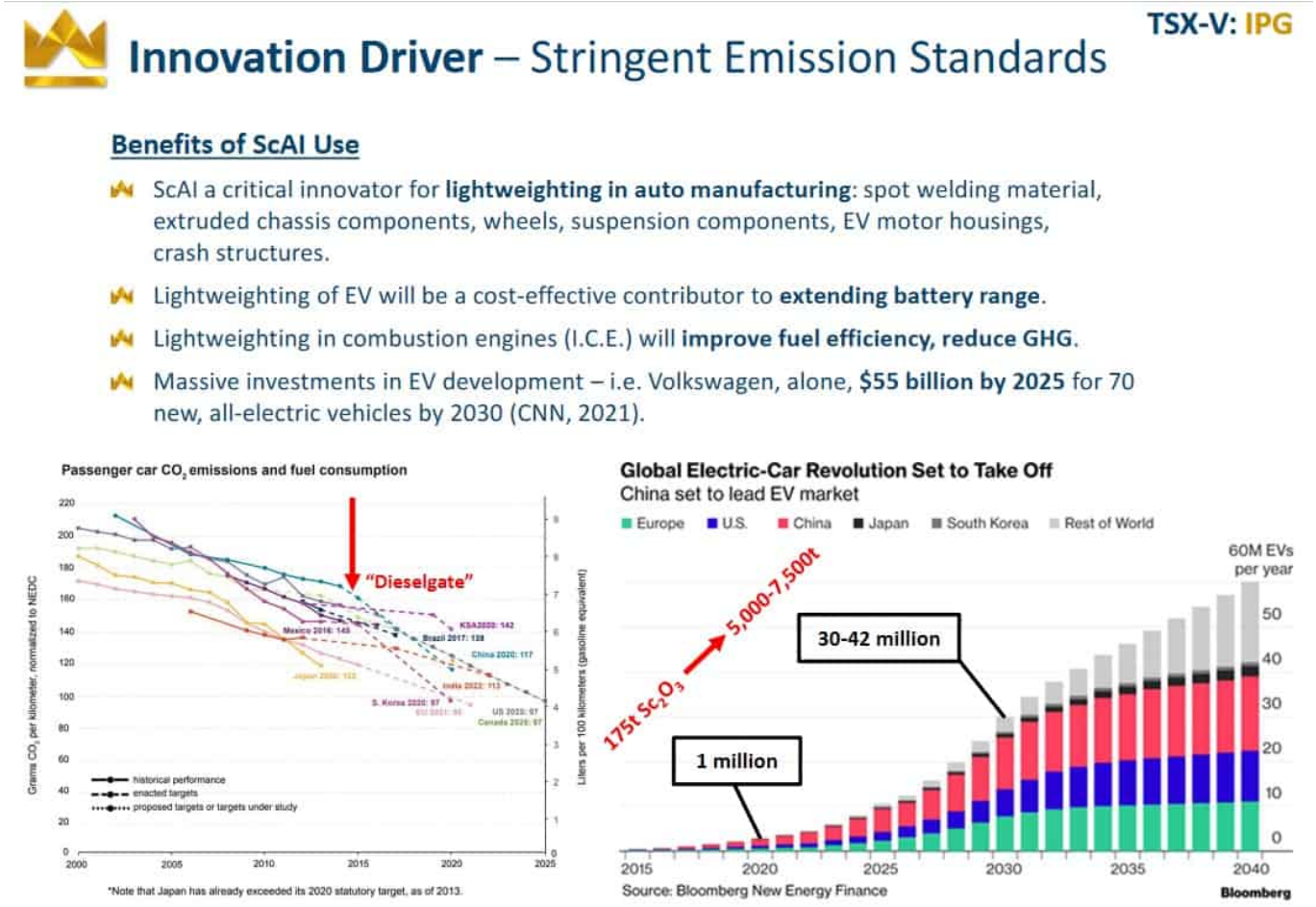
Rare earths and scandium drill results at Imperial's Crater Lake continue to 'exceed all expectations'

As electric vehicle (EV) manufacturers focus on achieving great energy efficiency and range lightweighting using a scandium-aluminum alloy continues to gain traction. By lowering a vehicle's weight the range can either be improved or if kept the same the cost can be reduced by using fewer batteries.

