
European Metals Holdings	\$ 175	\$ 1.39	-13%	-9%	21%	Czech	Rock	
Ironridge Resources	\$ 155	\$ 0.20	-12%	4%	60%	Ghana	Rock	
Cypress Development	\$ 154	\$ 1.55	7%	60%	76%	Nevada	Clay	
Prospect Resources	\$ 130	\$ 0.43	19%	105%	153%	Africa	Rock	
Frontier Lithium	\$ 130	\$ 0.84	-1%	8%	127%	Ontario	Rock	
Lepidico	\$ 112	\$ 0.023	15%	130%	130%	Africa	Rock	
Jindalee	\$ 101	\$ 2.36	-38%	-6%	197%	Oregon	Clay	
Savannah Resources	\$ 90	\$ 3.950	13%	1%	-10%	Portugal	Rock	
Lithium Power International	\$ 90	\$ 0.33	16%	76%	48%	Chile	Brine	
Wealth Minerals	\$ 88	\$ 0.480	39%	37%	465%	Chile	Brine	
European Lithium	\$ 87	\$ 0.105	21%	102%	133%	Austria	Rock	
E3 Metals Corp	\$ 81	\$ 1.93	10%	3%	124%	Alberta	DLE Brine	
Infinity Lithium	\$ 80	\$ 0.13	33%	40%	-19%	Spain	Rock	
Alpha Lithium	\$ 64	\$ 0.68	28%	-4%	-9%	Argentina	Brine	
Hawkstone Mining (Arizona Lithium)	\$ 61	\$ 0.045	5%	80%	400%	Arizona	Clay	
Zinwald Lithium	\$ 59	\$ 17.100	-25%	-8%	49%	Germany	Rock	
Arena Minerals	\$ 48	\$ 0.20	0%	33%	567%	Argentina	Brine	
Kodal Minerals	\$ 46	\$ 0.3650	1%	-18%	248%	Mali	Rock	
Noram Ventures	\$ 41	\$ 0.72	16%	20%	44%	Nevada	Clay	
Pure Energy	\$ 39	\$ 1.52	5%	15%	114%	Nevada	Brine	
Essential Metals	\$ 33	\$ 0.1750	-5%	84%	113%	Australia	Rock	
Aggregate Lithium Market Cap		\$ 104,616						

Then you have spodumene producers. Spodumene is an intermediate precursor product made from rocks. Lithium is generally made from either hardrock mines or brines in South America. The brine projects tend to be vertically integrated. So, it's the brine plus the chemical and spodumene and hard rock, there are some nonintegrated players that only produce spodumene. That includes Mineral Resources and Pilbara Minerals in Australia.

And then there's a very large universe of hopeful pre-revenue mining projects that are anywhere from having stakes on land to have drilled some holes to have advanced engineering studies to a pre-feasibility study level and some close to definitive feasibility study or have already raised full financing and are into construction. So, any project typically takes anywhere between 5 and 10 years. A brand-new greenfield will probably take 10 years from the time it's conceived to the time it actually gets into production.

But there are a number of brownfield opportunities as well on these emerging projects. But the emerging projects are so big because the incumbent producers don't have enough lithium resources within their own portfolio because lithium is a small industry that's growing super-fast. So, EV has been a killer app for lithium and lithium is the irreplaceable element of a lithium-ion battery. So, over the course of the past 12 years, like I said, there were fits and starts, but it's accelerated very significantly as Tesla has succeeded, and then post-COVID, as the whole world, Europe and now all of US are saying they're going to go all electric by certain timeframes.

JACK FARLEY: You write in one of your reports that pricing for lithium is still very strong, and it's only going to get stronger. If capital does not start to flow upstream, pricing will only get more extreme, and assets will only get more expensive. So, just to put it in the context of viewers, over the past year the price of lithium has erupted higher, and the stocks have followed as the typical that stocks follow commodity prices. Just paint us a picture of where you see this space headed going forward. And then we'll get into the nitty gritty of specific companies.

HOWARD KLEIN: Sure, well that thing that I wrote was actually a quote directly from one of our vodcast interviews, Ken Brinsden of Pilbara Minerals, who we interviewed for our Rock Stock Channel YouTube and he has taken a company from zero to 5 billion market cap in just five years and just selling the precursor of hard rock material but he has very innovatively put together a digital auction platform where the market for lithium when sold to China is often very opaque and non-transparent and often has off take contracts that are tied to some price indexes.

And that's worked to the producer's disadvantage over the past couple of years. So, he said let's [?] the swing supplier of spodumene because many other mines have shut down in the downturn two years ago. So, he basically said, we have lots of tons that are available on the on contract and will adhere to the prices there. But for new tons that we have that are non-contracted, there are lots of chemical processing plants in China that are all short material. So, he has conducted two auctions so far.

The first auction was I think in September or August and the price of spodumene was I think \$12,040. The last auction which was about two or three weeks ago was about \$20,200. Those prices, the \$20,200 and the \$12,100 compared to he was selling product for like \$400 this time last year. So, a nearly four to five

times increase in the price of spodumene. The chemical prices, lithium chemicals were trading typically ballpark at anywhere from \$6,000 but on average, maybe \$10,000 last year to now at the mid-20s.

So, companies like Albemarle and SQM who sell lithium chemicals were selling chemicals this time last year if they were not on contract at prices in the low to mid-teens. It's now price negotiating season. So, Tesla and LG and SK and other buyers of lithium are now going to be negotiating with Albemarle when they're desperate for lithium chemical supply, and Albemarle has a large chunk of that. Again, Albemarle has a lot of contracts, but they also have variable components to some of their contracts. So, it's going to be interesting to see where the prices fall.



But I expect that Albemarle and Livent and SQM are going to be getting prices in the high teens or maybe even mid-20s going into next year. And that's going to result in their earnings from lithium to be a hell of a lot better next year and the years after that. And the stock chart you're showing me for Albemarle, this has been one of my top picks since you started interviewing me in March of 2019. I said in March that I thought the stock could go to 200.

It's been as high as 240. I think this stock could be 300 in let's say 12 to 24 months, because commodity equities follow commodity prices as much as the industry hates hearing lithium is a commodity, because they view it as a specialty chemical. It is a critical mineral. And it's in high demand. And they're in the catbird seat and the earnings for Albemarle are going to benefit greatly, not only from price rises, but Albemarle has a lot of volume growth coming.

They've been investing in their own brownfield and greenfield projects. And those projects are going to come on stream and have additional volumes in the next 12 to 24 months.

JACK FARLEY: I think when you first came on with our friend, Ed Harrison in 2019, I think Albemarle was well below \$100. And as you say, it's not yet now firmly above that a \$200 mark, and the whole space, as you definitely know, has performed very well over the past two years. Actually, we can put up the RK Equity scoreboard so far. There has been a tremendous amount of beta in the space where stocks have performed all the way up from 50% up year to date, and some have performed up 370%.

