

Nickel 28 is in an enviable position for future nickel demand

The headlines for the new green (low carbon) world tend to focus on security of supply of rare earths, with a decent helping of lithium, cobalt and copper supply news. However there is a commodity that doesn't seem to get its share of the attention when it comes to the build-out of EVs and battery storage – and that's nickel. Global primary nickel usage is seen increasing by 12% in 2021 to 2.67 million tonnes, while primary nickel production is only expected to climb by 9% to 2.7 million tonnes, according to the International Nickel Study Group. EV nickel demand is forecast to grow to 1.3 million tonnes yearly by 2030, representing a whopping 48% of 2021 forecast nickel production. And let's not forget that presently about 65% of nickel is used to manufacture stainless steel. I'm pretty sure stainless steel will play an integral part in the US infrastructure spending the Biden administration has planned. So suffice it to say the supply/demand picture looks reasonably healthy for nickel for the foreseeable future.

There are several ways to add nickel to your portfolio if you are intrigued by these statistics. However, today we are going to look at a somewhat unique hybrid opportunity to get some nickel exposure. Nickel 28 Capital Corp. (TSXV: NKL) is a base metals company offering direct exposure to nickel and cobalt through its holding of 8.56% joint-venture interest in the producing, long-life and world class Ramu Nickel-Cobalt Operation located in Papua New Guinea. This provides Nickel 28 with significant attributable nickel and cobalt production, both being critical elements of electric vehicles and energy storage systems. But where Nickel 28 differentiates itself from other miners and explorers is that it also manages a

portfolio of eleven nickel and cobalt royalties in Canada, Australia and Papua New Guinea on nine exploration stage projects and two advanced / development stage projects. So an investor gets direct exposure to nickel and cobalt production today, with upside from a diverse set of potential royalties in the future. In other words, Nickel 28 is also a nickel/cobalt streaming company.

As interesting as that sounds, it's not even the most intriguing thing about Nickel 28 at present. The Company has reached a watershed moment in its deal with the Ramu mine majority owner and operator Metallurgical Corporation of China Limited ("MCC"). Without trying to get too deep into the financial nitty gritty, as part of the Joint Venture Agreement with MCC, MCC provided financing for the construction and development of the Ramu Mine. Nickel 28 had two separate debt agreements with MCC – one to finance the original construction of the mine ("Construction Debt") and a second amount to finance the ramp up and early operating expenses of the mine ("Operating Debt"). Up to this point, 100% of the operating surpluses from the mine are first allocated to repay the Operating Debt and related interest. Once the Operating Debt is repaid, the Company can repay the Construction Debt at any time without penalty and is entitled to its share of 35% of the mine's operating surpluses, with the remaining 65% used to repay any remaining Construction Debt and related interest.

So what the heck does all that mean? The operating surplus for the 6 month period ended December 31, 2020, at Ramu was \$15.4 million, which was applied to the Operating Debt in Q1/21 leaving \$10.1 million outstanding. With the average price for nickel in H1/21 being higher than H2/20, it's reasonable to assume Nickel 28 should soon be making its final payment on the Operating Debt thus freeing up some material free cash going forward. Back of the envelope math would suggest that number is almost \$11 million per year based on H2/20 pricing and costs.

There are several options that Nickel 28 has available to it for deploying this cash. Following repayment of the \$82.7 million Construction Debt still owed to MCC, Nickel 28's ownership interest in the Ramu Mine, will automatically increase to 11.3% at no cost. The Company can continue to invest in a battery metals focused portfolio of streams, royalties and direct interests in mineral properties. The Company recently announced a normal course issuer bid to repurchase its common shares, which it feels would be highly accretive to its net asset value per share and represents the highest rate of return on investment based on the current share price. Additionally, Nickel 28 has also indicated that there is an option to explore the institution of a dividend.