Scandium oxide demand has potential to rise from 175 tpa to 5,000-10,000 tpa if lightweighting is adopted widely across the EV sector



Source: Imperial Mining company presentation

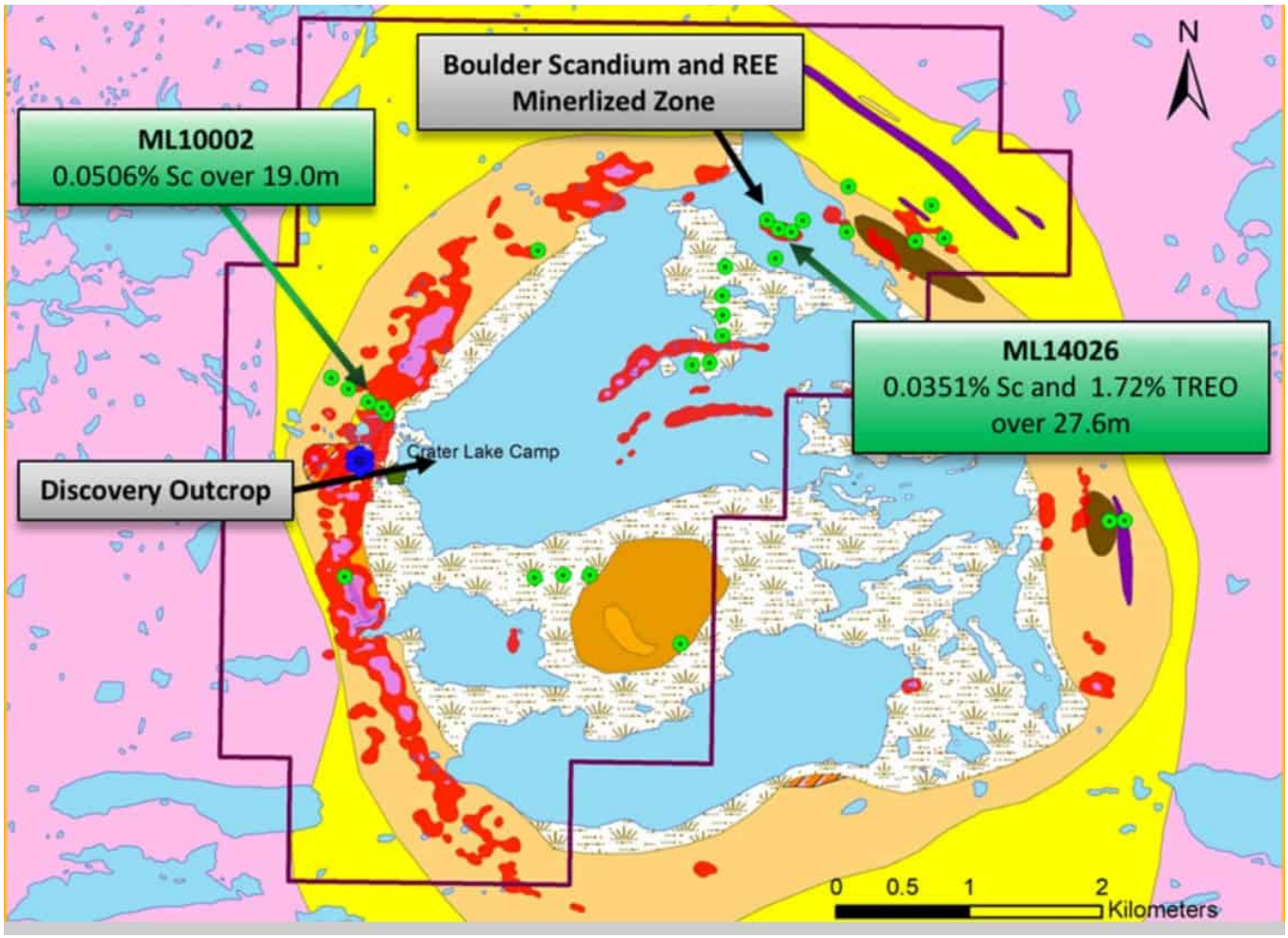
Scandium junior miner Imperial Mining Group Ltd. (TSXV: IPG | OTCQB: IMPNF) (“Imperial”) 100% owns the Crater Lake Scandium-REE Project in northeastern Quebec, Canada. The Project has a large 6km diameter complex host to high-grade scandium and some rare earths deposits. Drilling has defined a mineralized zone of over 600m in total strike length and from surface to a vertical depth of up to 200m. Scandium oxide drill result grades have ranged from 0.0235% to 0.056% (235-506 g/t) which makes the resource look potentially to be commercially viable, as viable scandium grades are typically >200-300 g/t. There is also a parallel niobium target showing grab assay results of between 0.20% and 1.42% Nb2O5 which sits 250m west of the scandium target.