RK Equity								
Lithium Market Scoreboard Sept 30, 2021		USD Mkt (\$m)	Share Price 9/30/21	1 Mo	3 mo	YTD	Location	Type
Chemical Producers		\$ 81,827						
Ganfeng (HKSE)	\$ 33,988	\$ 138.40	-23%	19%	49%	China, Aus, Arg, Mex	Rock, Brine	
Albemarle Corporation	\$ 25,609	\$ 218.97	-7%	30%	48%	US, Chile, Aus, China	Rock, Brine	
SQM	\$ 15,344	\$ 53.72	3%	14%	9%	Chile, Aus	Brine, Rock	
Tianqi Lithium	\$ 23,275	\$ 101.58	-25%	64%	159%	China, Aus	Rock	
IGO Limited	\$ 4,842	\$ 8.88	-8%	16%	39%	Aus	Rock	
Livent	\$ 3,733	\$ 23.11	-7%	19%	23%	US, Arg, China, Quebec	Brine, Rock	
Orocobre Limited	\$ 3,989	\$ 8.69	-5%	34%	94%	Arg, Japan	Brine	
Spodumene Producers		\$ 5,653						
Mineral Resources Limited	\$ 6,093	\$ 44.81	-18%	-17%	20%	Aus	Rock	
Pilbara Minerals Limited	\$ 4,333	\$ 2.05	-8%	41%	136%	Aus	Rock	
AMG Advanced Metallurgical	\$ 1,017	\$ 27.98	-7%	-3%	14%	Brazil	Rock	
Emerging Projects		\$ 17,136						
Lithium Americas (NYSE)	\$ 2,693	\$ 22.33	32%	50%	78%	Arg/Nevada	Brine, Clay	
Compass Minerals	\$ 2,278	\$ 64.40	-4%	9%	4%	Utah	DLE Brine	
Liontown Resources	\$ 1,981	\$ 1.44	48%	69%	324%	Aus	Rock	
Vulcan Energy Resources	\$ 1,160	\$ 13.03	-9%	69%	372%	Germany	DLE Brine	
Standard Lithium (TSX.V)	\$ 1,146	\$ 10.33	60%	103%	262%	Arkansas	DLE Brine	
Piedmont Lithium (NASDAQ)	\$ 864	\$ 54.46	-8%	-30%	105%	Carolina/Quebec/Ghana	Rock	
Ioneer	\$ 864	\$ 0.63	15%	80%	125%	Nevada	Rock	
AVZ Minerals Ltd.	\$ 776	\$ 0.335	37%	109%	97%	DRC	Rock	
Sayona Mining Ltd.	\$ 772	\$ 0.175	17%	101%	1844%	Quebec	Rock	
Sigma Lithium	\$ 677	\$ 10.25	4%	54%	243%	Brazil	Rock	
Neo Lithium Corp	\$ 506	\$ 4.53	4%	37%	128%	Argentina	Brine	
Lake Resources	\$ 504	\$ 0.615	1%	84%	742%	Argentina	DLE Brine	
Core Lithium	\$ 474	\$ 0.425	29%	77%	193%	Australia	Rock	
Firefinch Ltd (Mali Lithium)	\$ 404	\$ 0.610	5%	54%	270%	Africa	Rock	
Bacanora Lithium	\$ 350	\$ 0.675	2%	14%	5%	Mexico	Clay	
American Lithium	\$ 346	\$ 2.48	16%	34%	103%	Nevada	Clay	
Millennial Lithium	\$ 278	\$ 3.60	10%	29%	40%	Argentina	Brine	
Rock Tech Lithium	\$ 228	\$ 4.91	-3%	-2%	191%	Ontario	Rock	
Galan Lithium	\$ 197	\$ 1.010	-5%	10%	162%	Argentina	Brine	
Critical Elements Corporation	\$ 197	\$ 1.36	3%	4%	97%	Canada	Rock	
Argosy Minerals Limited	\$ 185	\$ 0.21	17%	107%	156%	Argentina	Brine	
European Metals Holdings	\$ 175	\$ 1.39	-13%	-9%	21%	Czech	Rock	
Ironridge Resources	\$ 155	\$ 0.20	-12%	4%	60%	Ghana	Rock	
Cypress Development	\$ 154	\$ 1.55	7%	60%	76%	Nevada	Clay	
Prospect Resources	\$ 130	\$ 0.43	19%	105%	153%	Africa	Rock	
Frontier Lithium	\$ 130	\$ 0.84	-1%	8%	127%	Ontario	Rock	
Lepidico	\$ 112	\$ 0.023	15%	130%	130%	Africa	Rock	
Jindalee	\$ 101	\$ 2.36	-38%	-6%	197%	Oregon	Clay	
Savannah Resources	\$ 90	\$ 3.950	13%	1%	-10%	Portugal	Rock	
Lithium Power International	\$ 90	\$ 0.33	16%	76%	48%	Chile	Brine	
Wealth Minerals	\$ 88	\$ 0.480	39%	37%	465%	Chile	Brine	
European Lithium	\$ 87	\$ 0.105	21%	102%	133%	Austria	Rock	
E3 Metals Corp	\$ 81	\$ 1.93	10%	3%	124%	Alberta	DLE Brine	
Infinity Lithium	\$ 80	\$ 0.13	33%	40%	-19%	Spain	Rock	
Alpha Lithium	\$ 64	\$ 0.68	28%	-4%	-9%	Argentina	Brine	
Hawkstone Mining (Arizona Lithium)	\$ 61	\$ 0.045	5%	80%	400%	Arizona	Clay	
Zinnwald lithium	\$ 59	\$ 17.100	-25%	-8%	49%	Germany	Rock	
Arena Minerals	\$ 48	\$ 0.20	0%	33%	567%	Argentina	Brine	
Kodal Minerals	\$ 46	\$ 0.3650	1%	-18%	248%	Mali	Rock	
Noram Ventures	\$ 41	\$ 0.72	16%	20%	64%	Nevada	Clay	
Pure Energy	\$ 39	\$ 1.52	-5%	15%	114%	Nevada	Brine	
Essential Metals	\$ 33	\$ 0.1750	-5%	84%	113%	Australia	Rock	
Aggregate Lithium Market Cap		\$ 104,616						

So, the stocks that have performed really well have been those greenfield projects, green meaning the grass is still on the mine, it hasn't been mined, and then once it starts to be mined, that's called a brownfield fund. So, you laid out the three majors in the space, Livent, SQM, and Albemarle, the three non-Chinese majors. Where, as an investor, are you seeing the greatest opportunity? And by the way, for viewers, we should note that at RK Equity, you do a lot of work with the lithium miners themselves.

So, to some of these companies, you are advisors, so you have a relationship with them. But I'd much rather talk to someone who knows what they're talking about and is involved in the space than someone who has no conflicts but does not know anything about the space. So, I just want to disclose that for our viewers.

HOWARD KLEIN: Thanks for that. And yes, I will talk about companies that I'm personally invested in, or RK is an advisor to. So, this is not financial advice as we say, but you quoted some numbers there, those were just in terms of percentage performance 40% to 400%. That was just over the past six weeks. But if we go back to, let's say, September 1st of last year, which was pre-Tesla battery day, and there was a lot of hype ahead of battery day, and that was when the lithium market turned from what I'm calling Lithium 2.0 into the Lithium 3.0 period that we are now.

And there were some companies that were near bankrupt that have risen 2,000% in one year. So, an absolutely astonishing beta are in these let's say early-stage developers. And if you're close to them, we've been associated with a number of them. We've missed several as well, but if you take a snapshot of where we are today, like SPACs, we talked about earlier this year. In March, I was saying it was like a lot of the SPACs were just like way too high, the valuations, but there was a disconnect I saw like in a QuantumScape or a Hyliion or Nikola or a Fisker.

Those companies all could go bankrupt, and nobody would care. But they were trading at very high valuations. And I was saying lithium was very significantly undervalued relative to those. So, a lot of those SPACs have come down a lot, while lithium has come up. But again, if you look at this chart, to put it in some context, in aggregate, the market cap of all of the companies on this scoreboard are now about \$110 billion dollars. That's up, in aggregate, four to five times. It was \$25 billion last year at this time. But the two Chinese companies that we didn't talk about so much, Ganfeng and Tianqi, amount for a large percentage of that gain.