It's always an exciting time for a company when it is in the enviable position of having numerous options to deploy its cash. Nickel 28 is focused on IRR and will be making a decision on how to spend its capital accordingly once the Operating Debt is officially retired. Stay tuned for what's next.

Market Bullishness on Lithium has eyes on Critical Elements Lithium

The world is going to need a lot of lithium over the next several years if it wants to come anywhere near the goals being set by most G7 governments. The math is staggering as clearly defined by Jack Lifton in this great InvestorIntel article. So today we are going to look at one of the purest lithium deposits globally, the Rose Lithium-Tantalum project

in Quebec. The project is owned and operated by Critical Elements Lithium Corporation (TSXV: CRE | OTCQX: CRECF).

Rose Lithium-Tantalum Project:

The Rose Lithium-Tantalum property comprises 473 claims spread over a 24,654 ha area located in northern Québec's administrative region, on the territory of Eeyou Istchee James Bay approximately 40 km north of the Cree village of Nemaska. The property is accessible by road via the Route du Nord, usable all year round and is 80 km south of Goldcorp's Éléonore gold mine, 45 km northwest of Nemaska's Whabouchi lithium project and 20 km south of Hydro Québec's Eastmain 1 hydroelectricity generating plant. In essence, excellent access to infrastructure including roads, low-costs (low carbon – 93% hydroelectricity) power and skilled labor.

On November 27, 2017, the Company filed a National Instrument 43-101 technical report for the feasibility study of the Rose Lithium-Tantalum project.

Highlights are as follows:

- Average annual production of 186,327 tonnes of chemical grade lithium concentrate
- Average annual production of 50,205 tonnes of technical grade lithium concentrate
- Average annual production of 429 tonnes of tantalum concentrate
- Expected life of mine of 17 years
- Average operating costs of \$66.56 per tonne milled, \$458 (US\$344) per tonne of concentrate (all concentrate production combined)
- Estimated initial capital cost \$341.2 million before working capital
- Average gross margin 63.6%
- After-tax NPV of \$726 million (at 8% discount rate), after-tax IRR of 34.9% and price assumption of US\$1,500

per tonne technical grade lithium concentrate, US\$750
per tonne chemical grade lithium concentrate, US\$130 per
kg tantalum pentoxide

To summarize, the deposit is a hard rock resource that hosts high purity lithium material with low iron and low mica content with full support and cooperation from the Québec government, First Nations and local communities. The economics and quality of this project have been proven to be very lucrative.

With a market cap of roughly \$305.6 million, based on 183 million shares outstanding at yesterday's three year high close of \$1.67, CRE is not an inexpensive, undiscovered micro-cap. However, you are getting a project that is on track to be fully permitted and start construction in 2021 with first production in 2023. It is located in a politically safe and supportive jurisdiction and with the increasing emphasis on supply chain certainty there is a lot of potential value simply as a result of the location of the Rose project. Not to take anything away from the quality or robust economics surrounding Rose as well.

Looking at the chart, CRE appears to be breaking out from a five month sideways channel ranging from approximately \$1.20 to \$1.55. It has traded above \$1.60 for the last five days on above average volume, closing above the \$1.60 level twice in that span. Whether this is being driven by their recent news that the company had received UL ECOLOGO® Certification for Mineral Exploration, anticipation of the decision statement on the environmental assessment from the Impact Assessment Agency, which is due imminently, or simply a result of general bullishness surrounding lithium, the chart looks very constructive from a technical perspective.



All in all, Critical Elements Lithium represents a potential world class lithium mine (and a meaningful rerating opportunity that goes with that) plus speculative upside from the companies eight other projects. Would it have been nice to discover this gem a year ago when it was trading closer to \$0.30 yet still had far less risk than a pure exploration play? Absolutely, and congratulations if you are a long term holder of CRE shares. However, if you are as bullish on lithium as Jack Lifton is you may want to take a closer look at Critical Elements Lithium Corporation.

