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

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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.