

# **Imperial Mining is set to announce a Resource Estimate that will Highlight Significant Grades of Scandium and Related Technology Metals**

Imperial Mining Group Ltd. (TSXV: IPG | OTCQB: IMPNF) ("Imperial") is due to shortly release a 43-101 preliminary Resource Estimate for their 100% owned Crater Lake Scandium-Rare Earth Project in northeastern Quebec, Canada. What can investors expect?

The Crater Lake Project consists of 57 contiguous claims covering 27.8km<sup>2</sup>. The Project has ~14 km of potential mineralized horizon (only 1/4 drill tested) spread over several zones, some of which have drill tested high-grade scandium and some rare earths deposits, including and yttrium. There is also potential for niobium and tantalum.

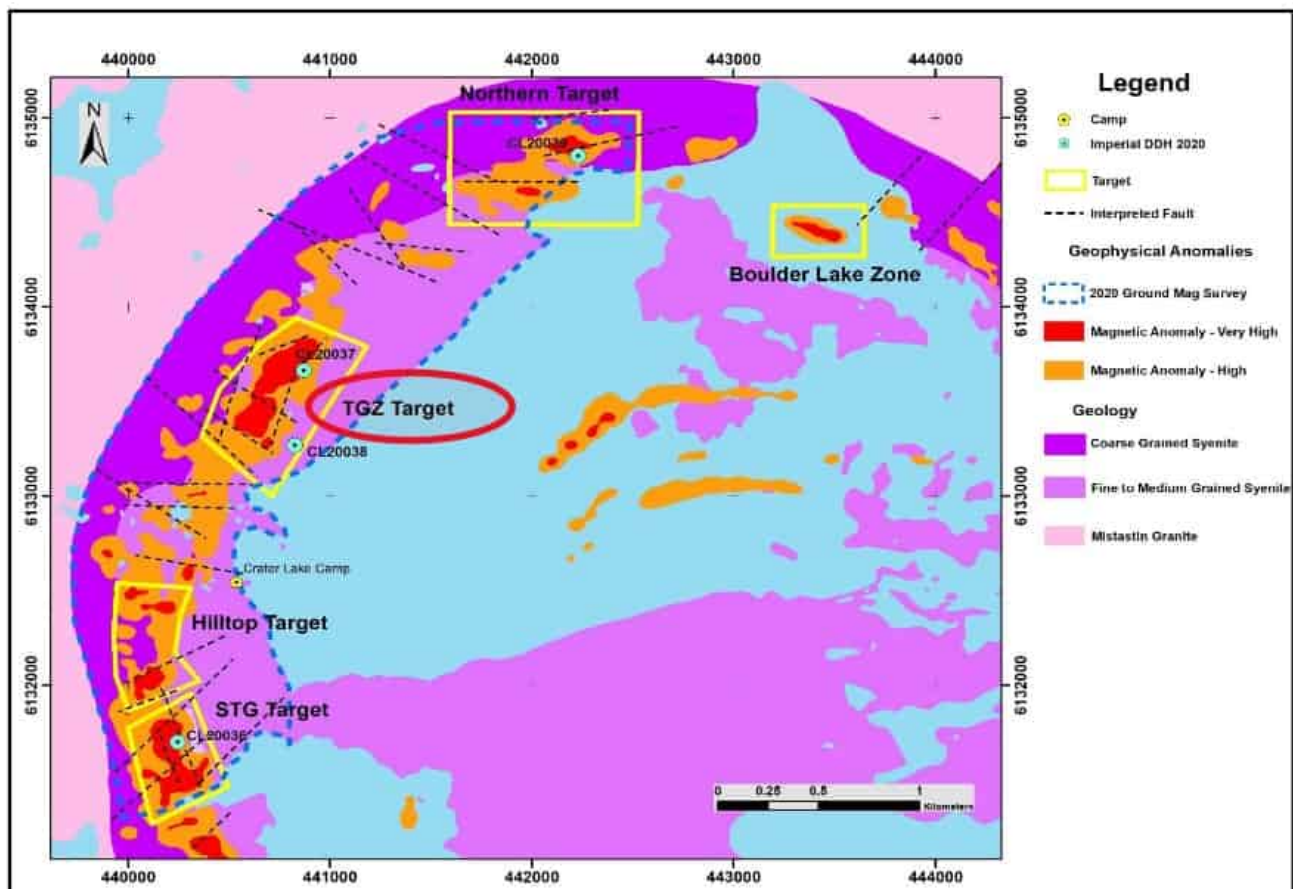
**Imperial Mining's Crater Lake location showing excellent infrastructure nearby**



- 🏆 Large surface scandium resource inventory
- 🏆 Near Quebec's aluminum metal production/value-add product
- 🏆 Good road, rail, air and hydroelectric capacity
- 🏆 Supported by Plan Nord infrastructure program
- 🏆 New QC critical mineral development fund (\$90M)

Drilling has defined several mineralized zones of over 600m in total strike length and from surface to a vertical depth of up to 200m.