It's all in the name – Critical Elements Lithium

There has been a lot of talk about Lithium (Li) over the last several months. We are all familiar with Lithium-Ion batteries in our laptops, cell phones, tablets, power tools and of course electric cars. But have you ever wondered why that is or are you like me (until now) and just took it for granted.

Turns out Lithium has the highest electric output per unit weight of any battery material which is why it is the standard material for lithium-ion (high energy-density rechargeable) batteries. It also happens to be the lightest of all metals making for a pretty good one-two punch to be used in battery technology. The point is, until there is a material technological breakthrough, Lithium will be leading the charge towards electrification of our society.

To that end, the demand side for Lithium looks to be skyrocketing over the next several years/decades. Here's some great information on this courtesy of InvestorIntel's own Jack Lifton in this article. As well there is a whole lot of supply chain questions that have been raised by both the pandemic and Chinese dominance of many of the critical battery materials leading to a noticeable shift towards "home grown" supply. Jack Lifton covers this issue in a video that's also worth a view here, where he discusses how the policy of the US government is to prioritize the production of critical materials either in the United States or in friendly countries that are allied with the US. Additionally, at this year's virtual PDAC Canada announced its own list of minerals (including Lithium) considered critical for the sustainable economic success of Canada and our allies. Canada's Minister of Natural Resources is quoted as saying "Canada's list signals to investors where Canada will focus and where Canada will lead. Critical minerals will get us to net-zero."

Needless to say, there should be a bit of a premium to North American BEV (battery-powered electric vehicle) manufacturers to have a convenient and stable source of this important material. Perhaps even more importantly, critical minerals and their development has the support of the Federal government. Enter Critical Elements Lithium Corporation (TSXV: CRE | OTCQX: CRECF). A Quebec based junior mining company with its flagship Rose Lithium-Tantalum project located in James-Bay, Quebec. The company has one of the most advanced Lithium

projects in Canada and one of the purest lithium deposits globally. The company recently announced an update to its draft environmental impact assessment report in which the Committee concludes that the project is not likely to cause significant adverse environmental effects. This moves the Rose project one step closer to obtaining the final authorization and keeping Critical Elements on pace to start mine construction in 2021 and see first production by late 2022/early 2023.

In 2017, Critical Elements completed a feasibility study on Rose Phase 1 for the production of high quality spodumene concentrate with an internal rate of return for the project estimated at 35% after tax, a net present value estimated at C\$726 million (8% discount rate) and a three year payback. Those are some robust numbers but it's going to be expensive to bring this project into production. The initial capital cost is estimated at C\$341 million including all infrastructure with a 10% contingency. Correspondingly, in January 2021, the company announced it has engaged Cantor Fitzgerald Canada Corporation to pursue, engage and evaluate global strategic partners and investors to advance the Rose Project to production. Given the outlook for Lithium, it's plausible to conceive that Critical Elements will be able to pick and choose the best deal for themselves to get the project financed (has anyone put a call into Elon Musk?).

In addition to the appeal of owning a company that could have a world class Lithium mine in full production by 2023 (and a meaningful rerating opportunity that goes with that), there is still some speculative upside from the companies 8 other projects. Even better, Critical Elements just announced an option agreement that gives Lomiko the right to acquire up to a 70% interest in the Bourier project. This agreement will allow the Bourier property to be explored in detail for battery minerals discoveries, such as Lithium, Nickel, Copper and Zinc while Critical Elements stays focused on goal #1 –

the Rose Lithium-Tantalum project. However, with roughly \$8 million dollars in cash, a financing decision has to be made to continue moving this exciting North American Lithium mine moving forward.

