

Positive market response for critical materials focused Avalon Advanced Materials' Lind Partners funding deal

Blink and you will miss it. Avalon Advanced Materials Inc. (TSX: AVL | OTCQB: AVLNF) has had that kind of a week, starting with the good news of securing a \$3.0 million convertible security funding agreement with an entity managed by The Lind Partners, a New York based asset management firm. The market loved that, with the share price popping up. Some of that increased valuation has since come out of the share price, but it does not diminish the potential fortunes for the company and their multi-pronged resource strategy.

The convertible security has a two year term and will accrue a simple interest rate obligation of 10% per annum on the funded amount, which is prepaid and attributed to its face value upon issuance, resulting in a face value of \$3.6 million. Lind will be entitled to convert the face value amount over a 24 month period, subject to certain limits, at a conversion price equal to 85% of the five day trailing volume weighted average price of Avalon's common shares prior to the date of conversion. The convertible security matures 24 months after closing. Avalon has the right to repurchase the convertible security at any time, subject to the holder's option to convert up to one third of the face value into Avalon common shares prior to this repurchase. Lind will also receive a closing fee of \$90,000, and 9.8 million common share purchase warrants. Each warrant entitles the holder to purchase one common share of the Company at a price of \$0.18 per common share until 48 months after closing.

That's a lot of technical information, but it is important to

appreciate that Avalon now has a funding partner and a built-in future financing over the next 4 years as well as a significant new shareholder.

Avalon has the best of both worlds, being a mineral development company focused on metals and minerals for use in clean energy and new technology. The company now has four advanced stage projects, providing investors with exposure to lithium, tin and indium, as well as rare earth elements, tantalum, cesium and zirconium.

The use of proceeds from the financing will be used to accelerate the planned work program for the company's Separation Rapids lithium project near Kenora, Ontario and cover near term working capital requirements. Next steps at Separation Rapids involve extraction of the 5,000 tonne bulk sample of the petalite mineralization for pilot plant processing to recover product samples for customer evaluation and finalization of the lithium hydroxide battery materials process flowsheet. The company is presently looking at two alternatives for pilot plant processing of the bulk sample. In parallel, the company will begin working on the feasibility study for its planned lithium battery materials refinery in Thunder Bay, Ontario. The company announced an agreement in late 2020 to collaborate on the development of this refinery with an industry partner, Rock Tech Lithium Inc. to produce lithium sulphate, a precursor chemical for lithium-ion batteries.

The Separation Rapids lithium project is 100% owned by Avalon, is located close to transportation (road access) and power infrastructure, including clean hydropower. According to the company, there are no undesirable environmental impacts and it has strong local community support. This is a very significant deposit as petalite is the predominant ore mineral – it can be used to both make high strength glass (smashed a cellphone screen lately....?) as well as being a high purity feed to make battery grade lithium hydroxide or carbonate.

The second business of the company is in the rare earths. Avalon has a 3% Net Smelter Royalty on the shallow zone of the Nechalacho Property and a 100% interest in the deep zone at the Thor Lake deposit in Canada's Northwest Territories. The project is on-track to produce rare earths in 2021. Shallow zone project development could lead to economies of scale to allow for future development of Avalon's deep rare earths deposit as well, the company has positioned itself well in the cleantech and rare earths space.

Avalon Advanced Materials Separation Rapids Lithium Project progresses, EV investors look north for critical materials

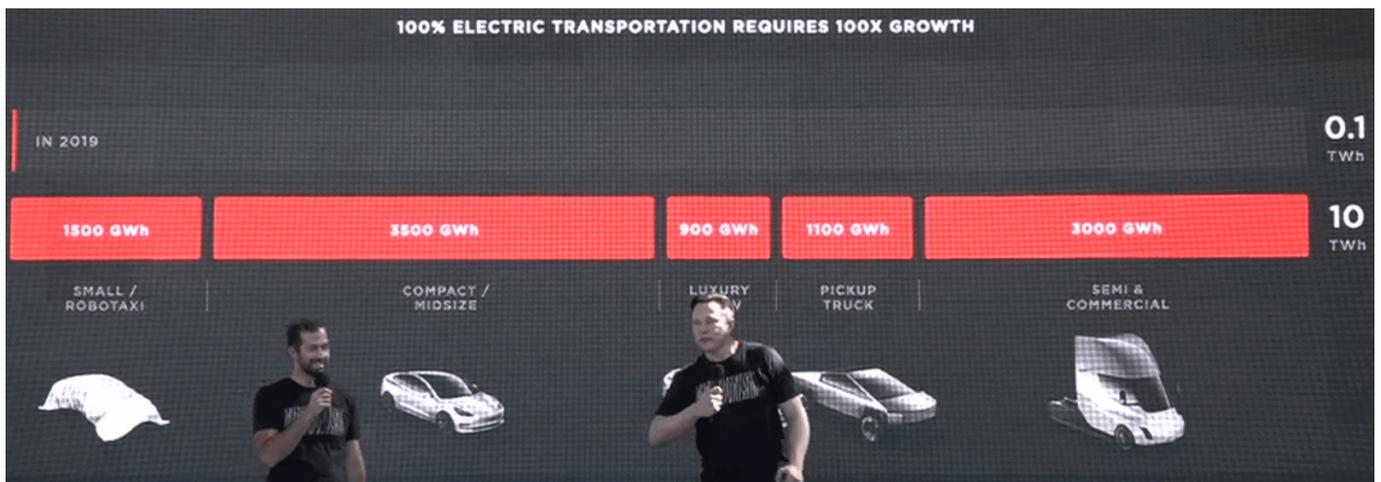
It is not very often that an investor can buy a company with exposure to both lithium and key magnetic rare earths. One company that offers exposure to both is Avalon Advanced Materials Inc. (TSX: AVL | OTCQB: AVLNF) ('Avalon'). Avalon has five critical materials projects across Canada, providing investors with exposure to **lithium, rare earths (neodymium, dysprosium)**, cesium, tantalum, feldspars, tin and indium.

