Peter Cashin on the increases in scandium and rare earths recoveries on Imperial Mining's Crater Lake Development Project

written by InvestorNews | October 7, 2022

In this InvestorIntel interview, host Tracy Weslosky talks to Imperial Mining Group Ltd.'s (TSXV: IPG | OTCQB: IMPNF) President and CEO Peter Cashin about a recent announcement on the increases in scandium and rare earths recoveries on it Crater Lake Development Project in Quebec.

Peter says: "We are also doing additional work to convert some of the inferred resources into indicated (resources). And in doing that work – we've actually found areas of mineralization that are thicker than we had anticipated. So it's probably going to add to the bottom line as well." He goes on to provide an update on the progress Imperial Mining has made to move the Crater Lake project towards a Feasibility Study. Peter also talks about the use of scandium in lightweighting applications to make vehicles fuel efficient and extend battery range in electric vehicles.

To access the full InvestorIntel interview, click here

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About Imperial Mining Group Ltd.

Imperial is a Canadian mineral exploration and development

company focused on the advancement of its technology metals projects in Québec. Imperial is publicly listed on the TSX Venture Exchange as “IPG” and on the OTCQB Exchange as “IMPNF” and is led by an experienced team of mineral exploration and development professionals with a strong track record of mineral deposit discovery in numerous metal commodities.

To learn more about Imperial Mining Group Ltd., click here

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Imperial Mining Group's Scandium-REE Preliminary Economic Assessment by the numbers

written by InvestorNews | October 7, 2022

Last week Imperial Mining Group Ltd. (TSXV: IPG | OTCQB: IMPNF) released the results of a Preliminary Economic Assessment (PEA). The results are impressive with a projected 25-year mine life for its Crater Lake TG Zone Scandium-Rare Earth Element (Sc-REE) deposit 200 km NE of Schefferville, Quebec. Of particular note is Imperial Mining's CEO Peter Cashin, who has been in mining for decades and has been involved in rare earths and scandium for over a decade which puts him in a strong position to understand the idiosyncrasies of these critical materials.

Scandium is an element that has huge potential in automotive, aerospace, military, and applications where weight is critical

without sacrificing other properties. Scandium has the ability, when added in < 1% levels to aluminum, to produce a metal that is one-third the weight of steel but has the strength of steel. The main scandium production is in China and Russia, and major companies are looking for a reliable, long-term supply from a favorable jurisdiction before committing to a design using scandium-aluminum alloy. Scandium can be welded which is of interest to aircraft companies as it has been said that eliminating the rivets which is the current practice would reduce the weight of a plane by as much as 20%. The challenge is designing a new airframe can take up to a decade. Therefore other applications are needed near term to generate cash flow in the early stages of a project. A new car can take 2-3 years to produce from scratch but with the drive to EV vehicles where weight is a major consideration, this is a key area for product development. Being in Quebec, Imperial is well situated to work with the aluminum smelters in the province.

According to Imperial Mining's PEA, gross revenues projected are CA$15.2 billion with gross earnings about 50% at CA$6.25 billion. The NPV is just under CA$3 billion at a 10% discount rate and an IRR (after-tax) of 32.8%. The initial CAPEX is projected at CA$870.9 million with a payback of 2.5 years. Impressive numbers.

Regarding the scandium itself, the drill results have shown grades that rate among the highest globally, if not the highest. The mine is an open-pit design, which will minimize costs, and the concentration phase would be done on-site with final processing being planned to take place in Sept-Iles. The strategy is to produce a master Sc-Al alloy in Sept-Iles along with a REE concentrate. The other notable calculation is Imperial Mining uses US$1,500/kg for Sc2O3 which is significantly lower than other PEAs for scandium in the marketplace. In addition, the Sc(2%)-Al alloy is discounted by

40% from the US Geological Survey 5-year trailing average, which is another conservative approach and refreshing to see instead of reporting extreme numbers which would be difficult to defend.