Critical Elements Lithium clear set path to production races alongside the tenfold global demand for lithium this decade

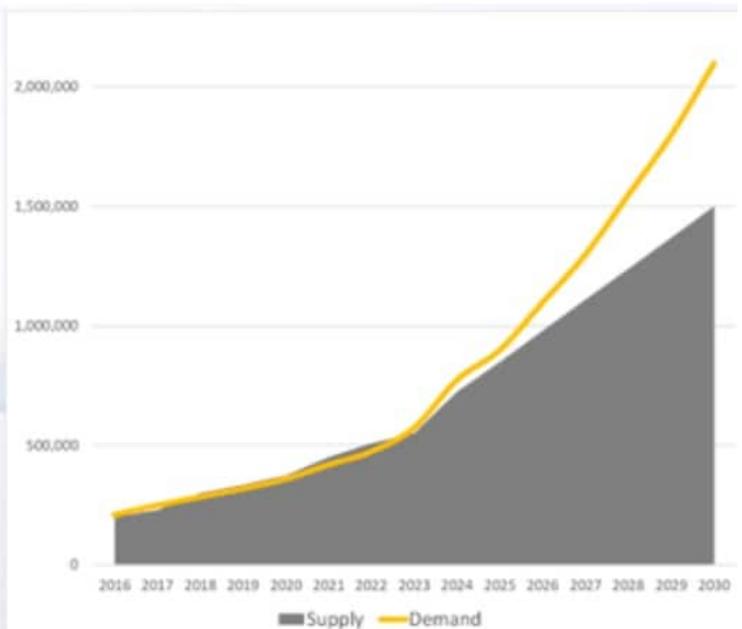
Lithium demand is set to increase around tenfold this decade, driven by the electric vehicle (EV) boom. This means quality lithium junior miners have a good chance of becoming a market Darkhorse overnight. The trick here is for investors to sort out which lithium juniors are most likely to succeed versus those that are not. So let's start with a review and update on Critical Elements Lithium Corp. (TSXV: CRE | OTCQX: CRECF) ('Critical Elements') who Frederick Kozak recently described in an InvestorIntel column as having "one of the purest lithium deposits globally" on its way to being completed.

Lithium demand is set to increase 10x this decade

- Current oversupply is short term
- Demand is expected to **exceed supply by 2023**.
- Expected to **increase 10x** over the next decade.
- By 2040 demand is expected to outstrip supply by **100%**

Why?

Insufficient upstream resource investment coupled with inefficient investment in downstream processing capacity.



Source: Broker research and internal analysis

Source

Critical Elements owns the advanced exploration stage Rose Lithium-Tantalum Project, located in James Bay, Northern Quebec, Canada.

Key positives for the Rose Lithium-Tantalum Project are:

- Western location – James Bay, Quebec, Canada is an excellent mining jurisdiction with excellent infrastructure.
- Good size lithium-tantalum spodumene (hard rock) resource, with low iron and mica content.
- Strong Phase 1 Feasibility Study result (Nov. 2017) – Based on an average annual production of 186,327 tonnes of chemical grade lithium concentrate and 50,205 tonnes of technical grade lithium concentrate the mine has an expected life of 17 years. The post-tax NPV8% is C\$726M with a post-tax IRR of 34.9%, and a CapEx of C\$341M. Total operating costs net of tantalum by-product credit are forecast to be US\$337/t spodumene.
- Strong metallurgical test results including very high lithium recoveries (~80%) to produce a high purity 6% lithium spodumene concentrate, that can be converted to

battery grade lithium hydroxide.

- Advanced stage project – The Company say that they are on track to have Rose fully permitted and start construction at Rose hopefully in 2021.
- Potential to expand production at Rose in Phase 2 and/or to produce the higher valued end product lithium hydroxide.

All of the above are very strong results. The CapEx is reasonable and should be achievable especially given Canada's recent focus on promoting and supporting critical materials production, the post-tax NPV is good, the IRR is excellent, and the forecast operating costs are low.

Critical Elements Lithium Corp. forecast development timeline to production

DEVELOPMENT TIMELINE

Approaching next steps...