With the electric vehicle (EV) boom set to take off, companies such as Tesla are planning to grow EV production by 50%pa reaching 20 million new EVs pa by 2030. At Tesla Battery Day Tesla suggested an aggressive industry wide target of 10TWh of Li-ion batteries pa by 2030 to meet EV demand (assumes a

switch to 100% EVs).

Tesla says that's a 100 fold increase on 2019 levels. This suggests demand for EV metals (such as lithium and the magnetic rare earths) looks likely to surge this decade and create a super-cycle for the EV metal miners.

100% electric transportation requires 100x growth in EV battery production this decade



Source: Tesla Battery Day video

Avalon's focus projects for lithium (Separation Rapids, Lilypad) and rare earths (Nechalacho)



Source

Avalon's Separation Rapids Lithium Project is located 70 km by road north of Kenora, Ontario, Canada. It holds one of the

largest “complex-type” lithium-cesium-tantalum pegmatite deposits in the world. A PEA was completed in 2018 resulting in a pre-tax NPV8% of \$156m, post tax IRR of 22.7%, CapEx C\$77.7m with a 20 year mine life. In a recent news Avalon has been doing metallurgical test work with the overall objectives of reducing costs, improving recoveries and optimizing lithium product quality. Avalon has previously developed a proprietary process flowsheet to produce a high purity lithium hydroxide product from petalite. The process limits waste by recycling of the sulphuric acid solvent. Avalon and partners are now optimizing the final stages of the process, which involves the use of electrolysis to produce lithium hydroxide. The results will enable finalizing equipment selection and design. A further 2,500 tonne bulk sample extraction program is set to commence next. With Ontario Premier Doug Ford recently announcing Ontario’s interest in establishing new battery materials supply chains in the province, Avalon is investigating collaborative opportunities to establish a lithium processing facility in Northwestern Ontario.

Avalon’s Lilypad Cesium Property, located 150 km northeast of Pickle Lake, Ontario, is an exploration stage project with cesium-lithium-tantalum mineralization. It has the potential to be a secondary lithium supply source for Avalon. Avalon has recently re-activated the Project due to increasing demand for cesium. Planned follow-up work will initially involve mineralogical and analytical testwork, which will be followed by metallurgical process testwork to identify the most efficient methods for concentrating the pollucite ore and recovering by-product tantalum and lithium.

Avalon’s flagship Nechalacho Rare Earth Elements Property is located at Thor Lake, Northwest Territories, Canada. Avalon’s main focus is the deeper HREE Basal Zone at the property. The Basal Zone retained by Avalon contains a rich polymetallic rare metals resource, with potential for economic recovery of several rare earth elements. A Feasibility Study was completed

in 2013 on the Basal Zone resulting in a pre-tax NPV10% of \$1.35 billion (post-tax NPV10% of \$900m). The post-tax IRR was 19.6%. CapEx was \$1.575b. Sales of the five critical REO (neodymium, europium, terbium, dysprosium and yttrium) account for over 82% of the separated REO revenues. Avalon has also retained a 3% NSR on the near surface T-Zone and Tardiff Zone at the Nechalacho Rare Earth Elements Property, bought by Cheetah Resources back in 2019. Avalon could also potentially collaborate with the newly planned SRC Rare Earths Processing Facility to be established in Saskatchewan with plans to be operational by late 2022.

EVs are coming in all shapes and sizes and they will require huge amounts of EV metals such as lithium and rare earths

Avalon Advanced Materials Inc. stock is up 87.5% over the past year and trades on a market cap of C\$26m.