Scandium is best known for increasing the strength and hardness of aluminum and is therefore used commercially for lightweighting in the automotive industry, space industry, for fuel cells and defense applications. Niobium is used mostly in the steel industry to significantly increase steel strength, resulting is less steel required and overall cost savings.

Announced on April 28, 2021, recent drill results at Crater Lake included results of **92.5 m @ 291g/t scandium oxide (Sc_2O_3).** Elevated levels of total rare earth oxides plus yttrium of up to 0.42% were also found. Imperial stated in the release that “at a gold price of $1,750US/oz and a scandium oxide price of $1,250US/kg, the intersections represent a gold-equivalent value of 6.5 to 8.0 g/t Au”, Imperial’s President and CEO Peter Cashin stated:

“The winter drilling results for the Crater Lake property continue to exceed all expectations….. mineralization has been traced by drilling over 600m in total strike length from surface to a vertical depth of up to 200m. **Importantly, the zone appears to get wider and higher grade with depth.**”

Imperial Mining's Crater Lake Scandium-REE Project in northeastern Quebec, Canada



Source: Imperial Mining corp. website

Further drill assay results announced on May 27, 2021, included an intercept of **111.9 m @ 298 g/t Sc_2O_3.** Elevated levels of **total rare earth oxides plus yttrium (TREO+Y) of up to 0.38%** were also found across the scandium-bearing horizon. Given current high prices for the magnet rare earths such as neodymium, praseodymium, dysprosium, the rare earth oxides found should help boost the projects by-products and hence project economics. The current drilling program is now completed with a total of 14 drill holes having tested the TG Zone.

Next steps and business strategy

Imperial will now undertake a 43-101 preliminary Resource Estimate of the TG zone for delivery in June 2021. Imperial's strategy is to become a producer of scandium and valuable rare earths using simple process recovery methods. Imperial would like to be a scandium disruptor and to capture market share. Over time the Company's goal is to move downstream to deliver high-margin scandium-aluminum alloy products for the automotive, aerospace, defense and fuel cell sectors. The Project's location in Canada's aluminum capital of Quebec should also lead to further market opportunities.

One such opportunity has already emerged with Eck Industries ("Eck") with a letter of intent ("LOI") to develop scandium-modified aluminum alloys for transportation, defense and aerospace markets. The research work will be directed towards developing a novel scandium-enhanced version of the currently commercially available 535 Aluminum which Eck uses for a wide array of applications. The initial scope of work will include casting and testing of various compositions as well as characterization of the finished alloys.

Closing remarks

Imperial is still in the early stages of proving up a resource. But given scandium at economic grades is rare the Company is doing very well by finding good grade scandium and valuable rare earths. The Resource estimate is a significant near term catalyst, which would typically be followed by a Preliminary Economic Assessment (PEA) or PFS.

All of this is ahead, so given the current market cap of just C$29 million, investors with a long-term time frame can have a chance at a potentially big reward if all goes well. The usual risks of junior miners also apply.