# Crater Lake Exploration Targets



Source: Company presentation

## Excellent drill results at Crater Lake continue in 2021

Past drilling has shown some excellent long length, high-grade, scandium oxide results ranging from 0.0235% to 0.056% (235-506 g/t).

For example, in April 2021 the Company announced excellent drill results at Crater Lake that included **92.5 m @ 291g/t scandium oxide ( $\text{Sc}_2\text{O}_3$ )**. Elevated levels of total rare earth oxides plus yttrium of up to 0.42% were also found. There is also a parallel niobium target showing grab assay results of between 0.20% and 1.42% Nb<sub>2</sub>O<sub>5</sub> which sits 250m west of the scandium target.

Then in May 2021, Imperial announced:

- **“Assay results from the first four drill hole continue to return impressive intercepts of **111.9 m (367.0’)** grading **298 g/t scandium oxide (Sc<sub>2</sub>O<sub>3</sub>)**, including 40.5 m (132.8’) grading 336 g/t Sc<sub>2</sub>O<sub>3</sub> and 34.77 m (114.0’) grading 321 g/t Sc<sub>2</sub>O<sub>3</sub>.**
- **Elevated levels of total rare earth oxides plus yttrium (TREO+Y) of up to 0.38 %.”**

More recent drill results announced in June 2021 included:

- **“99.8 m (327.3’) grading 299 g/t scandium oxide (Sc<sub>2</sub>O<sub>3</sub>)**, including 24.2 m (79.4’) grading 331 g/t Sc<sub>2</sub>O<sub>3</sub> and 77.3 m (253.5’) grading 313 g/t Sc<sub>2</sub>O<sub>3</sub>.
- **Elevated levels of total rare earth oxides plus yttrium (TREO+Y) of up to 0.46%** characterize the scandium-bearing intercepts.”

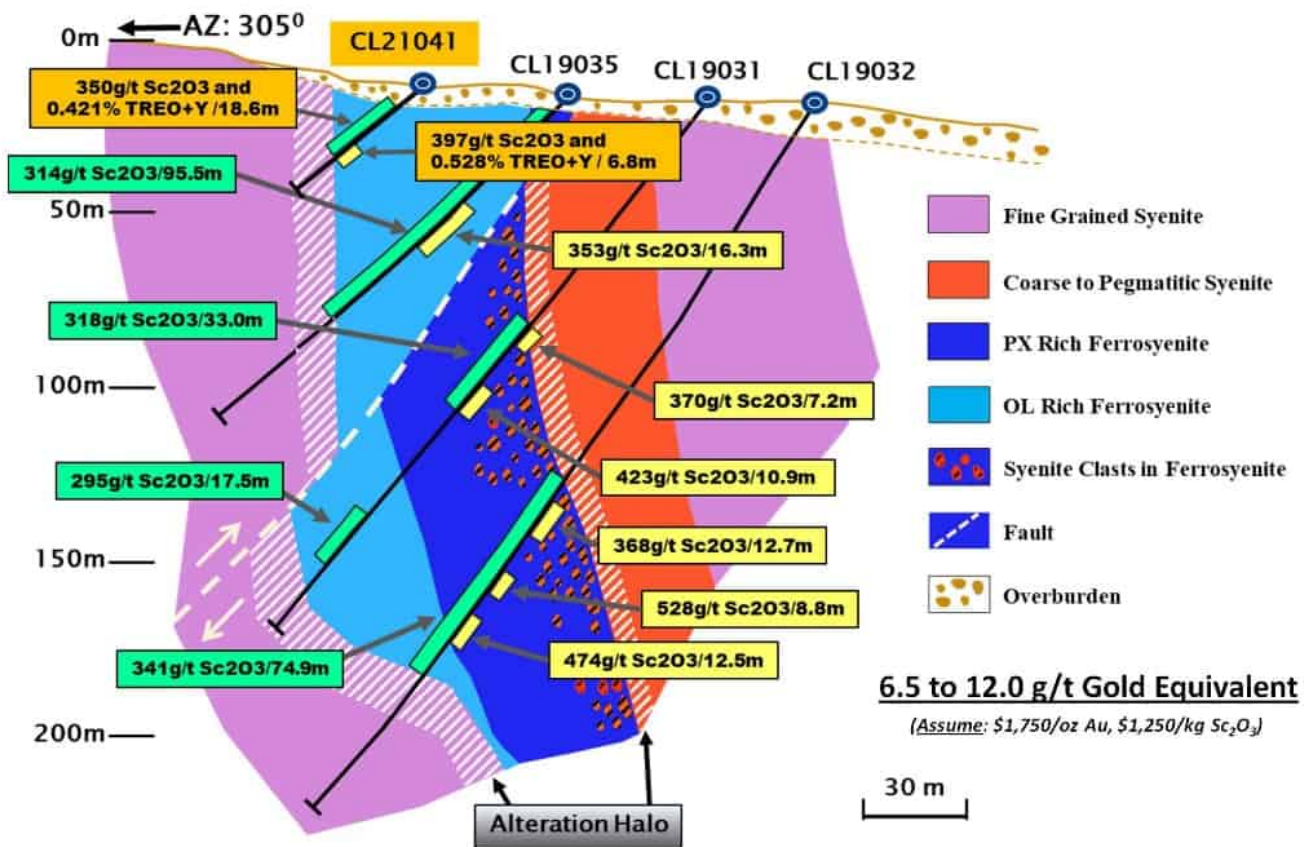
**Crater Lakes’ critical minerals mean a 10MT resource can potentially be very valuable**