RK Equity								
Lithium Market Scoreboard Sept 30, 2021		USD Mkt (\$m)	Share Price	1 Mo	3 mo	YTD	Location	Type
Chemical Producers		\$ 81,827						
Ganfeng (HKSE)	\$ 33,988	\$ 138.40	-23%	19%	49%	China, Aus, Arg, Mex	Rock, Brine	
Albemarle Corporation	\$ 25,609	\$ 218.97	-7%	30%	48%	US, Chile, Aus, China	Rock, Brine	
SQM	\$ 15,344	\$ 53.72	3%	14%	9%	Chile, Aus	Brine, Rock	
Tianqi Lithium	\$ 23,275	\$ 101.58	-25%	64%	159%	China, Aus	Rock	
IGO Limited	\$ 4,842	\$ 8.88	-8%	16%	39%	Aus	Rock	
Ilvont	\$ 3,733	\$ 23.11	-7%	19%	23%	US, Arg, China, Quebec	Brine, Rock	
Orocobre Limited	\$ 3,989	\$ 8.69	-5%	34%	94%	Arg, Japan	Brine	
Spodumene Producers		\$ 5,653						
Mineral Resources Limited	\$ 6,093	\$ 44.81	-18%	-17%	20%	Aus	Rock	
Pilbara Minerals Limited	\$ 4,333	\$ 2.05	-8%	41%	136%	Aus	Rock	
AMG Advanced Metallurgical	\$ 1,017	\$ 27.98	-7%	-3%	14%	Brazil	Rock	
Emerging Projects		\$ 17,136						
Lithium Americas (NYSE)	\$ 2,693	\$ 22.33	11%	50%	78%	Arg/Nevada	Brine, Clay	
Compass Minerals	\$ 2,278	\$ 64.40	-4%	9%	4%	Utah	DLE Brine	
Liontown Resources	\$ 1,981	\$ 1.44	48%	69%	324%	Aus	Rock	
Vulcan Energy Resources	\$ 1,160	\$ 13.03	-9%	69%	372%	Germany	DLE Brine	
Standard Lithium (TSX.V)	\$ 1,146	\$ 10.33	60%	103%	262%	Arkansas	DLE Brine	
Piedmont Lithium (NASDAQ)	\$ 864	\$ 54.46	-8%	-30%	105%	Carolina/Quebec/Ghana	Rock	
Ioneer	\$ 864	\$ 0.63	15%	80%	125%	Nevada	Rock	
AVZ Minerals Ltd.	\$ 776	\$ 0.335	37%	109%	97%	DRC	Rock	
Sayona Mining Ltd.	\$ 772	\$ 0.175	17%	101%	1844%	Quebec	Rock	
Sigma Lithium	\$ 677	\$ 10.25	4%	54%	243%	Brazil	Rock	
Neo Lithium Corp	\$ 506	\$ 4.53	4%	57%	128%	Argentina	Brine	
Lake Resources	\$ 504	\$ 0.615	1%	84%	742%	Argentina	DLE Brine	
Core Lithium	\$ 474	\$ 0.425	29%	77%	193%	Australia	Rock	
Firefinch Ltd (Mali Lithium)	\$ 404	\$ 0.610	5%	54%	270%	Africa	Rock	
Bacanora Lithium	\$ 350	\$ 0.675	2%	14%	5%	Mexico	Clay	
American Lithium	\$ 346	\$ 2.48	16%	34%	103%	Nevada	Clay	
Millennial Lithium	\$ 278	\$ 3.60	10%	29%	40%	Argentina	Brine	
Rock Tech Lithium	\$ 228	\$ 4.91	-3%	-2%	191%	Ontario	Rock	
Galan Lithium	\$ 197	\$ 1.010	-5%	10%	162%	Argentina	Brine	
Critical Elements Corporation	\$ 197	\$ 1.36	3%	4%	97%	Canada	Rock	
Argosy Minerals Limited	\$ 185	\$ 0.21	17%	107%	156%	Argentina	Brine	
European Metals Holdings	\$ 175	\$ 1.39	-13%	-9%	21%	Czech	Rock	
Ironridge Resources	\$ 155	\$ 0.20	-12%	4%	60%	Ghana	Rock	
Cypress Development	\$ 154	\$ 1.55	7%	60%	76%	Nevada	Clay	
Prospect Resources	\$ 130	\$ 0.43	19%	105%	153%	Africa	Rock	
Frontier Lithium	\$ 130	\$ 0.84	-1%	8%	127%	Ontario	Rock	
Lepidico	\$ 112	\$ 0.023	15%	130%	130%	Africa	Rock	
Jindalee	\$ 101	\$ 2.36	-38%	-6%	197%	Oregon	Clay	
Savannah Resources	\$ 90	\$ 3.950	13%	1%	-10%	Portugal	Rock	
Lithium Power International	\$ 90	\$ 0.33	16%	76%	48%	Chile	Brine	
Wealth Minerals	\$ 88	\$ 0.480	39%	37%	465%	Chile	Brine	
European Lithium	\$ 87	\$ 0.105	21%	102%	133%	Austria	Rock	
E3 Metals Corp	\$ 81	\$ 1.93	10%	3%	124%	Alberta	DLE Brine	
Infinity Lithium	\$ 80	\$ 0.13	33%	40%	-19%	Spain	Rock	
Alpha Lithium	\$ 64	\$ 0.68	28%	-4%	-9%	Argentina	Brine	
Hawkstone Mining (Arizona Lithium)	\$ 61	\$ 0.045	5%	80%	400%	Arizona	Clay	
Zinnwald Lithium	\$ 59	\$ 17.100	-25%	-8%	49%	Germany	Rock	
Arena Minerals	\$ 48	\$ 0.20	0%	33%	567%	Argentina	Brine	
Kodal Minerals	\$ 46	\$ 0.3650	1%	-18%	248%	Mali	Rock	
Noram Ventures	\$ 41	\$ 0.72	16%	20%	44%	Nevada	Clay	
Pure Energy	\$ 39	\$ 1.52	5%	15%	114%	Nevada	Brine	
Essential Metals	\$ 33	\$ 0.1750	-5%	84%	113%	Australia	Rock	
Aggregate Lithium Market Cap		\$ 104,616						

The emerging producers in aggregate on what you have in front of me are \$17 billion, okay, and a few of those are 2 billion or 1 billion. If you think about those companies like you would think about some of the SPACs that have just raised \$200 million and \$500 million that are pre-revenue, \$17 billion in aggregate is very small. QuantumScape alone is a 10 billion market cap company. Lucid is a 26 billion market cap company. Both of those companies could fail, and nobody would care. These lithium companies,

a great number of these lithium companies will be needed because the demand for lithium is growing at 20%, 25% per year as far as the eye can see.

The markets may be 400,000 tons, 450,000 tons, that's going to be 2 million tons, 3 million tons over the next 10 years. So, the market has recognized that these companies need to be financed and there's been a fair bit of M&A just in the past week actually precious-- it's funny, I called lithium is the new precious metal. So, over the weekend, a Chinese company, Zijin Mining, a 40 billion market cap company, put in a 36% premium bid for an Argentine brine that has an equivalent to 770 million US dollars.

It's a pre-production company that spent the past five years bringing their project almost to the point where it's construction ready. They still have a few more things to do before it's construction ready, but they've received an accepted a \$770 million dollar bid. Great reward for investors who have been in that stock. This is we call it higher love. This was an all 52-week, an all-time high for this company, Neo Lithium.

