

Imperial Mining Sets Comprehensive 2021 Plan at Crater Lake after \$2.6M Financing

After a positive summer drill program at its flagship **scandium-rare earth** Crater Lake Property in northeastern Quebec, Imperial Mining Group Ltd. (TSXV: IPG) successfully closed a \$2.6 million financing in December to accelerate the project forward in 2021.

Imperial Mining plans to use the proceeds to complete definition drilling at Crater Lake's "TG Zone", and to deliver both a 43-101 Resource Report and a Preliminary Economic Assessment (PEA) by the end of June 2021.

Last trading at \$0.16, Imperial Mining Group has a market cap of \$20 million and a PEA could re-rate the company, shifting it closer to the \$175 million market cap of NioCorp Developments Ltd. (TSX: NB | OTCQX: NIOBF) that has a Feasibility Study at its Elk Creek niobium-scandium project in Nebraska, United States.

Peter Cashin, President & CEO of Imperial Mining Group, recently commented, "I am very pleased of the positive response that the market has shown for our private placement. The financing was oversubscribed, and we believe that it was motivated by the recent significant announcements in the critical metal space, in particular for scandium and the rare earths."

Scandium Alloys at Home and in Space

Manufacturers in many industries, including automotive, aerospace, and defense, recognize that scandium-modified

aluminum alloy materials could become a critical input into their production processes.

With the push for lighter and stronger materials to make vehicles more fuel-efficient and the need for tough and durable metal alloys for the resurgence in space activity, scandium-aluminum “superalloys” have been already used by NASA and the European Space Agency (ESA).

In a March 2020 speech at the Satellite 2020 Conference, Elon Musk, founder of Tesla (NASDAQ: TSLA) and SpaceX stated that the aerospace engineers at SpaceX were going to switch to a different alloy “pretty soon” to replace the current stainless-steel alloy, known as 301.

Scandium-aluminum alloys are highly valued as an important lightweight material and are one-third the weight of steel and 60 % of the weight of titanium alloys.

Scandium-aluminum alloys are also corrosion-resistant and can be used in a variety of industries, including aerospace, automotive, and consumer products, such as baseball bats, bicycle frames, and golf clubs.

A small percentage of scandium alloyed with aluminum enables aluminum to be effectively welded to another piece of scandium-aluminum alloy, without the need for heavy hardware to join the pieces together.

Scandium-aluminum alloys are currently being used by California-based Relativity Space, a private aerospace manufacturing company. Relativity Space’s massive 3D printer can create a rocket from raw material to flight in 60 days.

The automotive industry could be a large market opportunity for scandium. With scandium-aluminum’s self-welding abilities, engine blocks could be constructed using 3D printers.

In addition, according to a recent report, the average

passenger vehicle contains over 150 kilograms of aluminum and the average light truck contains over 230 kilograms of aluminum. If only 1% of the traditional aluminum used in the approximately 17 million light vehicles (cars and light trucks) produced in the United States each year, switched to scandium-aluminum, that impact would create a demand for 35 tonnes of scandium each year.

With current scandium production estimated between 25-35 tonnes per year as such, this type of demand would immediately double the current supply requirement.

Scandium

Scandium is an element, sometimes classified as a rare earth metal, and currently, there are no primary scandium mines. Supply comes from the by-product of other mineral extractions from deposits in China, Russia, and more and recently, Australia.

Scandium is not traded on any metal exchange and the price is negotiated between buyer and seller. According to the most recent USGS data sheet on scandium, over the past five years, the price for scandium-oxide has averaged \$4,560 per kilogram.

Scandium and other “critical metals” were thrust into the spotlight last year when President Trump signed an Executive Order addressing the threat to the United States’ supply chain from relying on “critical minerals” from “foreign adversaries”, specifically identifying China. The 35 mineral commodities deemed critical under the definition included aluminum, gallium, graphite, lithium, manganese, niobium, the rare earth elements group, and scandium.

Crater Lake Property – Scandium & Rare Earth Metals

The 100%-owned Crater Lake Project is located 200 kilometres northeast of Schefferville, Quebec, and covers 2,780 hectares (approximately 6,900 acres). The project hosts three zones of

mineralization (Boulder, TG Zone (TGZ), and STG), determined by scandium-rich outcrops, boulders, and recent drilling.

Highlights from the summer drill program included Hole #CL20037 from the TGZ that returned intervals grading up to 253 grams per tonne (g/t) Scandium Oxide (Sc_2O_3) over 29.14 metres (m), including 9.3 m grading 299 g/t Sc_2O_3 and 21.69 m grading 271 g/t Sc_2O_3 including 9.16 m grading 299 g/t Sc_2O_3 .