As noted earlier, Imperial Mining plans to produce a rare earth concentrate. This is priced at a 70% discount to market prices in March 2022, which is realistic as the main target customer would be China, which is currently buying concentrate from MP Materials out of California. This discount is in keeping with how the Chinese would calculate the value, and even then the lanthanum would not be a significant contributor. The other key point of this revenue calculation was that it is based only on the 4 key magnetic elements plus lanthanum, which is realistic as the magnetic elements are where the main value is in all REE deposits globally. It is nice to see a company not running economics on separated REEs and saying it can sell everything it produces, which is not possible. This concentrate would help defray the scandium OPEX to a certain degree.

Overall, scandium is a situation of build it and they will come. The full report should be available by end of July.

Peter Cashin of Imperial Mining talks about scandium's importance and the need for

domestic supply

written by InvestorNews | October 7, 2022
In this InvestorIntel interview with host Byron W King during PDAC 2022, Imperial Mining Group Ltd. (TSXV: IPG | OTCQB: IMPNF) President and CEO Peter Cashin talks about the growing recognition and demand for scandium in specialized manufacturing, and the need for securing a reliable domestic supply.

In the interview, which can also be viewed in full on the InvestorIntel YouTube channel (click here), Peter describes the importance of scandium as an industrial metal: "As an alloy agent for aluminum in very, very small quantities of 0.2 to 0.4 percent you can increase the the mechanical properties of the alloy by 800%." Peter also talks about the importance of scandium, used in defense, aerospace and automotive industries where strong, lightweight, heat and corrosion resistant metals are needed.

Peter goes on to say that only 35 tons of scandium are produced a year, mostly by Russia and China, but Imperial Mining – which just published a new PEA on its Crater Lake TG Zone Scandium-Rare Earth Element (Sc-REE) deposit – is located in Quebec, Canada. "We know that the consumers both in the the military establishment, the automotive industry and the aerospace industry have been looking for this stuff… and our intention is to produce and develop this thing to production to be able to satisfy the western and certainly North American manufacturing market."

To access the full InvestorIntel interview, click here

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Peter Cashin on the "earth shattering" PEA for Imperial Mining's Crater Lake Scandium-REE deposit

written by InvestorNews | October 7, 2022

In this InvestorIntel interview with host Tracy Weslosky during PDAC 2022, Imperial Mining Group Ltd. (TSXV: IPG | OTCQB: IMPNF) President and CEO Peter Cashin talks about the company's recent PEA announcement, which confirms that its Crater Lake TG Zone Scandium-Rare Earth Element (Sc-REE) deposit has "the potential to be a long-term provider of critical Scandium and magnet Rare Earths to world markets."

In the interview, which can also be viewed in full on the

InvestorIntel YouTube channel (click here), Peter discusses how with the new PEA "people will look at the financial metrics of this project, and they they stand up against any project that's out there currently." He talks about the results of the new PEA, which include a pre-tax net present value (NPV) of $2.97 billion with a pre-tax internal rate of return (IRR) of 42.9%, with annual net revenues averaging $608 million from the sale of high-purity scandium oxide (Sc2O3), scandium-aluminum Master alloy (ScAl) and rare earth element (REE) hydroxide concentrate, and a pre-tax capital payback of 2.5 years from the start of production.

Peter also talks about the importance of scandium, used in defense, aerospace and automotive industries where strong, lightweight metals are required, and when added to other metals in small amounts it makes them heat and corrosion resistant. Its lightness makes it an attractive "green" metal reducing vehicle weight for lower fuel consumption. "What we'll ultimately end up doing is significantly reducing the carbon footprint of most manufactured platforms they have right now."