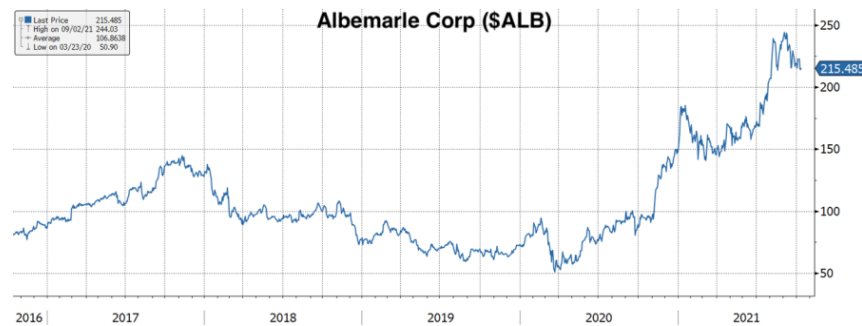
A few weeks prior to that two other Chinese were fighting it out for another company called Millennial Lithium in Argentina. That one sold for almost half of what the lithium is sold for, about \$400 million. But that was CATL, a major Chinese battery company supplier to Tesla, is buying that for \$400 million. So, in the precious metals, you have a South African company Sibanye-Stillwater platinum group metals, very successful company, very successful entrepreneur has decided they want to get into lithium.

They made a small investment in Europe, a company called Keliber, private company, Keliber, I think last year, but they've just announced a more significant investment in a company called Ioneer which has a project in Nevada. So, they're investing \$490 million into that. So, there's been a lot of M&As or emerging project scoreboard, a number of the companies are either being acquired or are joint venturing. In addition to that, there's been a lot of financing activity as the market caps of these companies have grown, as investors, institutional and retail, have been making money on these companies in this thematic.

They just recognized that these things need to get built and they offer still very significant relative value. Within that context, though, still you have to be selective because on that scoreboard, there are some stocks that I think are overvalued. I've missed some of them. I've been invested in some of them. But on a relative value basis, you can just throw a dart at the board and made money on lithium this time last year.

Now, I would be more cautious although I wouldn't short anything because the tailwind is still so strong and there's some people predicting that lithium prices that are in the mid-20s now go as high as \$40,000 next year. So, I think there's a real chance of a parabolic pattern meltup over the course of the next three, six, 12 months, because there's still a fair number of skeptics and you still haven't seen some top tick buyout.

And actually Albemarle, which you have in front of me, is that in my mind, one day, you might see a major mining company like BHP or Rio Tinto or a big oil company like Exxon or someone basically say we need to diversify into lithium, and maybe they'd buy out Albemarle at a 40 billion, 50 billion valuation up from 27 billion where it is today. When and if that happens, I would view that as a potential topicky side.



JACK FARLEY: Yeah, that's interesting. So, there's a tremendous beta in the space as you said. If you've had thrown a dartboard over the past few years, you would have done remarkably well, even if you chose one of the least well performing names. But let's get into the alpha, which companies you like and which you don't. However, before we go into those small, greenfield companies, let's start with the majors.

There's Albemarle, there's Livent, and there's SQM. In your previous interviews with Ed, you said the one you liked the most was Albemarle. If you wanted some diversified exposure, there was Livent. But at the time you didn't really like SQM. However, it's my understanding that SQM has somewhat been a laggard, because they produce not so high-quality lithium and they're really focused on low cost. So, you're more open to SQM now than previously. So, just walk us through your view on the majors and then we'll get into the emerging ones.

HOWARD KLEIN: Okay, that's a good point. I think I spoke enough about Albemarle. I like they have the best assets, they are the lithium proxy. If you do like statistical analysis, you'll probably see an R squared of 100 of Albemarle to the lithium price. So, well-managed company and very liquid stock and again, they have price and volume growth. I haven't liked Livent since our last discussions. They're in Argentina. They have largely price growth, but no volume growth, and Argentina is a risky place, and the stock is very richly valued in my view. And I think there's some M&A premium already built into that valuation.

It's a fine company, just price is too high in my opinion of valuation. SQM, I don't fundamentally like them as a company, the management to be honest. And I've been right to say that they would underperform. They have substantially underperformed, whereas Albemarle has hit higher love very significantly. SQM has not hit its all-time highs.

And why is that? They have grown their lithium volumes more than anybody else. But they treat lithium as a commodity, that to some degree, they've been incentivized by their government to behave this way. Because they have a concession that expires in 2030. Basically, they've been given an opportunity to significantly ramp up production, but they have higher royalties that they have to pay if the price of lithium is high.

So, they have sought to keep lithium price relatively low while ramping up production but also not focusing very much on the quality of the lithium. Lithium is a specialty chemical. So, rather than seek to be selling to Tesla high quality battery materials, SQM has largely played a market share game in China for the lowest

quality lithium. So, they has, more than anybody else, caused the price to decline significantly because of these large volumes. Certain lithium prices they were selling were at \$5,000 or \$6,000.

However, their stock is now trading at 15 million market value. They used to be on par with 15 billion market value. They used to be on par with Albemarle 15 billion. Albemarle is now 27 billion, so the market has derated the lithium multiple of SQM, but I think SQM is now poised because they have fewer long-term contracts. They're most tied to spot market prices and because spot market prices have gone up so much, I think SQM is going to have some very good earnings quarters and the market may not be factoring that into SQM's price today.

So, SQM is more of a trade, like in six to 12 months. I consider Albemarle a long-term investment you could buy and hold five years, go to sleep, they pay dividend. In SQM's case, I consider this is more of a six- to 12-month trade that I just think on a relative performance basis, it's poised to potentially rerate because they're going to start producing some good earnings from higher lithium prices.

JACK FARLEY: Now, talk to me about a company I know you're very excited about, Piedmont Lithium. What are they? What are they trying to do? Are they in the rock space? Are they in the brine space? Who are their partners? And what do you see for the future of this company?

HOWARD KLEIN: So, Piedmont Lithium like Lithium Americas, whatever, 12 years ago, I started working with that company when it was a 10 million market cap and it's been as high as a billion dollars, and I think it could be \$3 billion. So, I am still very supportive of it, but again, not financial advice, I'm biased here. And the CEO is a very good friend of mine. But we last spoke in March, in early March and Piedmont peaked in the high 80s.

It's now around \$60, it's been as low as \$49. But it peaked in the high 80s following a front-page news story in the Wall Street Journal which profiled the founders, and the Wall Street Journal profiled the founders because in September of last year, Piedmont signed an off-take agreement with Tesla. So, that was a very big news event for Piedmont, but also for the lithium industry generally. In late March, after we spoke, Piedmont raised \$123 million at \$70 through Evercore and JP Morgan, and then the stock dropped to as low as \$49.



I was suggesting to in March that Piedmont could reach \$100 within six to 24 months, I still believe that. I think by first half next year, that will happen. But I'm also going to suggest that by late next year or early

2023, I think it could be a \$150 stock. And the reason for that is that when we spoke in March, not all the other stocks had risen as much right, and the lithium price had not risen as much. So, we're now in a new paradigm where spodumene prices have risen four to five times, lithium chemical prices have risen twice, two times.

But apart from that Piedmont has substantially added value to its own projects. And by that, their flagship project in North Carolina, they've grown their resource by 40%. They've grown their production by 34%. So, they were, when we last spoke, their business plan was to produce 23,000 tons of hydroxide, they're now planning 30,000 tons of hydroxide just from North Carolina.