Importantly, the true thickness of the scandium mineralized zone is estimated to be up to 110 m and is open at depth and along strike.

The company sees major positive factors with the project, including:

- The resource is exposed at the surface, so it is amenable to a low-cost open-pit operation.
- The deposit is high grade relative to its peers and could reduce the CapEx to develop the mine and the OpEx to run the mine.
- The preliminary metallurgy showed strong scandium mineral recoveries.
- The project is in the mining-friendly jurisdiction of Quebec and supported by Quebec's recently launched \$90 million "critical minerals" development fund and Plan Nord, Quebec's economic development strategy to develop natural resource extraction in northern Quebec.
- The deposit is located in close proximity to the 9 aluminum smelters and one alumina refinery in Quebec.

Final Comment

Look for the definition drill results, 43-101 Resource Report, and the PEA to potentially lift the stock price higher this year.

Critical Materials Corner with Jack Lifton – Impact of Biden Admin on Rare Earths

In the first episode of the **Critical Materials Corner** with Jack Lifton, Jack talks about if there is going to be any change in the focus on critical materials under the Joe Biden administration.

In this InvestorIntel video, which may also be viewed on YouTube (click here to subscribe to the InvestorIntel Channel), Jack went on to explain the role of bureaucracy and the US Federal government to drive policies on critical materials to make the US independent of China for critical materials.

Speaking on the electric vehicles sector, Jack said, “The big drive in the US is to get the price of the batteries down.” He continued, “If I were an investor, I would be looking at batteries, battery management, battery raw materials, and also the raw materials for solar panels and wind turbines because these are big pushes by the US government.” He further added, “You can store energy with lithium, cobalt, nickel and manganese. But you can’t make anything move without rare earth permanent magnets.” Speaking on the Department of the Interior’s list of critical materials he explained why copper should be on the list.

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

Did H2O Innovation just sign a deal with Tesla?

Did H2O Innovation Inc. (TSXV: HEO | OTCQX: HEOFF) just sign a deal with Tesla?

The company provided a corporate update this morning, announcing it has signed \$3.2 million in new industrial and wastewater contracts. Highlighting this update was the announcement that the company was **awarded the engineering contract on a capital equipment project for the largest electric vehicle manufacturer in the US.**

The company has secured the engineering contract to design two identical reverse osmosis (RO) trains, each rated at 2,200 m³/day, for an electric vehicle manufacturing plant located in Texas. Upon successful completion of the engineering work, a purchase order for construction and delivery of the equipment is expected to be issued.

It is public knowledge that Tesla is building a new plant in Texas (the Texas Gigafactory) and construction is well underway. The logical conclusion....

This could be a distraction in the company's share trading as the market comes to understand the deal, but note that this is only one of the new contracts signed that have increased the company's Water Technologies & Services sales backlog to \$37.1 million.

The company is a technical innovator in the water handling business and the market has (finally) recognized this. On September 1, 2020, the company's share price closed at C\$1.09. At market close on January 15, 2021, the company's share price

had more than doubled to C\$2.57, with a market capitalization of \$199 million.

Recall that H2O Innovation does business around the world, but mostly in North America with almost 20% of business coming from other global sales. The company has three main business segments – Operating and Maintenance is the largest at approximately 48% of revenues, Specialty Products is the next largest at approximately 30%, with Water Technologies & Services (WT&S) accounting for the remaining 22%. The announced new contracts are the WT&S segment.

The new other new contracts include:

- conversion of a conventional activated sludge plant to a membrane bioreactor (MBR) facility with biological phosphorus removal, also in Texas,
- a redesign and replacement of a failing MBR system at a school in the State of Maryland, which will include repairs and improved durability of the wastewater system using ceramic membranes,
- an exciting first for H2O Innovation, the award of a demonstration pilot for its novel SILO technology at an industrial customer in the Midwest US, and
- a contract in Southern California for the supply of two RO demonstration units at the Hyperion Water Reclamation facility. This project reinforces the Corporation's presence and experience in the critical water reuse market.

According to President and CEO of H2O Innovation, Frédéric Dugré, Texas is a strategic market for the company and “the projects we execute often also lead to opportunities for our other business units down the line”. The company continues put efforts into capturing more wastewater, water reuse, and industrial opportunities, which are characterized by higher gross profit margins.

The company continues to have a strong balance sheet, excellent customer retention and a market leading reputation for quality, innovation and service. With a growing backlog of orders, the company has no shortage of future business which should be good news for investors looking forward to the potential for future growth in a world that relies on clean water. Doing business with a company the size of Tesla also could have future business implications.