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Imperial Mining's Quebec scandium play is aluminum's best friend

written by InvestorNews | October 7, 2022

To me scandium sounds like it should be a country between Finland and Sweden in the Baltic Sea, but then again a lot of people have considered some of my thoughts pretty strange. However, scandium is becoming a critical metal of growing importance in aluminum alloys for auto, commercial aircraft, military armor and EV development, significantly reducing weight and manufacturing costs. It's used as a hardener and strengthener of common aluminum alloys, which are also heat and corrosion resistant. Its weight reduction applications in the automotive, aerospace, fuel cell and defense sectors in turn help reduce the overall carbon footprint by making aircraft and vehicles lighter and more fuel-efficient with lower emissions. Because of these tremendous applications, demand is expected to grow considerably from the current 35 tonnes per annum of product availability to western markets to as high as 2,000 tonnes by 2040.

Source: Imperial Mining Group Corporate Presentation

Obviously, I don't need to comment on the importance of supply

chains, “on-shoring”, etc. in light of what the world has seen over the last year or two. We’ll suffice it to say that domestic is better. Which leads us to today’s topic of conversation – Imperial Mining Group Ltd. (TSXV: IPG | OTCQB: IMPNF). Imperial is a Canadian mineral exploration and development company focused on the advancement of its Crater Lake scandium-Rare Earth property led by an experienced team of mineral exploration and development professionals with a strong track record of mineral deposit discovery in numerous metal commodities. The Company also has a pair of gold prospects, Opawica and La Ronciere all in Quebec.

However, what makes Crater Lake so special is that it is the only hardrock scandium deposit in the world and happens to be in the mining friendly jurisdiction of Quebec, close to hydroelectric capacity and Quebec’s aluminum metal production where 90% of Canada’s “Green” aluminum is produced. As well, it is looking like Bécancour in Quebec is becoming Canada’s battery cathode manufacturing hub with recent announcements from BASF regarding a cathode active materials and recycling site to support North American producers in their transition to e-mobility and General Motors and POSCO Chemical’s $400 million facility to produce cathode active materials for vehicle batteries. It would appear that Imperial could borrow a line from the real estate business and say their project is all about location, location, location.

Source: Imperial Mining Group March 15, 2022 Press Release

It also doesn’t hurt that Crater Lake already has 43-101 compliant resource estimate. In September Imperial received the inaugural NI 43-101 Technical Report for the Crater Lake TG Zone Mineral Resource Estimate.

Source: Imperial Mining Group Ltd. press release Sep 23, 2021

The results of the Resource Estimate for the Northern Lobe of the TG Zone far exceeded the minimum threshold resource Imperial internally set for a 20-25-year notional mining operation, or 10 million tonnes. And the good news is mineralization remains open laterally and at depth, demonstrating the potential to increase the mineral resource with additional drilling.

The Company has plenty of catalysts over the next several months to keep the news flow coming for investors. Work on a 43-101 Preliminary Economic Assessment (PEA) on the TG Zone scandium-rare earth zone resource is progressing and is expected to be completed in the next few weeks. A diamond drill program on the TG Zone (Northern Lobe and Southern Lobe) will commence in late June with up to 22 diamond drill holes for approximately 2,500 m. In addition, there is excellent potential to expand the mineral resources with further drilling on the Southern Lobe. In late Fall 2022, the new drill hole data from the summer program will be forwarded to a consultant to revise and update the previous 43-101 Resource Estimate of the TG Zone. This revised resource will allow Imperial to move forward with a Pre-Feasibility (PFS) or Feasibility (FS) Study.

During Summer 2021, Imperial collected a 50-tonnes bulk sample for use in a pilot plant study. It is expected that the remaining 32-tonnes will be shipped to Sept-Iles, QC by the end of July 2022 to be used in a pilot plant study to further test and optimize Imperial's patent-pending metallurgical process method. Additionally, Imperial has commissioned a hydrometallurgical flowsheet development program based on its patent pending two-stage hydrometallurgical method for the extraction of scandium and rare earth elements with SGS Canada. The program, which started on January 31, 2022, is partially

financed from a $245,355 grant from the Quebec Ministry of Energy and Natural Resources with expected completion at the end of Q3 2022. Results from the work will aid in the engineering design of Imperial's pilot program for the Crater Lake project for later in 2022.