JACK FARLEY: Is that per year, that 30,000?

HOWARD KLEIN: That's per year for like 20 years, I think.

JACK FARLEY: And what is the skew of a ton of hydroxide now?

HOWARD KLEIN: Like going in the market today in the spot market, it's north of \$20,000. But that is not what Piedmont presumes in their studies. They presume in their studies something like 14,500 or 15,000, based on a theoretical presumed incentive price like where lithium might be based on a number of factor. But the overall, in the beginning of March, the market believed Piedmont's Carolina lithium project had a net present value of \$1.1 billion.

They increased that to \$1.9 billion by 80% as a result of this increase in resource and increase in production volume and they might have used slightly higher prices. Separate from the Carolina project, though, Piedmont made an extremely smart investment. I told you that some of those stocks on the scoreboard rose 20 times from last year, Piedmont invested in a company called Sayona at less than a penny. In Australia, they have companies that have billions of shares, so that's not abnormal.

But anyway, they invested in less than a penny. That stock is now 15 cents. So, they supported Sayona. Sayona is an Australian company developing projects in Quebec. So, Sayona has gone from let's say 25 million, 30 million market cap to a market cap as big or bigger than Piedmont's in just the past six months. So, it's an extremely astute investment by Piedmont. Piedmont now has access to substantial projects in Quebec in partnership with Sayona.

They have also invested in Ghana, very smartly. They found another deeply undervalued project with a very substantial and promising resource in an asset very close to the port. It's one of the safest countries in Africa. And the market hasn't actually rewarded Iron Ridge where they invested as much as it's rewarded Sayona. But they've thought well beyond just the 30,000-ton Carolina lithium project, they now have sufficient spodumene resources to produce 60,000 tons of lithium hydroxide.

So, they haven't publicly announced yet that that is their plan, but you don't have to be a genius to realize that America is going to need it. You have a chart up here of all of the battery plants. So, Piedmont is developing in America and in Quebec pretty much the most advanced and one of the only spodumene to

hydroxide business plans and that's where most of the lithium in the world comes from is hard rock in Australia converted in China.



And they are replicating that strategy for the North America and possibly the European market. And while all of that has happened since March, but the stock declined from 70 to 50 and is now trading only at 60. So, my partner, Rodney, he put out a note recently basically saying, the implied value of Piedmont's flagship Carolina lithium project is now trading at an 87% discount, only 13% of its NPV. Whereas I mentioned Sibanye-Stillwater made an investment into Ioneer, that \$490 million investment.

He's done some math. It equates to about 80% of NPV. So, Piedmont has hired Evercore and JP Morgan, they're running a strategic partnering process as we speak, and Piedmont is advancing. We'll talk about permitting and the like in a second. But if Piedmont were to realize an 80% of its NPV for its Carolina lithium project, Rodney is suggesting it's worth \$130 a share. If they were to get 100% of their NPV, it would be \$150 a share. If we go back to Zijin Mining buying Neo Lithium in Argentina, they're paying 64% of their NPV.

And that's a discounted price relative to its NPV, it's discounted to 80% or 100%, which I'm suggesting that Piedmont could achieve. And I think that discount is justified because Argentina is much-- and they're selling it to a Chinese buyer, but I think that there's a huge scarcity value into what Piedmont has put together.

JACK FARLEY: Sorry, we lost you for the past like 30 seconds. Can you repeat, you're talking about the rerate, that Piedmont was getting like a percentage of its net asset value and that Zijin Mining made that acquisition at 6%.

HOWARD KLEIN: So, Neo Lithium was a high-quality project, but they decided to sell at \$770 million of project which had an NPV of \$1.2 billion, I think. So, that was like 64% of its NPV. Piedmont's NPV is \$1.9 billion. They're trading at let's say 13% of that. If they were to sell at 80% of that which is what Sibanye-Stillwater is paying for Ioneer, the accretion of value, it would represent \$130 to Piedmont's stock. If they got 100% of their NPV just for the Carolina project, it would equate to \$150 stock.

That's ignoring any upside to their Ghana asset or their Quebec asset. That's just for this asset but in my opinion, Piedmont in North Carolina is like MP Materials in California, okay. It's a scarce hard rock mine. It's the only conventional hard rock mine in America, and it deserves to trade at a significant premium. So, also the only company I think of all the lithium developers that it's 100% domiciled US company. Everything else that's traded tends to be either an Australian or a Canadian company.

And that matters to some degree, but Piedmont and its management are very focused like Jim Litinsky and MP is very focused on developing an American sources of supply. Ford and SK Innovation announced \$11.4 billion investment in Tennessee and Kentucky as key innovations in Georgia. The Carolina lithium project is less than 500 miles from where those huge investments are being made in Tennessee.

So, the southeastern United States is becoming a huge EV battery hub. But Piedmont has been underperforming very significantly in the past three months, and the reason for that is that they're in the final throes of their permitting process and the permitting process is subject to public hearings. And whenever you have public hearings, inevitably, there are some people who don't like mining. So, there's been some NIMBY resistance, which I think has been--

JACK FARLEY: NIMBY is not in my backyard.

HOWARD KLEIN: Not in my backyard resistance, which has been overblown in my opinion by inflammatory news articles and some colorful statements, quotes that were given to journalists by local county commissioners. That happened in July, so the stock went down 20% in one day, the day of the first hearing when this news article came out.

But since that time, the commissioners have passed updated county ordinances that specifically referenced lithium and chemical processing. So, Piedmont received federal permits in 2019. And they have now submitted for their state, North Carolina permits, I think, at the end of August or early September, and those are in the public comment period. I'm very optimistic that North Carolina state mining authorities will get this permitted sometime early in the new year, at which point, Piedmont will publish final feasibility studies

and be in position for full financing and possibly the beginning of construction as early as the second half next year.

So, in my read of what's happening, Gaston County is very excited by the prospect of a billion-dollar investment in the county, 500 jobs average \$90,000. Gaston County, where this is located is the 10th biggest county in North Carolina by population, but it's like 30th on a household income basis. So, the average income is something like \$50,000 and Piedmont's promising here average \$90,000 for 500 high quality mining and chemical engineering processing jobs in our region, North Carolina, where Albemarle is and Livent is, that's rich in skills.

So, there's all spillover economic. They're doing an economic impact statement to talk about all of the spillover effects that this will garner. And on top of that, North Carolina very well could attract like Tennessee and Kentucky have attracted battery factories and cathode factories and EV factories right in their backyard, an extremely strategic source of supply of lithium chemicals. So, for all those reasons, I think the noise around the permitting is overblown, and a huge opportunity to buy a very liquid stock, this is not a penny stock anymore.

This is a \$60 stock. It has very significant institutional share ownership. And also, they redomiciled in the US, meaning they're no longer an Australian company with an ADR but a full US listing but they just missed the window where like the Russell 2000 or Russell 3000 have their index rollover. So, next year a stock like this will fit into very broad-based index constituents like that and not just be in ETFs which are good in getting substantial inflows, but that's just another thing to think about from an institutional investor point of view.

JACK FARLEY: Yeah, so you're saying it wasn't able to make it based on the timing in the Russell 3000 and that is typically a good thing for a stock because anytime someone buys the ETF of the Russell 3000, or via a mutual fund, the Russell 3000 then has to buy more Piedmont as well. Okay, so that's a good thing. And so, you said there are overblown issues about the permit, but I just want to make clear to the audience that when you say it's trading at 13% of its net present value, people may be wondering why is that the case? The reason is that it's not producing right now. It is a greenfield project and they're still working out the permit, so they haven't built the mines.