Kozak on Imperial Mining's proximity to Quebec's aluminum production corridor

Just six months ago, the share price of Imperial Mining Group Ltd. (TSXV: IPG) was range-bound between CAD\$0.05 and CAD\$0.06/share. This was a good thing, because only a month before, the company was trading at \$0.04 or less! The company closed 2020 at approximately \$0.09/share but currently trades around \$0.16/share with a market capitalization of approximately CAD\$20 million.

What happened? As followers of the rare earth space know, the market is catching on to the notable rare earths companies and the need to recreate a domestic US/non-China based supply. In addition to the company's gold and base metal assets, Imperial's Quebec hardrock property has excellent exposure to scandium. This was highlighted on December 31, 2020 in a year-end interview, where scandium and Imperial Mining were mentioned by name. On January 4, 2021, the stock soared to \$0.16 and continues to trade at that level.

As you probably know, scandium is an additive to aluminum

alloys that hardens and strengthens the end product, (not unlike titanium alloys) and allows for lighter weight but equivalent (or better) strength components. Notably, two Russian jet fighters (MiG-21 and MiG-29) use scandium alloys in their construction. Other uses for scandium alloys include (but not exclusive to) automobiles, fuel cells and other defense products.

Peter Cashin, President and CEO, recently explained how Imperial Mining's 100%-owned Crater Lake Project "provides a strategic opportunity for an exciting new line of lightweighting [sic] products." The project contains rare earths but is highly leveraged to scandium.

"How it (Crater Lake Project) stands out is that it is a primary bedrock opportunity in Quebec," said Mr. Cashin. "The grades are exceptionally high relative to our peers for a bedrock deposit. It is exposed at surface so it would be amenable to an open pit operation. Our preliminary metallurgy shows that we have very strong recoveries and high rejection rates of the gangue minerals from our metallurgical work so far. We are ideally located very close to the aluminum capital of Canada."

In other words, a potential source of a critical metal element for the aluminum industry right on its doorstep in Canada!

After an active 2020 field program, which included 130-line kilometers of detailed ground magnetic surveys, in August the company announced the discovery of several new areas of scandium mineralization on the Crater Lake Project. These new areas lie within the same 14-km magnetic trend hosting the three previously defined mineralized zones on the property (Boulder, TGZ and STG). Subsequent 2020 drilling confirmed strong scandium resource potential on the property, which was announced last November.

The market clearly liked those results. Imperial went on to

successfully raise CAD\$2.6 million on closing of an oversubscribed, non-brokered private placement of flow-through shares and units in early December 2020.

Looking into 2021, Imperial is in an enviable position in the scandium industry owing to their close proximity to Quebec's aluminum production corridor, where 90% of Canada's aluminum is produced. While there is already competition from the recently announced scandium plant by \$100 billion market capitalization Rio Tinto, the Crater Lake Project appears to have all of the traits of a high-quality, low cost project which is getting better delineated with every drilling program. Still a competitive advantage, the project has easy egress to the aluminum smelters plus low-cost electricity and a supportive political environment.

While it is too early to say that the Crater Lake Project will be the next (hardrock or otherwise) scandium supply source for Quebec aluminum, the project is getting ever closer to the decision to proceed with a new mining development. There are still a significant number of steps to go before that decision, but the company appears to have a promising future ahead.

Returning interest to the rare earths space has eyes back on Rare Element Resources

"Patience is a virtue".

That would be an understatement when it comes to the long history of Rare Element Resources Ltd. (OTCQB: REEMF) and President & CEO Randy Scott. However, the company has not remained unnoticed by the market and the current share price reflects the returning interest to the rare earths space.

The company owns a 100% interest in a group of 499 unpatented mining claims and 640 acres owned in patent, called the Bear Lodge Project. The mine site is located approximately 12 miles northwest of the town of Sundance, Wyoming in close proximity to transportation, power and human resources in a mining-friendly jurisdiction. According to the company, the Bear Lodge deposit is one of the highest grade rare earths deposits in North America. Average ore composition is approximately 3% rare earths, but the company has discovered a large minable zone of 8-10% rare earths. Truly world class!

The company's rare earths project has been delineated and basically ready to develop since mid-2014, when a Preliminary Feasibility Study on development of the Bear Lodge Project was published. As followers of the rare earths industry know, this unfortunately coincided with an orchestrated collapse of the global industry and caused Rare Element Resources (RER) to pause their activities.