As you can see, there is plenty on the go at Imperial Mining Group and the good news is they started May with C$2.8 M in working capital and virtually no debt. The Company currently has a market cap of C$14.7 million representing plenty of opportunities for a potential domestic supplier of an up and coming critical material.

Peter Cashin on Imperial Mining developing the highest-grade scandium deposit in the world in Quebec

written by InvestorNews | October 7, 2022

In a recent InvestorIntel interview, Tracy Weslosky spoke with Peter Cashin, President and CEO of Imperial Mining Group Ltd. (TSXV: IPG | OTCQB: IMPNF) about the scandium supply chain challenges and about Imperial Mining's R&D initiatives to work with a top alloy producer to develop new scandium-modified aluminum alloys and applications, as they work towards securing off-take agreements with strategic end-user partners.

In this InvestorIntel interview, which may also be viewed on

YouTube (click here to subscribe to the InvestorIntel Channel), Peter Cashin pointed out the limited scandium production capacity globally and went on to highlight that China and Russia are today the two primary scandium producers in the world. As "a North American source of the highest-grade scandium opportunity," Peter highlighted the competitive advantages of Imperial Mining's Crater Lake Scandium-Rare Earth property located in Canada's aluminum capital – Québec. He went on to explain how scandium alloys can help reduce carbon footprint and also increase the range of electric vehicles making Imperial Mining attractive to ESG investors.

To watch the full interview, click here

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Quebec, Canada set to become a

critical battery materials' production hub

written by InvestorNews | October 7, 2022

Imperial Mining's world-class Crater Lake Scandium-Rare Earth Project in Quebec will soon complete a PEA

There have been some great news releases recently of new lithium ion battery materials projects coming to Quebec, Canada. The first was BASF's cathode active materials and recycling facility planned to be located in Bécancour, Quebec. The second was General Motors and POSCO Chemical's $400 million facility to produce cathode active materials for vehicle batteries, also in Bécancour, Quebec. It is looking like Bécancour in Quebec is to become Canada's battery cathode manufacturing hub. This bodes well for the development of an EV manufacturing industry in Quebec at some stage.

Today's company has key EV related metals, scandium and the magnet rare earths, as well as gold exploration; with three projects located in Quebec, Canada.

Imperial Mining Group Ltd's. (TSXV: IPG | OTCQB: IMPNF) (Imperial) three projects in Quebec are the:

- Crater Lake Scandium-Rare Earth Project,
- the Opawica Project (gold exploration), and the
- La Roncière Project (gold exploration)

Imperial has progressed significantly over the past 6 months, announcing a Maiden Resource, drill results, and commencement of a PEA at their 100% owned Crater Lake Scandium-Rare Earth

Project. Today we will look at the Crater Lake project and at what's next for the Company.

Crater Lake Scandium-Rare Earth Project

Maiden Resource

As announced in September 2021, Imperial's NI 43-101 Maiden Resource estimate for the TG Scandium-Rare-Earth Zone at its Crater Lake Scandium-Rare Earth Project is an **Indicated Resources of 7.3 million tons grading 282 g/t Sc_2O_3** and **Inferred Resources of 13.2 million tonnes grading 264 g/t Sc_2O_3.** This is an excellent result putting the Crater Lake Project among the top scandium resources in the world. The Resource estimate also highlighted valuable magnet rare earths Nd, Pr, Dy and Tb. The Resource remains open to further expansion.

Maiden Resource estimate and Resource Model for the TG Zone at the Crater Lake Scandium-Rare Earth Project

Source: Imperial Mining Group company presentation

Recent drill results

Since the Maiden Resource, Imperial has had some stellar drill results including:

- **115.8 m (379.9') grading 252 g/t scandium oxide (Sc_2O_3)** at the STG Zone. There are also elevated levels of total rare earth oxides plus yttrium (TREO+Y) of up to 0.475 %. The STG Zone is a new discovery, 2km south of the TG North Lobe Resource.

PEA

Work on a 43-101 Preliminary Economic Assessment (PEA) on the TG Zone scandium-rare earth zone resource is advancing well, despite some delays. The PEA results were targeted for Q1, 2022, but now look like being in Q2, 2022.