HOWARD KLEIN: They have something like \$130 million in the bank and they have an \$850 million capex needs, so the company will need to raise more money. They have applied for the Department of Energy ATVM loan program. This is the same loan program that lent money to Tesla a number of years ago. Jigar Shah at the Department of Energy Loan Project Office and Jennifer Granholm Secretary of Energy has said there's \$40 billion there and we need to invest in projects.

So, Piedmont publicly announced that they are applying for such a loan. If they were to get such a loan, that would be very low-cost funding. It'd be long term, low interest rate and having the impromptu tour of the US government--

JACK FARLEY: And they would have to raise equity but by issuing more shares, which would be diluted to the equity price.

HOWARD KLEIN: That's right. But they probably will need some equity, they could potentially sell a portion of their project in the way that Sibanye-Stillwater is earning into 50% of Ioneer. And that will be for \$490 million, they're getting half of the project. Pete mine probably wouldn't do that type of deal specifically, but they might sell a stake of let's say, I don't know, 25%, 50% of the company and then finance pro rata with a joint venture partner.

Anyway, that's what they've publicly articulated is an ask, but they have a process underway. Assets are scarce, there's lots of interest. You've even seen Jim Farley of Ford, talking about having to get back into, going all the way up to the mines, we might see Fordlandia again when Ford was owning iron mines and rubber plantations in Brazil. It's not in the question that they or their suppliers like SK Innovation or others, GM will-- it's a game of musical chairs.

There's real risk, and I watched an interview recently with Jim Litinsky of MP Materials, he basically said that there could be a major bankruptcy at a major auto company or battery company that's supply chain related, critical minerals related. They just don't have the materials and they're not going to be able to produce their cars. And that will cause it. It could be rare earths, it could be lithium, it could be nickel, it could be graphite. And I think that that's a realistic possibility.

And the paranoia about that is going to start to sink in with Jim Farleys and the Mary Barras of the world as they've announced, it's only really this year. A year ago, Mary Barra was making ventilators and masks for COVID. They have now laid out their strategy, every major auto company has laid out through their battery days or power days or Volkswagen, Stellantis, a whole fleet of electrification, billions and billions of dollars, hundreds of billions, if not trillions of dollars is going to be allocated to EVs, new models, batteries.

And they haven't really started yet thinking in earnest about raw material all the way up to the mine and the chemical, but they're going to because they're going to realize that it's the limiting factor to all of those other admissions. I'll make one other comment, as a further tailwind, Tesla co-founder JB Straubel and his Redwood Materials has started with recycling and recycling was like super popular and that's great. But his master plan, which he announced about a month ago, is that the midstream of the battery supply chain, the cathodes are a missing ingredient to create the closed loop mine chemical cathode, battery, EV, recycling, we were missing cathode.

So, he articulated a plan of 100 gigawatt hours of cathode plants by 2025 and 500 gigawatt hours by 2030. And he said that there needs to be for companies of equal ambition as that to build the future that we want of an all-electric future. So, ultimately lithium chemical goes into a cathode first, not in EV. So, that additional cathode demand on top of the Ford and SK and Rivian is going public, they're going to raise \$8 billion.

So, there's all of this new information. Today, FREYR and Koch announced a joint venture to build 50 gigawatt-hour batteries by 2030. They're investing \$70 million in 24M which is an MIT-backed semi solid state battery technology that FREYR is implementing and licensing in Norway. But now, Koch has said we want to partner and build this in America. So, it's exciting times. Demand is just incredible, and assets like Piedmont and others, I want to talk about some others in Canada.

Piedmont, we need 50, 75 Piedmonts, okay. Seriously. And there's vast potential in America and in Canada to become very significant suppliers and ensure that sufficient lithium is available, secure, sustainable lithium is available for North America and European aspirations because right now, we're overreliant on China.

JACK FARLEY: We actually have a question from Chen who said, how much would a potential worsening US-China relationship impact the lithium market? Let's broaden that question and say, even if the US and China are getting along fine, what if the supply chain disruptions continue and US companies are unable to secure the lithium that they need? What do you think would the knock-on effects of that would be?

HOWARD KLEIN: If push comes to shove, China is going to supply their homegrown companies before they're going to supply American companies or European companies. So, even if we're on the most perfect friendliest terms, China's still not a free market. They're not just selling to the highest price they're looking after themselves. China has this Made in 2025 strategy that has targeted certain industries and electric vehicles and batteries is one of those industries.

And the Build Back Better Biden agenda is very much and Jennifer Granholm, I've never seen someone in America championing an industrial policy in a similar way that China and also Europe are doing but they're basically saying they're going to eat our lunch, and she's right. If we want this EV future, it needs government support, it can't just be private market, free market funded, where it's not a level playing field.

So, America, and that's why Jigar Shah at the Loan Projects Office is making some loans, but we'll see what happens with the infrastructure plan and the further additional-- they're not getting 3.5 trillion. Where's the compromise is going to be? Where is Senator Manchin going to fall? And are we going to get this through? But I'm confident something like that will get through. I'm confident that there will likely be EV buyer subsidies embedded within that, and it'll be a further tailwind to the sector they'll get with the program and support the industry and they will have state support as well.

JACK FARLEY: Got it. Thanks, Howard. Let's do a turbo round on some stocks. We only have 10 minutes or so left. I understand they're the premium that you say for stocks that are listed in Australia because they are near China and that has been a very consistent demand for lithium within China. But there is a discount of stocks listed in Canada and I know you have a couple on your radar, such as E3 Metals and Compass Minerals.

Talk to me about those and then also talk to me about them as part of the larger DLE field, that is direct lithium extraction. So, there's Standard Lithium, Vulcan Energy and Lake Resources, but it's particularly Compass Minerals and E3 Metals. Why do you like those two in particular?

HOWARD KLEIN: Okay, so I told you that lithium currently comes from conventional hard rock or conventional brines. So, there are two other categories, clay and direct lithium extraction where no lithium is currently produced really, but they have promise for the future. Between those two categories, I have a preference for direct lithium extraction stories than clay stories. Compass Minerals is a client of ours, they're in the Great Salt Lake of Utah. They're making potash, and in the potash, they've discovered that there's lithium, but lithium requires new technology to actually produce it.

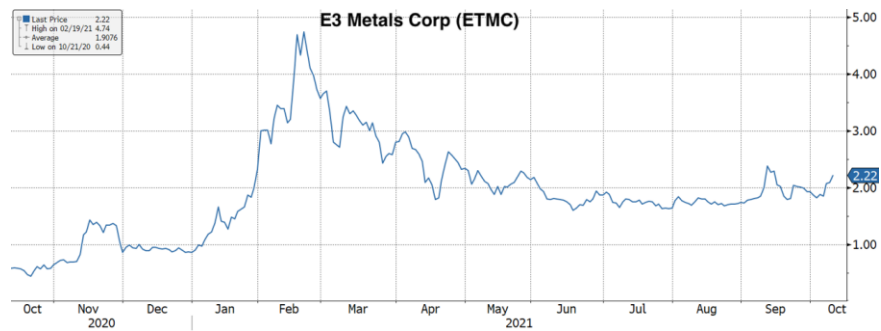
So, it's a 2 billion market cap company with some hidden value in it. And they haven't announced much to the market other than the fact that they have a resource, and they're evaluating a couple of DLE technology providers. But I'm optimistic that they will pick a provider, and they will set a path. They've actually articulated that they think they could be in production by 2025 of anywhere between 20,000 tons and 25,000 tons of lithium chemicals.