The good news – the Bear Lodge Project was put under “care and maintenance”, but RER did not stop working. In 2017, the company attracted a strategic investor Synchron, a subsidiary of General Atomics Technologies Corporation, which invested US\$4.75 million in new equity in the company. Synchron had an option to acquire further equity in the company for just over US\$5.0 million, which was exercised in late 2019 and gave Synchron an approximate 49% interest in RER. This strategic investment has allowed RER to continue work on its proprietary technology for rare earths separation and also update environmental baseline information that will be used in application to move the project forward.

According to RER “Bear Lodge is a significant mineralized district containing many of the less common, more valuable, critical rare earths that are essential for high-strength permanent magnets, electronics, fiber optics, laser systems for health and defense, as well as many technologies like electric vehicles, solar panels and wind turbines.” Between 2004-2013, a total of more than 160,000 feet of drilling was completed in over 200 core holes that range in depth from 88 to 1,886 feet. This allowed the company to prepare a report (NI 43-101) in 2014 that estimated the resource potential of the project.

Proposed operations at the Bear Lodge Project will consist of the following:

- A small surface mine,
- A Physical Upgrade (PUG) Plant located adjacent to the mine for mineral pre-concentration, and
- A Hydrometallurgical (Hydromet) Plant for further concentration, impurity removal and recovery of the rare earth oxides from the mineral pre-concentrate, located in Upton, Wyoming.

Current estimates are that RER could receive all permits and licenses for the Bear Lodge Project approximately 18 to 30 months after resuming permitting efforts. However, separate from the mining project, the company has made significant strides in developing their proprietary rare earth separation technology which will be used to process the mine’s output.

As followers of the company know, the Synchron connection has been invaluable to RER. Leveraging the General Atomics relationship, another subsidiary (Umwelt-und Ingenieurtechnik GmbH Dresden or UIT) has operated the pilot plant in Germany utilizing RER developed processes, while tweaking them to adjust or improve the technology. Once that has been completed, the company will be approaching the demonstration plant decision. This plant is expected to be constructed

somewhere in Wyoming

In February 2020, the company announced successful pilot scale test work conducted over the previous year for extraction of rare earths metals. This is ultimately leading up to the construction of a demonstration scale rare earths processing and separation plant which is anticipated to take approximately 18-24 months once funding is secured. The company has approximately 900 tons of ore stockpiled from the Bear Lodge Project – operations to process and separate rare-earth-elements from the stockpiled ore will follow in an additional 12-month period.

“The most important event for RER in past three or four years has been investment by Synchron” according to CEO Randy Scott. “Their strategic investment really is a big deal and the General Atomics/Synchron organization bringing a lot of knowledge and experience to the RER board.”

I would tend to agree, as the company has a world class ore deposit and the ability to exploit it economically. The company expects to update the market as appropriate, but notes that no further mining would be required for ore to feed a demonstration plant as approximately 900 tons is currently stockpiled.

The corporate philosophy is to announce results, rather than prognosticate and then revise. While there is limited historic news flow, you can rest assured that when there is a corporate announcement, it will be meaningful to shareholders.

Stay tuned!

Lifton, Clausi, Cashin and Putnam on how the time for scandium is now

The Technology Metals Show hosts Jack Lifton and Peter Clausi talk to Peter Cashin, President and CEO of Imperial Mining Group Ltd. (TSXV: IPG) and George Putnam, President, CEO and Director of Scandium International Mining Corp. (TSX: SCY), about scandium, which is a critical material and the scandium market overall.

The full interview available exclusively to subscribers of the **Technology Metals Show**, this a promo clip from the panel's discussion on the overall scandium market, commercial uses of scandium and the latest research and development that has been done in this area. George said, "Scandium has some unique aspects to it that make it well suited as an aluminum alloy along with some exciting uses in a number of areas specifically in battery technology."

In the interview, Peter Cashin provided an update on the Imperial Mining's Crater Lake Scandium-Rare Earth property located in the Canada's aluminum capital – Quebec.

To access the complete interview subscribe to the **Technology Metals Show** and get exclusive access to member-only content through this exclusive site. Or Log-In Here for the latest conversations, debates, updates and interviews with the leaders, thought leaders and investors focused on issues relating to sustainability in the critical materials sector.

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CBLT continues to build value for shareholders and looks set to benefit from Ready Set Gold

CBLT Inc. (TSXV: CBLT) had a great 2020 with the stock price up 200%. This is because the Company continues to make deals that add value for shareholders and avoids stock dilution, the latest deal being CBLT's 6.1% share in today's CSE listing of Ready Set Gold (CSE: RDY) ('RDY'), a promising gold exploration play. RDY is anticipated to commence trading on January 12, 2021 under the symbol "RDY" on the Canadian Securities Exchange (CSE).