Imperial’s ‘target’ at Crater Lake is to define a scandium-REE mineral resource of a minimum of 10 Mt, sufficient for a 25-year operating model. What some investors miss is that a small relatively shallow resource-rich in valuable metals such as scandium, niobium, and rare earths can be highly valuable. The chart below highlights this by expressing the results as 6.5 to 12.0 g/t ‘gold equivalent’. If Imperial Mining was able to achieve 10MT of ore at say 6.5 g/t Au equivalent (lower range) that would be equivalent to 65 million grams (2.1 million troy ounces) of gold in terms of value. If the grade was in the higher range then the gold equivalent would be almost double. Of course, the 10MT is a ‘target’ and not yet a reality, as we will have to wait to see what the upcoming resource estimate is.

**The Crater Lake TG Zone drill results are equivalent to 6.5 to 12.0 g/t gold equivalent**



# Crater Lake Property - TG Zone Drilling – 500N



Source: Company presentation

Once a resource is grown the other important issue is the extraction method and recovery rates. In June 2021 news Imperial announced that they had developed a “high-recovery extraction process for scandium and rare earth elements for Crater Lake mineralization...as part of its current Phase 3 Hydrometallurgical Development Program.” Scandium extraction was at **84-87%**, and total rare earth elements, including yttrium (TREE+Y) was **84%**. This is excellent news.

## Near term stock catalysts

Imperial President & CEO, Peter Cashin, stated in August: “We are now in the final stages of the surface evaluation of our Crater Lake property. In addition to delivering the inaugural 43-101 Sc2O3 resource estimation on our TG Zone later this month, we look forward to delivering on the results of the remainder of the targets present on the Crater Lake property. We clearly

believe that much additional critical metal potential remains to be evaluated on our property as we have only drill-tested one-quarter of the favourable 14-km-long mineralized horizon. We also intend to assess a high-grade niobium-tantalum mineralized area identified in 2010, north and northwest of the scandium-bearing Crater Lake Complex.”

Imperial will now embark on a Summer 2021 campaign that will include surface evaluation of additional high priority scandium rare earth exploration targets outside of the drilled TG Zone mineralized area. 50-tonne bulk samples at the STG mineralized Zone will be used in a pilot plant study to further test and optimize Imperial’s metallurgical process method. Next, a detailed assessment of historical high grade rare earth, niobium, tantalum occurrences at the Crater Lake Extension property area will be undertaken. Following this will be a pilot plant study and a Preliminary Economic Assessment.

### **Closing remarks**

Imperial Mining trades on a market cap of a mere C\$20 million. Considering the outstanding drill results over the past year, outstanding hydromet recovery rates achieved to date, and the impending 43-101 preliminary Resource Estimate due out any day now the stock looks likely to be potentially re-rated higher soon. Don’t wait too long!

---

**Jack Lifton and Peter Cashin  
talk about the scandium**

# market and Imperial's strategic opportunity in the vital lightweighting space

In an interview with Technology Metals Show host Jack Lifton, President and CEO of Imperial Mining Group Ltd. (TSXV: IPG) Peter Cashin discusses the scandium market and the economics of the Crater Lake Project. Peter explains how Imperial Mining's Crater Lake Project provides a strategic opportunity for an exciting new line of lightweighting products. The project also contains rare earths.