And given that it's a brownfield site, it's already permitted. There's already a lot of infrastructure there. The prospect that it'll come in on a low capex, low opex, I think is strong, and it's not a junior company, it's coming from a relatively well capitalized the NYSC listed company. So, I like that story. I think there's hidden value, because the market doesn't fully understand it. They just announced this resource in July, but as the market comes to understand it, it has potential to rerate.

E3 Metals is in Alberta. They trade on the OTC. EDMMF is their ticker symbol, that's trading at less than 100 million market cap, where some of those other names that you mentioned, Standard Lithium, Vulcan, Lake Resources and a private company, Lilac, just raised money from Chris Sacca, T. Rowe Price and BMW. So, it used to be in mining industries. They don't like new technology. If it's new technology, unproven, it typically trades at a discount. They're the only industry in the world that treats innovation with such disdain.

But in the past year, that's changed. It's changed in part because you've had some Palo Alto venture capital mentality come into the sector in the case of Lilac, and the whole ESG sustainability narrative, these are hard projects, but they have the promise of producing from brownfield developments where you're using tailings or you have existing infrastructure, or the land footprint is a lot smaller. And potentially, it could produce a lot faster than, let's say, conventional brine [?] in Argentina and Chile, where they have huge land footprints that takes a very long time to produce, and the overall quality in yields as we're talking with SQM is not always very high.

So, direct lithium extraction, there's a number of companies that are pursuing these opportunities. But in a lot of cases, it's a company that has the technology and they're looking and partnering with someone who has a resource, or it's someone who has a resource and they're looking to partner with someone who has a technology. In the case of E3 Metals, they have both a technology and they have a resource, that resource is in Alberta. It's the LaDuke Reservoir. There's lithium in the water, and they have an ion exchange technology which is similar to what Lilac has. But the market hasn't rerated this story in the way that it's rerated all the others, so [?] a relative value.



But as you look at this chart here, there's a lot of enthusiasm and a lot of stocks. We talked about this higher love. A lot of companies have hit highs then came in over the summer and have now hit 52-week or all-time highs. In the case of E3 Metals, that's not the case. It hit a high of nearly \$5, it came in as low as a \$1.80. It's been trading water, but I'm looking at that chart and knowing what all the enthusiasm there is for the other DLE stories, this company is reasonably well funded.

They're advancing toward a pilot plant. They have announced some aspirations to possibly list in the US as some other companies have. They just got coverage initiation from Roth Capital with a \$4.5 target, which is around its highs, but even at its highs, this was at a 250 billion market cap. Compared to Standard Lithium, which is a billion-market cap company or more, and they own 30% of their flagship project. They just had some announcement earlier today for a second project. So, that stocks rallying.

But Lake Resources is in the mid-500 million market cap, and they have to license someone else's technology. And they're in Argentina. So, I'm rooting for all of these companies. And I missed a number of those DLE stories, but we've been with E3 Metals since 40 cents. It's now a little bit above \$2. It's up a fair bit today.

JACK FARLEY: By way of \$4.80, yeah.

HOWARD KLEIN: What's that?

JACK FARLEY: I said, it's 40 cents from \$2.20 by way of \$4.80.

HOWARD KLEIN: Exactly. But even at \$4.80, okay, it would only be a 250 million market cap. So, if it were priced, the thesis of E3 is no different and no less compelling than the thesis of Standard Lithium and Vulcan in my opinion, okay. And those stocks have already risen just very high valuations. In the case of Standard Lithium, they're more advanced than E3. In the case of Vulcan, I wouldn't argue that they're much more advanced, risk reward having analyzed both of these companies.

So, I think this is more speculative, though, for sure. Like compared to Piedmont Lithium, which is much more advanced, much more conventional. I need to caveat that there's a risk that E3 doesn't work at all as there is a risk that Vulcan and Standard Lithium, these companies could be worth nothing. No one's yet proven it.

JACK FARLEY: Do you think that the odds-- the odds are maybe perhaps similar, but E3 is so much cheaper than, let's say, a Vulcan.

HOWARD KLEIN: Exactly. In a similar way that QuantumScape may fail. QuantumScape may disappear. Fisker may disappear, Lucid may disappear. All of these companies may not work. Nikola may disappear. But they're currently trading in the market at multiple billions of market cap. This company is bouncing around at less than 100 million market cap with similar potential to other stories.

So, from that perspective, I think it's a speculation that as people start to understand this story better and it epitomizes the energy transition. This is an oil province in Alberta. Jennifer Granholm talks about converting coal workers or oil workers to green economy workers. Here, all the people who work in Alberta can work on E3 helping pump liquid through their ion exchange technology.

And it's a permit friendly location, but look, this company has \$10 million or \$15 million in the bank, they're going to need \$500 million, \$600 million to build their project. But the first focus is on a pilot plant, in the same way that Standard Lithium has built a pilot plant over the past two years and is not 100% at the finish line but the stock has risen because they've shown promising results. I think E3, as they move the pilot, they will also show promising results.

And the company won't go bankrupt in the next 12 to 24 months. But the tailwind of lithium, the tailwind of green, more sustainable ESG types of lithium extraction, I think the stock could be up five to 10 times in a similar way that those other companies were up five to 10 times. It's like it's standing out anomalously from a relative value point of view for not a really good explainable reason.

JACK FARLEY: You are a big fan of Steve Wynwood, you've talked about Lithium 2.0's boom and bust in 2017, 2018. You referred to his earlier songs such as Can't Find My Way Home and you counseled investors to have blind faith. Now, you're talking about the Lithium 3.0 boom and you're talking about songs like Back In the High Life Again and Higher Love.

I would argue that with these other DLE stocks, like Standard Lithium, Vulcan Energy Resources, and Lake Resources, perhaps there's a little bit of Dear Mr. Fantasy. You don't take short positions but let's just say it is not Vulcan Energy Resources or the other ones that you have your stamp on, it is Compass Minerals and E3 Metals that you have chosen to work with and that has the lithium bulls [?].

HOWARD KLEIN: In the DLE space, yes, and I greatly appreciate your-- I'm not Carson Block or some other short seller out there but if I were, that could be an interesting title. I do want to talk about-- I know we don't have much time but one other thing--

JACK FARLEY: To set it up, so far, we've been talking about the cathode which is one part of the battery which has lithium, it has nickel, it has cobalt, the other part of the battery is the anode, which has graphite in it. So, what is graphite? What is most graphite now, synthetic graphite and then what is the company that is trying to make organic graphite?

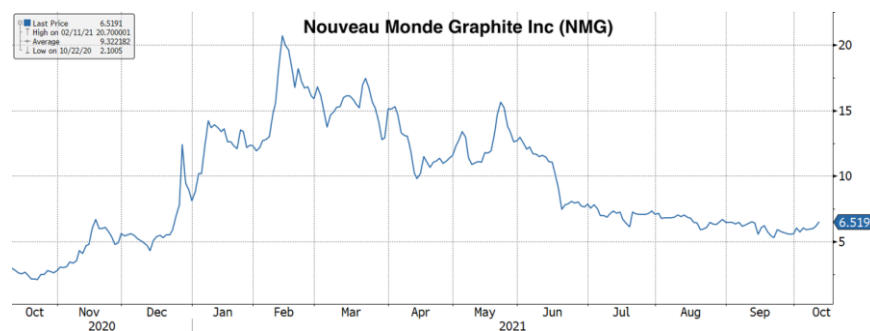
HOWARD KLEIN: So, Nouveau Monde Graphite is the company that I want to talk about. We just interviewed the chairman of the company, Arne Frandsen, on Rock Stock channel, our YouTube channel, and he simplified things. I also talked about KISS, keep it simple, stupid. So, graphite is not well understood because there's no like Albemarle or SQM equivalent of graphite that's publicly traded in the US and every quarter is publishing results.