Imperial's Crater Lake Project location map and highlights

Source: Imperial Mining Group company presentation

Next steps and targets

- Q2, 2022 – PEA results for the Crater Lake Scandium-Rare Earth Project to be announced.
- Late June 2022 – A 2,500m drill program on the TG Zone (Northern Lobe and Southern Lobe) to commence.
- End Q3, 2022 – Hydrometallurgical flowsheet development program results due.
- H2, 2022 – An update to the previous 43-101 Maiden Resource Estimate of the TG Zone.
- Late 2022 – Engineering design for Imperial's pilot plant program.
- Mid-2023: Definitive Feasibility Study (DFS), IBA, receipt of construction
  permits.
- Late Q4, 2025/Early Q1 2026: Delivery of first product (subject to permits and funding).

Closing remarks

Imperial Mining Group is making good progress and has already delivered a solid Maiden Resource at their flagship 100% owned Crater Lake Scandium-Rare Earth Project. The PEA is expected to be out soon in Q2, 2022, with numerous catalysts to follow. Meanwhile, the magnet rare earths prices keep rising. All of

this bodes well for the Company, as shown by the successful recent raise of C$3 million and a C$245,355 Quebec Government award to optimize their Crater Lake Scandium recovery process.

Scandium is the rarest of the "rare earth" metals. Small additions of scandium to alloys with aluminum give properties of corrosion resistance, tensile strength, ductility, and low weight that make them ideal for weight reduction and safety in large scale battery boxes for EVs and in load bearing aircraft parts.

Imperial Mining Group trades on a market cap of C$26 million and looks to be in the right place at the right time. And let's not forget their gold exploration potential. Stay tuned.

Byron King and Jack Lifton discuss Scandium's bright future with Peter Cashin of Imperial Mining

written by InvestorNews | October 7, 2022

In this episode of **Critical Minerals Corner**, Jack Lifton and Critical Minerals Corner Co-Host & InvestorIntel Columnist Byron King are joined by Peter Cashin, President and CEO of Imperial Mining Group Ltd. (TSXV: IPG | OTCQB: IMPNF) to discuss "miracle metal" scandium and how Imperial Mining is positioned to become the "largest scandium producer in the world…"

Byron King pointed out that Russia is one of the primary sources

of scandium, and he went on to highlight the supply chain concerns for scandium because of the current Ukraine-Russia conflict and sanctions against Russia. Speaking about the lack of sustainable supply of scandium, Peter Cashin went on to provide an update on Imperial Mining's Crater Lake Scandium-REE Project in Québec. Peter also provided an update on Imperial Mining's collaboration with Eck Industries to prototype a scandium-aluminum battery box for a global automotive manufacturer.

To access the complete episode of this Critical Minerals Corner discussion, click here

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Spotlight on American Rare Earths as new Bill forces defense contractors to stop buying rare earth enabled products from China

written by InvestorNews | October 7, 2022

On January 15, 2022 it was reported by Reuters that a new bill was introduced in the US Senate that would force defense contractors to stop buying rare earth enabled products from China by 2026 and use the Pentagon's Defense Logistics Agency, DLA, to create a permanent stockpile of rare earth minerals. The U.S has only one producing rare earths mine at Mountain Pass, California, run by MP Materials, and currently has no capability

to process rare earth minerals downstream of the mine. If passed, the new bill would help support the U.S goal of developing a more local and secure supply of rare earths, in the USA.

Today's company has not one, not two, but three USA located rare earth projects. Its flagship Arizona rare earths project contains light rare earths. Light rare earths include the valuable magnet metals praseodymium and neodymium, as well as scandium.

American Rare Earths Limited 3 USA rare earths projects – location map

Source: Company presentation

American Rare Earths Limited (ASX: ARR | OTCQB: ARRNF) is focused on developing its 100% owned La Paz Scandium and Rare Earths Project in Arizona, USA. The Project was acquired in August 2019 with an existing NI 43-101 Resource. The Project lies about 170km northwest of Phoenix.