"How it (Crater Lake Project) stands out is that it is a primary bedrock opportunity in Quebec," said Mr. Cashin, Imperial's President and CEO. "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."

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.

For more information on the **Technology Metals Show** email us at [info@technologymetals.com](mailto:info@technologymetals.com) or reach us direct at +1 (416) 546-9233



---

# Imperial Mining's Cashin on the 'huge' scandium market moving forward

"I bring attention to that Bloomberg article at the end of October speaking about the scandium market and some of the players. I was particularly surprised and pleased on the projections on consumption by 2035 of 1,800 tons of scandium. The current players, the advanced players that are in the scandium space are maybe 400 so I think there is a lot of opportunity for new players to come in and establish themselves in what I think is going to be a huge market going forward." States Peter Cashin, President & CEO of Imperial Mining Group Ltd. (TSXV: IPG), in an interview with InvestorIntel Corp. CEO Tracy Weslosky.

**Tracy Weslosky:** It has been too long since we have received an update. What is going on with Imperial Mining?

**Peter Cashin:** Very busy summer and fall trying to get our projects up and going since inception in January. A gold project in Chibougamau, the south belt I told you about, was in a press release earlier this week and then of course active on our Crater Lake scandium project in northeastern Quebec. We are doing a lot of metals marketing, strategic marketing for scandium particularly in the EU and U.S. trying to get a pulse of the market because I think there is some potential big growth happening in the scandium space.

**Tracy Weslosky:** Okay. You have jumped right into scandium so let us go there. Is it too late to get into scandium because scandium has had some major movement in the last year.



**Peter Cashin:** Correct. I bring attention to that Bloomberg article at the end of October speaking about the scandium market and some of the players. I was particularly surprised and pleased on the projections on consumption by 2035 of 1,800 tons of scandium. The current players, the advanced players that are in the scandium space are maybe 400 so I think there is a lot of opportunity for new players to come in and establish themselves in what I think is going to be a huge market going forward.

**Tracy Weslosky:** Some of you out there may not be aware the fact that Peter Cashin is one of the most respected experts and knowledgeable players in the critical materials sector. I am going to ask you to dumb it down for me. Is it too late to get into the scandium market?

**Peter Cashin:** Not at all. I think that there is an opportunity for growth. I think we are just in the early stages. The benefits of scandium were really fully understood starting in the 1970s and lots of R&D capacity went into learning the product and learning its benefits and looking for new markets. But, all plugs were pulled on all that R&D initiative back in 2012 because they could not get any sustainable supply. It was China or Russia and those are not reliable supply chains. You are starting to see the peers, my peers, now getting back into R&D with industry leaders. That is usually a precursor for explosive growth in the market.

**Tracy Weslosky:** Okay. I heard that precursor for explosive growth in the market. I am also seeing here that you just put out a news release about mining samples at Crater Lake project in Quebec. Can you talk to us about these samples?

**Peter Cashin:** Crater Lake is our flagship. It is a large intrusive complex. We knew about scandium back in 2014 when I was running Quest Rare Minerals. We did our work. We understand that there is about 6 kilometer long horizon that is very enriched in scandium that we have only just started to

dust off now. This past summer was exactly intended to start opening up the zone, try to fully understand it and sample on its length for the purpose of identifying additional drill targets...to access the complete interview, [click here](#)

Disclaimer: Imperial Mining Group Ltd. is an advertorial member of InvestorIntel Corp.

---

## Cashin on the scandium market and Imperial Mining's Crater Lake asset

"We are starting to do the metallurgy for scandium mineralization we have on the property. It is very positive. That is a process where we want to reduce the mine volumes by using magnetic concentration. It is looking like we will be able to reduce the amount of material we mine in half. That is important for reducing the footprint of the operation, reducing the transportation, infrastructure that is related to the project. Also there is a byproduct that we can actually sell out to the cement market." States Peter Cashin, President & CEO of Imperial Mining Group Ltd. (TSXV: IPG), in an interview with InvestorIntel Corp. CEO Tracy Weslosky.

**Peter Cashin:** We are starting to do the metallurgy for scandium mineralization we have on the property. It is very positive. That is a process where we want to reduce the mine volumes by using magnetic concentration. It is looking like we will be able to reduce the amount of material we mine in half. That is important for reducing the footprint of the operation, reducing the transportation, infrastructure that is related to the project. Also there is a byproduct that we can actually

sell out to the cement market. It is an iron powder product that they use as a strengthener and, again, always a reduction of the environmental footprint on the operation.