So, it's hard to get your head around the graphite marketed. Graphite, from an education point of view, is probably two to four years behind where lithium education among institutional investors is. But Nouveau Monde took the step to become the first to list properly on a US exchange. And to just simplify it, everyone focuses on the cathode, which is lithium, nickel, manganese, cobalt, but anodes are 95% graphite, pretty much. And you can't make a battery without an anode, and you can't make an anode without graphite.

So, right now, a lot of graphite, some is natural graphite, some is artificial graphite. Artificial graphite or synthetic graphite is made from the fossil fuel, they're like needle [?]. And that's more expensive, it's less sustainable, but historically has had better performance. Natural graphite, which is a-- and by the way, graphite is 100% produced in China. So, the reliance on China is 100% in graphite, whereas 80%, let's say, for lithium hydroxide.

So, more reliant, and [?] thesis is in a similar way of Piedmont, you have a mine and then a chemical plant, they have a graphite mine in Quebec, and they're going to build a coated spherical graphite anode plant. So, it's basically taking the raw flake material and turning it into this specialty graphite that can fit into the anode. Now, given anode may have some synthetic graphite and some natural graphite, right now, it's mostly synthetic. And again, it's more expensive, it's less sustainable. So, natural graphite is lower cost, it's more sustainable, and it's localized. It's more secure, and they're like the only one.

So, this is the only one listed on fully integrated, listed on the New York Exchange. The stock is down 70% from its highs. This chart looks like the E3 chart.



JACK FARLEY: We have it up now.

HOWARD KLEIN: And the thesis behind this story is as good or better than it was at a time. And it's as good or better than the lithium thesis, but it's not well understood. And the second factor why it's less understood is that in lithium, we see that lithium prices have gone up two to four times. Every week, there

are price reporting agencies who are publishing prices. And graphite is more opaque. You don't see the prices moving. You don't know.

But when you look at the demand for graphite and natural graphite, in terms of multiple times of volume of graphite demand needed, it's similar to lithium. The growth of graphite is as significant, and synthetic graphite will be needed and it will grow. And there are good opportunities in there. There's one stock that has done phenomenally well in Australia, called Novonix.

Nouveau Monde and Novonix were at about the same valuation six or eight months ago. But then Novonix took off, they signed a deal with Phillips 66, an oil company in America. And I think that's likely that an event like that, a partner off take for Nouveau Monde will happen sometime in the next six to 12 months and you'll have a rerating. That stock is only 250 million market cap, so you compare it to Piedmont and a billion or some of these direct lithium extraction stores, they have 87 million in the bank, they raised a bunch of money through Evercore and BMO.

So, it has all the underpinnings and strong backing, it's my only play in the graphite space. And if you were to build a portfolio in the battery material space with some of the lithium names I mentioned here, maybe add FREYR on the battery side, you could add as a graphite play, Nouveau Monde Graphite.

JACK FARLEY: So, you do not give investment advice and neither does Real Vision. But if one were to construct an exposure to lithium, they can size the size of the Piedmont as they want, according to the beta, how much they wanted the beta, but maybe the safer stuff, the Albemarle, it's going to be at the base of the pyramid, and then you get your Piedmont Lithium in the middle and then the top, the sweet spot is those much more speculative names like Nouveau Monde that you say that do have a potential to be very rewarding.

Howard, you've been so generous with your time, but I know there is another company you wish to discuss. Talk to us about FREYR. It's a European battery company that went public via a SPAC. Now, I believe it's trading slightly below that \$10 after it this SPAC. What do they do-- and by the way, for people who want, we only going to have a few minutes on this, but your partner at RK Equity had a phenomenal report and that is on realvision.com, viewers can see that. But just tell us about FREYR of why you liked the stock so much and what you see for it going forward.

HOWARD KLEIN: Okay, that research report, I don't think was on FREYR. It might have been on one of the other companies. But FREYR, I spoke about it earlier today is yes, you're right. They're trading around where the SPAC price was. But more importantly is they have about 700 million in the bank. And they're trading at a billion dollars. So, they're trading marginally above their cash balance.

And Morgan Stanley, Adam Jonas is a leading auto analyst. I like the way he's distilled the thesis. And he basically said, Norway is the most advanced in terms of EV penetration in the world. The Norwegian government is very much behind FREYR. And there's hydroelectric power in the same way. In Quebec, there's hydroelectric power, so clean Nordic batteries, using technology from America.

So, the 24M, I'm not a battery specialist by any stretch, but Elon Musk talks all the time about to become manufacturing efficient, you need to reduce steps along the supply chain. So, the current steps to make a battery are like 15 steps. In FREYR and in 24M's case, they've reduced that to, I don't know, five or six steps. So, by doing that, you're using less materials. It's more sustainable. It's also cheaper, faster. So, 24M has been around for 10 years. It's been at MIT incubated, Kyocera in Japan has it licensed.

So, it's just on the cusp of being commercialized and FREYR has chosen them, and Koch have chosen them as their battery technology to commercialize and you're making a bet in a similar way, E3, you're making a bet that they're going to succeed with their direct lithium extraction. You're making a bet with FREYR that they're going to make batteries more sustainably more cheaply, and they're going to get customers like Volkswagen or whoever is going to sign up and buy their batteries for both energy storage applications and EV applications.

JACK FARLEY: Thank you for that. And yes, to be clear, there are three reports you sent me. One is your view of the lithium space. Another one is on Nouveau Monde, which you recently talked about. And the last one is on Piedmont Lithium but you're absolutely right. There is no report on FREYR. Howard, thank you so much--

HOWARD KLEIN: Jack, there is one other report you could put up there that Rodney also put and we didn't talk about it, just this whole concept of the North American lithium triangle. Piedmont is partnered with Sayona in Quebec but there's one other Quebec company we represent called Critical Elements that's in Quebec, and in Ontario is Frontier Lithium, and that's another research report that Rodney wrote. Both of those companies are conventional hard rock spodumene mines, similar to Piedmont, similar to Sayona, similar to so much of what's happening in Australia.

But Canadians are invested in Argentine projects, but they have not shown a great deal of appetite for projects in their own countries. So, I think similar to E3, that both Frontier and Critical Elements are likely to achieve higher have to use that analogy. And the North American lithium triangle from North Carolina to Quebec to Ontario is going to become a major source of hard rock to hydroxide hubs, which are going to feed the US battery supply chain.

JACK FARLEY: Okay. Thank you for that, Howard. It's been brilliant having you on. Thanks so much for sharing your time and insights. We can add a link to that North American triangle report in the description. Howard, just tell people quickly where people can find your work on YouTube as well as on Twitter.

HOWARD KLEIN: So, our website is rkequity.com. My handle on Twitter is @lithiumionbull and our YouTube channel is Rock Stock channel.

JACK FARLEY: Yes. And the report where we compiled a report on realvision.com is called School of Rock. Figures you want to check that out. So, Howard, thank you so much. Great to have you on Real Vision and hope to have you on again soon and thank you to everyone watching. Have a good day.

HOWARD KLEIN: Thanks, Jack.