The Company states: "La Paz is a large tonnage, bulk deposit comprising high value, light rare earth (LREE) assemblage with the potential to be the largest rare earth project in North America…..contains very low penalty elements such as radioactive thorium and uranium." They further comment: "The results show an increase in grades of certain high-value Rare Earth elements, including magnetic and heavy Rare Earths used in numerous technologies such as Electric Vehicles (EVs), wind turbines, air conditioners/refrigeration, phones, and critical national defense industry tech."

The La Paz Scandium and Rare Earths Project

La Paz covers over 890 hectares with mining claims on federally controlled land and a prospecting permit over one section of Arizona State Trust land (259 hectares). The claims are unencumbered and 100% controlled by La Paz Rare Earth LLC (100% owned subsidiary of American Rare Earths Limited). The Project benefits from excellent local infrastructure including electricity, water,and gas; and is in a mining friendly jurisdiction.

The JORC 2012 classified Resource Estimate as announced in August 2021 at La Paz is **170.6 million tons of Total Rare Earth Elements (TREE) at an average grade of 391ppm.** The Indicated Resource Estimate is 35.2 million tonnes. The Resource estimation report demonstrates approximately 66.6 million kilograms TREE, approximately 80.0 million kilograms TREO, plus 4.4 million kilograms of Scandium Oxide (Sc2O3).

The Resource displays relatively uniform distribution of total rare earth elements (TRRE) across and along strike, covering a resource area of 2.5km by 1.5km (La Paz Resource only). The entire deposit is exposed at surface, or lightly concealed by alluvial cover.

The Company recently stated (re La Paz): “What is also exciting are the higher grades intersected in the La Paz resource area of up to four times the depth of the previous maiden resource, with mineralization remaining open at depth and along the strike, indicating the potential for a much larger deposit.”

The Company also reported a new potential resource in the Southwest area of the La Paz Project where one diamond core hole terminated in mineralization material below 75 metres. New claims are being staked in the area.

La Paz Project highlights and showing the La Paz Resource area and the new discovery Southwest Resource area <4km away

Source: Company presentation

Other projects

American Rare Earths Limited has also recently acquired two other USA rare earth projects – The Searchlight Rare Earths Project in Nevada and the Halleck Creek Project in Wyoming. The Company also has exposure to cobalt via its strategic investment in Cobalt Blue Holdings (ASX: COB), which owns the Broken Hill Cobalt Project in Australia.

Catalysts in 2022

- La Paz drilling contractor appointed and to commence work in January 2022.
- Field exploration work continues at Halleck Creek with the Maiden Drill program planned for Q1 2022.
- Results from working with USA research institutions with La Paz's mineral profile incorporated into emerging US advanced rare earth processing technologies.
- Preliminary Economic Assessment (PEA) for La Paz by the end of 2022.

American Rare Earths Managing Director and Chief Executive Officer, Chris Gibbs, stated in December 2021: "Timing could not be better with the recent Capital raising efforts and obtaining the permits to commence drilling at our key projects. The opportunity to bring Fidelity onto the register means we can accelerate the planned scope of works and unlock value sooner."

American Rare Earths Limited highlights

Source: Company presentation

Closing remarks

American Rare Earths Limited offers investors exposure to three USA rare earths projects, including the flagship La Paz Scandium and Rare Earths Project in Arizona.

With rare earths demand set to surge this decade as we switch to green energy and transportation, it is worthwhile looking at what companies can be the next suppliers of rare earths, especially in the USA.

American Rare Earths Limited has recently raised A$5.7 million after fees with Fidelity International initially taking an equity interest of approximately 9.9%. The current market cap is A$110 million. One to follow in 2022, especially with the current drilling at La Paz and Q1 2022 drilling at Halleck Creek. Stay tuned.