CBLT Inc. offers investors exposure to multiple Canadian cobalt and precious metals projects, an equity share in RDY and any sale proceeds, and management's strong track record of deal making.

CBLT owns 1,833,333 shares (approximately 6.1%) of RDY. CBLT has received its first release from escrow of 458,333 free-trading shares. There are three remaining escrow releases of the same number of shares, to take place on or about April 18, June 18 and August 18, all in 2021. RDY's last financing was carried out at C\$0.75 per share, giving CBLT's holding an implicit value of over \$1,300,000. **CBLT Inc. stands to benefit by selling some of its RDY holdings as it comes out of escrow to mitigate downside risk and holding on to the remainder to ride the 'gold and Hemlo' wave.**

The Ready Set Gold announcement above gives a good summary of the company quoted below:

- “A basket of gold projects in the Hemlo area in Ontario with a focus on high-grade gold exploration and development potential, including the 100% owned Northshore Gold Project hosting **Indicated Resources of 391,000 oz Au** in 12.36 million tonnes at **a grade of 0.99 g/t** and **Inferred Resources of 824,000 oz Au** in 29.58 million tonnes at **0.87 g/t Au** using a cut-off grade of 0.50 g/t Au. (NI43-101 Technical Report – 2014).
- A proven team of public company executives and explorers focusing on profitable exits for shareholders.
- Low share float of 29.8 million shares outstanding and 37.1 million shares fully diluted.”

Note: Bold emphasis done by the author.

The background on this deal involved CBLT Inc. selling its 56% share of the Northshore Gold Property Joint Venture to Omni Commerce Corp. (“Omni”). For the sale CBLT Inc. received \$350,000 in cash and \$1,100,000 in common shares of Omni. Subsequently RDY formed out of an amalgamation agreement dated August 12, 2020, between Omni and RDY, effectively meaning CBLT Inc. became a RDY equity holder.

A deeper look at Ready Set Gold (‘RDY’)

RDY states that its mission is to discover, expand, develop high grade, economic gold deposits on proven and prolific greenstone belts in Canada with an initial focus on Ontario. As mentioned above in the CBLT announcement RDY has already discovered significant gold ounces, or as reported in their presentation a total of 1.22 million ounces. The indicative market cap for the initial listing is C\$22 million fully diluted, which gives a market cap per ounce of US\$18/oz, well below most competitors. Of course RDY is a new listing and has a significant percentage of their gold still in the lower Inferred category, so this must be taken into consideration when comparing to peers.

2021 will see Phase 1 drilling of 3,000 meters of infill drilling and upgrading of the Inferred Resource. This will be followed by Phase 2 drilling of another 3,000 meters, including of new targets. This should lead to plenty of news flow in H1 2021.

Ready Set Gold's 3 key gold projects – Northshore, Hemlo Eastern Flanks, and Emmons Peak



Ready Set Gold company highlights

LOCATION	TEAM	OUNCES	STRATEGY	QUALITY
A proven jurisdiction with many multi-million ounce neighbours that operate at industry leading low costs	A proven team of public company managers and explorers with a focus on profitable exits for shareholders	100% ownership of the Northshore Gold Project with a historical 2014 NI 43-101 Indicated Resources of 391,000 oz Au and Inferred Resources of 824,000 oz Au	A bold & fast-paced strategy to produce exciting short-term results for shareholders	An exceptional basket of projects with a focus on high-grade gold with exploration and development potential

Source: RDY company presentation

About CBLT Inc.

CBLT Inc. is a project generator with a focus on quality cobalt projects in safe jurisdictions such as Canada. CBLT has numerous projects in Canada. CBLT's flagship is the Copper Prince Project located in Falconbridge Township, in the Sudbury Mining District of Ontario, Canada. The Project has Cu-Ni-PGM and gold occurrences. Sample 616311 found 54.3g/t Au and 5,020 ppm (0.502%) Co. CBLT also owns the Chilton Cobalt Project in the Grenville Subprovince in Quebec, which contains two areas with large nickel-copper-cobalt-chromium findings. In total CBLT has its hands in over 10 projects in Canada. You can read more in my past articles [here](#) and [here](#).

Closing remarks

CBLT Inc. still has a low market cap of only C\$4.7 million despite their tremendous stock price performance in 2020. By buying into CBLT Inc. investors gain exposure to over 10 projects in Canada with base metals (Co, Ni, Cu) and precious metals potential (Au, Ag, PGMs), some equity exposure in Ready Set Gold which is due to list today, and management's deal making skills that has a proven track record of adding value for shareholders without stock dilution. Be quick!