Clear Path to Construction and Commissioning

- The Company's near-term focus is on securing final permits and project financing with first production targeted for 2022
- Rose is on track to be fully permitted in H1 2021



Source

Rose Project update

The final stages of Phase 1 permitting is continuing both at the Provincial and Federal levels. At the Provincial level

Critical Elements stated on March 8, 2021 that: “The environmental and social impact assessment and review procedure will conclude shortly, to be followed by a recommendation in respect of the authorization of the Project.” The Federal level result is slightly delayed due to COVID-19 with Critical Elements reporting in March 2021: “The Impact Assessment Agency of Canada and the Cree Nation Government (the “Committee”) needs more time to consult with local communities in order to complete the environmental assessment process.”

As shown on the development timeline above, project financing usually follows permitting, then mine construction, and finally, production can begin to ramp. All going well the target for initial production is later in 2022 or early 2023, commercial production in 2023, and full production (28.9 Kt LCE) in 2025.

Other projects and valuable metals/materials

Critical Elements also has several other exploration stage projects with potential for lithium, copper, nickel, zinc, lead, gold, silver, rare earths, and platinum group elements (PGE). A brief summary of their projects is shown below.

- **Nisk** – The property is prospective for lithium, copper, nickel, PGE and gold.
- **Arques** – Prospective for lithium, rare earth element, niobium, and tantalum.
- **Bourier** – Prospective for lithium, copper, zinc, gold, and silver.
- **Caumont** – Prospective for lithium, copper, nickel, PGE and gold.
- **Dumulon** – Prospective for zinc, lead and gold.
- **Duval** – Prospective for gold, copper, nickel, and PGE.
- **Lemare** – Prospective for gold, copper, nickel and PGE.
- **Valiquette** – Prospective for copper, nickel, PGE and gold.

Closing remarks

Critical Elements trades on a market cap of only C\$246M. Investors are certainly getting a lot when you consider the late stage Rose Lithium-Tantalum Project's Phase 1 post-tax NPV8% of C\$726M. All going well there is further exploration potential at Rose, the Phase 2 potential (lithium hydroxide production) and the 8 other projects listed above. The stock has rallied 365% in the past year but this was from a ridiculously low point back at the March 2020 COVID-19 lows. One thing for sure, the world is moving now rapidly to EVs and lithium demand will be through the roof.

Drolet Stock Notes on Critical Elements Lithium: One of the Highest Purity, Undeveloped Lithium Projects in the World

Mario Drolet, President of MI3 Communications Financières Inc. (MI3), released his Drolet Stock Notes on Critical Elements Lithium Corporation (TSXV: CRE | OTCQX: CRECF) on November 11, 2020 for exclusive distribution on InvestorIntel. Highlights include:

- Critical Elements is a junior mining company in advance exploration stage. The company's flagship project is the Rose Lithium-Tantalum project located in James-Bay.
- Rose Project is the only new source of technical grade lithium globally.

- The Rose Lithium-Tantalum Project currently contains reserves of 26,8 million tonnes of Probable Reserves at a grade of 0.96% Li₂O Eq. or 0.85% Li₂O and 133 ppm Ta₂O₅.
- Feasibility study complete for a Spodumene production – Final stage of permitting
- CRE surge following a \$3.0M PP ...
- Support: S2; \$0.80 – S1; \$0.93 Resistance: R1; \$1.01 – R2; \$1.10



About Critical Elements Lithium Corporation

Critical Elements Lithium Corporation is a junior mining company in advance exploration stage. The company's flagship project is the Rose Lithium-Tantalum project located in James-Bay, Quebec with a good geographic location, on-site access to infrastructures like: **powerline, roads, airport, railway access and camp**. Primero Group recently completed the first phase of its Early Contractor Involvement agreement with the Corporation and provided a Guaranteed Maximum Price for the engineering, procurement and construction of the wholly-owned Rose Lithium-Tantalum project on a lump sum turnkey basis that is in line with the Project's feasibility study published November 29, 2017. The project feasibility study is based on

price forecasts of US \$750/tonne for chemical-grade lithium concentrate (5% Li₂O), US \$1,500/tonne for technical-grade lithium concentrate (6% Li₂O) and US \$130/kg for Ta₂O₅ in tantalite concentrate, and an exchange rate of US \$0.75/CA \$. The internal rate of return (“IRR”) for the Rose Lithium-Tantalum project is estimated at 34.9% after tax, and net present value (“NPV”) is estimated at CA \$726 million at an 8% discount rate.