Is Imperial Mining Group the real scandium play?

written by InvestorNews | October 7, 2022

When I first started looking into scandium, I found out that it was used in bicycle frames, aluminum alloy baseball bats and some fishing rods, which was good enough for me to be interested. However, improving the strength, corrosion resistance, and reducing the weight of those items isn't going to raise an eyebrow at COP26 nor is it likely to dramatically improve demand for scandium. That's why it probably makes more

sense to talk about how a scandium-aluminum alloy is used in weight reduction applications in the high volume automotive, aerospace, fuel cell, and defense sectors. In fact, scandium can reduce our carbon footprint by making commercial aircraft and vehicles lighter and more fuel efficient thus lowering emissions. In EVs, scandium is used in light weighting vehicle components to extend battery range and improve fuel cell efficiency. Airbus SA has patented scandium-aluminum alloys for welding of aircraft structures in place of rivets for assembly, which reduces weight by 20%. With all the bad press emissions from air travel have gotten the last couple of days out of Glasgow, this could become a very important issue for the future of plane manufacturers.

Now that we've determined scandium is a good thing and could possibly be on the upswing as a commodity in demand, perhaps we'll discuss a North American source given that there isn't a whole lot to choose from currently. Scandium is a moderately abundant element, although it tends to be spread out throughout the earth rather than concentrated in a few places. Currently, in North America, the only notable possible production comes as a by-product of planned niobium mining at NioCorp Developments Ltd.'s (TSX: NB) Elk Creek project in Nebraska. This makes the Crater Lake scandium-REE project of Imperial Mining Group Ltd. (TSXV: IPG | OTCQB: IMPNF) a unique find. It's the only hardrock scandium deposit in the world and happens to be in the mining friendly jurisdiction of Quebec, close to hydroelectric capacity and Quebec's aluminum metal production where 90% of Canada's "Green" aluminum is produced. That's already a lot of boxes ticked and we haven't even gotten into the grades of the Crater Lake project.

But first a little about Imperial Mining Group. Imperial is a Canadian mineral exploration and development company focused on the advancement of its Crater Lake scandium-Rare Earth property.

The company is led by an experienced team of mineral exploration and development professionals, who have a strong track record of mineral deposit discovery in numerous metal commodities. The Company also has a pair of gold prospects, Opawica and La Ronciere all in Quebec.

As for the Crater Lake project, in September Imperial received the inaugural NI 43-101 Technical Report for the Crater Lake TG Zone Mineral Resource Estimate.

Source: Imperial Mining Group Ltd. press release Sep 23, 2021

The results of the Resource Estimate for the Northern Lobe of the TG Zone far exceeded the minimum threshold resource Imperial internally set for a 20-25-year notional mining operation, based on a 10 million ton lift. And the good news is that mineralization remains open laterally and at depth, demonstrating the potential to increase the mineral resource with additional drilling. Imperial will soon commence work on an NI 43-101 Preliminary Economic Assessment (PEA).

Another strategy that sets Imperial apart is that it is actively collaborating with partners to further the development of strategic scandium marketing activities to projects that require important weight and carbon footprint reductions. A great example is their work with Eck Industries to begin prototyping components while concurrently looking to maximize weight savings for the transportation sector. They recently showed that the material properties for EV battery box requirements, as specified by a major North American automotive manufacturer, have been met or exceeded. Last month the Company was awarded, along with its partner FusiA Groupe, C$2.6 million for a scandium-aluminum material R&D project. The project will focus on the industrialization and the development of a vertically

integrated supply chain for a scandium-aluminum alloy for 3D printing. I’m impressed by the fact that Imperial is increasing the awareness and demand for their product before they’ve put their project into commercial production.

Unless you’ve been living under a rock for the last few months, we all know the impact that the interruption of supply chains has had on virtually everything. The manufacturing world is learning the hard way that it might be time to “on-shore” critical parts of their supply chain if they want to complete their product manufacturing, let alone compete. So, to be one of the best grade scandium resources in the world and be located on mining friendly, North American, soil means we should all probably pay a little closer attention to Imperial Mining.