**Tracy Weslosky:** Many of you at InvestorIntel know who Peter Cashin is, but do you know who Imperial Mining is? Can you give us a bit of an overview of Imperial Mining?

**Peter Cashin:** Sure Tracy. Of course, when I left Quest I brought the Crater Lake, which was the Misery Lake scandium property. I was looking for a home for it. Initially I was thinking about going public with that entity. It did not work out, but we recently did an RTO with a Quebec-based explorer, NQ Exploration and they had some base metals and gold properties. I thought that is where investor intention was so we rolled those together to form Imperial. We went public on the TSX Venture just in January.

**Tracy Weslosky:** For those of you out there watching leaders in our industry, Imperial Mining is one that we are all watching Peter. I think we should use this opportunity to maybe talk about what is happening with the scandium market...to access the complete interview, [click here](#)

Disclaimer: Imperial Mining Group Ltd. is an advertorial member of InvestorIntel Corp.

---

# **Imperial Mining CEO on their copper-zinc potential at**

# Carheil

March 19, 2018 – “Carheil, in particular, is the extension of what SOQUEM calls their B26 property. They have defined about an 11-million ton massive sulfide, copper-zinc volcanogenic massive sulfide. They just recently optioned our ground. They are going to be undertaking about \$4 million dollars of exploration over the next 4 years because they feel, as we do, that there is some very good copper-zinc potential.” states Peter Cashin, President & CEO of Imperial Mining Group Ltd. (TSXV: IPG), in an interview with InvestorIntel’s Peter Clausi.

**Peter Clausi:** I saw you last May and you were on another transaction at the time. I see that has evolved.

**Peter Cashin:** Correct.

**Peter Clausi:** How did you come to be in Imperial Mining?

**Peter Cashin:** I was with Quest. I ran Quest from 2008 to 2015. When I left them. I brought a technology metals property with me called The Crater Lake Property. I tried to find a home for it. I put it into a whole co. by the name of Peak Mining Corporation. The idea was to try to make it become a public entity, fell on a tough market. What I did instead is I sought a junior, a dormant junior that had some good gold and base metal properties. It is NQ, NQ Exploration. I took those. We did a reverse takeover. We threw it into Imperial. I threw my technology metals property into it as well and we went public just at the beginning of January as a matter of fact.

**Peter Clausi:** That is Crater Lake.

**Peter Cashin:** That is the Crater Lake opportune.

**Peter Clausi:** Where is that located?

**Peter Cashin:** That is northeastern Quebec, east of the

Schefferville, in the iron mining area.

**Peter Clausi:** You have a project named SOQUEM.

**Peter Cashin:** It is called Carheil, but our partner is SOQUEM.

**Peter Clausi:** Right.

**Peter Cashin:** SOQUEM is the Quebec government's Crown exploration corporation. Really their mandate is to stimulate exploration in the province of Quebec for different commodities. Carheil, in particular, is the extension of what SOQUEM calls their B26 property. They have defined about an 11-million ton massive sulfide, copper-zinc volcanogenic massive sulfide. They just recently optioned our ground. They are going to be undertaking about \$4 million dollars of exploration over the next 4 years because they feel, as we do, that there is some very good copper-zinc potential.

**Peter Clausi:** They made you a cash payment.

**Peter Cashin:** Correct.

**Peter Clausi:** They can buy up to 50% for almost \$4 million dollars over 4 years.

**Peter Cashin:** That is correct. That is correct.

**Peter Clausi:** That is a good project.

**Peter Cashin:** They are good operators. They know the camp cold so aside from ourselves, they are the best second opportunity I think to advance the potential of the property.

**Peter Clausi:** You are in the right neighborhood. There is the past producing Selbaie Mine that kicked out 53 million tons.

**Peter Cashin:** Correct.

**Peter Clausi:** Looking at my numbers, because I have to cheat to read them, 1.9% zinc, 1% copper, 40.7 grams per ton.

**Peter Cashin:** Yes, it was open pittance so it is really a low-cost opportunity. That was BHP Billiton that operated that thing.

**Peter Clausi:** When was that?

**Peter Cashin:** That would have been in the 1980s and nineties. Now it is on care and maintenance for the tailings pond. Glencore has that right now.

**Peter Clausi:** Okay so you are in the right neighborhood. Good project, good partner. What do we look for next?

**Peter Cashin:** I am being carried so it is a good project. We have technical input on the direction of the exploration for that particular project...to access the complete interview, [click here](#)

**Disclaimer:** Imperial Mining Group Ltd. is an advertorial member of InvestorIntel Corp.