PLEASE DO YOUR DUE DILIGENCE

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**Eric Zaunscherb on Critical
Elements Lithium's**

competitive advantages and the demand driven by energy storage systems

In a recent InvestorIntel interview, Tracy Weslosky speaks with Eric Zaunscherb, Chairman of Critical Elements Lithium Corporation (TSXV: CRE | OTCQX: CRECF), about their flagship Rose Lithium-Tantalum project located in James-Bay, Quebec. Eric starts with “Lithium ion batteries are ramping up in terms of demand driven by e-mobility and energy storage systems.” And then proceeds to discuss the Critical Elements’ vision, which is to be a global leading, responsible supplier of lithium hydroxide to the emerging electric vehicle and energy storage industries. Discussing the value of their First Nations relations, and the advantages relating to management with experience in taking a project to operations, Eric discusses how Critical Elements is well-positioned to play a significant role in the lithium market with one of the highest purity spodumene deposits in the world. Adding that “We aspire to be a large responsible and sustainable provider of lithium to the lithium ion battery industry.”

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

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To learn more about Critical Elements Lithium Corporation, [click here](#)

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Jack Lifton on the real challenge of China Incorporated on the global supply of rare earths

China's recent re-enactment of its export "prohibition" list illustrates the differences between the impact of the West's "financial globalization" and of China's approach to globalization under "Socialism with Chinese Characteristics" on the individual nations' security of supply of critical materials (rare earths) as enabled by what are the two principal competing economic systems in today's world, "free market" capitalism and state-controlled capitalism (also known

as Socialism with Chinese characteristics).

It's easy to say that China's recent revisions to and the republication of the law that makes the export of named technologies from China either subject to governmental approval or simply illegal, is retaliation for the American (Trump[?]) (and now also the Japanese and EU) administrations' technology import and use bans applied recently to Chinese cybertechnology, but for the Rare Earths these restrictions have been in place for more than a decade, and their updating and reaffirmation in Chinese law tells a much more nuanced and worrisome story.

Looking carefully at those of China's export restrictions that are focused on rare earth "processing" technology, they show that China does not want any of its companies, state-owned or "private", to give any assistance to foreign entities to develop any aspect, at all, of a total rare earth supply chain.

I have been told that China originally acquired rare earth separation (by solvent extraction) technology from the first Molycorp in the early 1980s when that company was seeking to lower its costs by exporting the rare earth separation technology it had developed in the 1960s and 70s to China where bastnaesite, the same mineral as was being mined at Mountain Pass by Molycorp, was being recovered in large quantity as a byproduct of iron ore mining in Baotou, Inner Mongolia. I believe that Molycorp also then began sending some ore or ore concentrates from California to China at that time for separation in China. I have been told that the "blueprint" for a rare earth separation plant supplied by Molycorp was stolen and illegally "sold" into alleged operatives from China in the first Chinese "rare earth processing rush" in the 1980s during which dozens of dedicated solvent extraction systems for rare earths were built outside of Molycorp's control.

Deng Xiaoping, the real founder of modern China's economic

system famously said during this period of rapid growth for China's rare earth "processing" industry that **rare earths were to China what oil was to the middle east**. Besides encouraging the development of a rare earth industry and to support it, this pronouncement also encouraged the creation in Chinese universities of departments of "separation science" in departments of chemistry and chemical engineering. Today, in 2020, thousands of Chinese chemists and chemical engineers specialize in rare earth "processing." The State Key Laboratory for Separation Science at Peking U., alone, has four locations with more than 400 researchers, more than 150 of whom hold PhDs! It is estimated that several thousand Chinese researchers are dedicated today to the field of rare earth studies in China.

All of the raging commentary about Chinese intellectual property theft from the West, America in particular, has masked the fact that regarding rare earth processing downstream of ore concentration China has an existing and growing advantage technologically over all of the West. While it is certainly true that we do not know the true costs of mining and refining rare earths in China, because China doesn't seem to capitalize health and safety concerns that are both significant and also highly regulated in the USA and almost all other Western countries, we must also concede the advantage of extensive experience to China in the effective production of rare earth metals, alloys, and magnets. The current method of choice, for example, for the production of rare earth metals, the electrolytic reduction of molten salts, has never even been practiced commercially in the USA.

The unfortunate truth is that the US and the West needs technological help. Particularly in scale-up, from China's large reservoir of downstream (of mining) rare earth processing knowledge and experience if, and only if, the goal is global competition with China for the 150,000 mta rare earth permanent magnet markets. If the goal is regional or

national self sufficiency and security of supply then governments will have to either subsidize or get much smarter, with regard to economics and the selection of companies that have the necessary skill sets, about (re) establishing total domestic supply chains for critical materials and, especially, the components manufactured from them.

The American federal bureaucracy is an assembly of the industrially inexperienced but well credentialed (not necessarily well educated!) who first and foremost speak with each other, and, when and if they must reach outside of their group, go only to academics for advice on policy.

Implementation of policy is simply not considered, and the excuse for that is it would look like overstepping their authority, favoritism, or worst of all, a mistake might be made that would reflect badly on the bureaucrat.

China's mandarin bureaucrats are chosen primarily for their experience and skills as well as their education and (Chinese Communist) Party connections. The China "State Council" sets the nation's industrial policies. The bureaucrats implement those policies. Those bureaucrats, speaking with the authority of the State Council and President, have a great influence on the lending policies of the People's Bank of China.

The current Chinese "President" has decreed (not recommended) that by 2025 China will be independent of the rest of the world in 10 key high technologies. Several of these technologies are critically dependent upon rare earth enabled components, especially rare earth permanent magnets.

China is today cleaning up its rare earths industry to meet global standards of health and safety. This has necessitated a sharp restriction on rare earth mining within China. China is today, in 2020, on a track to import nearly 40% of its needs for rare earth bearing ores for ALL of the rare earths.

In fact, heavy rare earth production from so-called ionic clays has essentially halted within China. Yet, notwithstanding the rare earth mining pollution “problem” the implementation of China 2025 is advancing rapidly.

What does this mean for Western rare earths mining, refining, metal and alloy making, and rare earths enabled products’ manufacturing? It means that China, Incorporated, is your competitor at every stage of the total supply chain. It means more importantly that as China’s consumer economy grows and as long as China requires outside raw materials the rest of the world will be completely subjugated to Chinese pricing and export policy.

Neither the US (or any other allied) defense establishment can take the risk of having its rare earth permanent magnet and alloy supply cut off or curtailed by the Chinese government. Even more dependent upon China today, in permanent magnet volume alone, are the global OEM automotive and consumer appliance industries.

Investment outside of China in a total rare earths supply chain is a necessity for US defense and the continuation of an independent American manufacturing base for high technology consumer products. It is certainly not wise to put all of your eggs in one basket, but it is also very unwise to plan on just one company or one technology to solve America’s (and the West’s) dependency on the Chinese rare earth industry. The solution is to choose only those participating companies that understand the need to manage or have a total rare earth supply chain in view. The poor economics of some of the component operations of the total rare earths supply chain can be solved by legislation (e.g., the Cruz rare earth components tax relief bill) or by the distribution of costs among the supply chain components so that the whole is profitable.

It’s time for a serious discussion of the rare earths supply problem. China is not planning to assist the development of

competitors in this field.