# 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.

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# Avalon's 'Holy Grail' plan-of-operations for near term production of NA critical materials

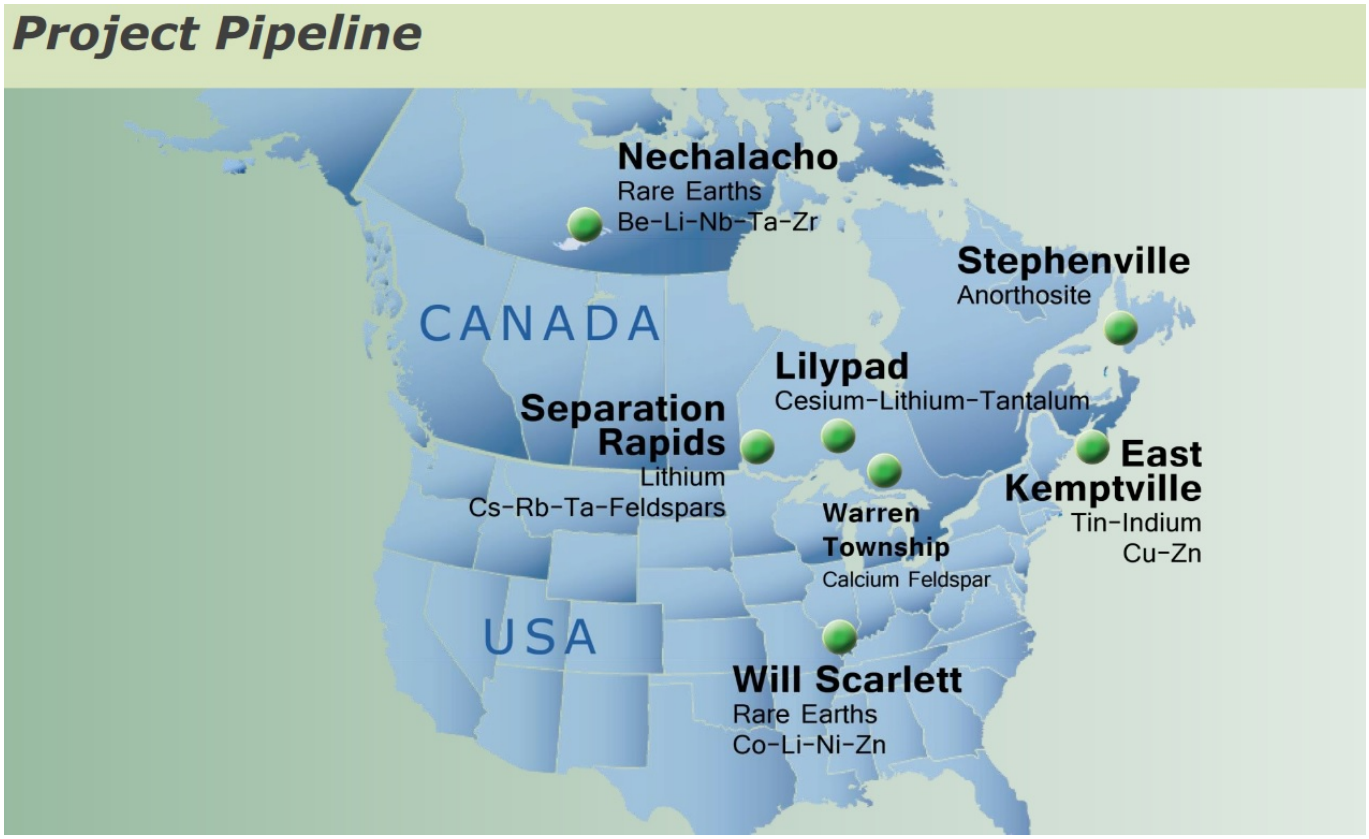
Avalon is a company with big plans. With several advanced critical materials projects all in the safe jurisdiction of Canada. Using smart extraction processes and technology, and in some cases JV project partners, Avalon aims to cost-effectively bring several new projects into production.

Additionally Avalon is working on extracting valuable materials from waste materials, that offer potential for near term revenue streams. Many Governments and large miners are interested to facilitate the removal and further processing of waste material.

Avalon Advanced Materials Inc. (TSX: AVL | OTCQB: AVLNF) is focused on critical minerals and cleantech materials including rare earths, lithium, tantalum, cesium, cobalt, nickel, tin, and others with near term production potential.

Avalon has adopted a strategy of sourcing low CapEx, high value projects which can be put into small scale production quickly and cost effectively. To this end Avalon has several JV partners in their different projects.

**Avalon Advanced Minerals project pipeline**




Source

**Nechalacho Rare Earth Elements Property (Thor Lake, Northwest Territories, Canada) (3% NSR on T-Zone and Tardiff Zone bought by Cheetah Resources, and 100% owns the HREE Basal Zone).**

Avalon has sold some of the project (the near surface T-Zone and Tardiff Zone resources) to Cheetah Resources for C$5 million cash. Avalon will receive a 3% NSR on these areas should they reach production. Cheetah Resources recently announced they are moving rapidly toward small-scale production of rare earths including neodymium and praseodymium.

The Basal Zone retained by Avalon contains a rich polymetallic

rare metals resource, with potential for economic recovery of the heavy rare earth elements, neodymium, praseodymium, lithium, zirconium, beryllium, niobium and tantalum. A Feasibility Study was completed in 2013 on the Basal Zone resulting in a NPV10% of $1.35 billion.

You can read more in a recent InvestorIntel article.

**Separation Rapids Lithium Project**

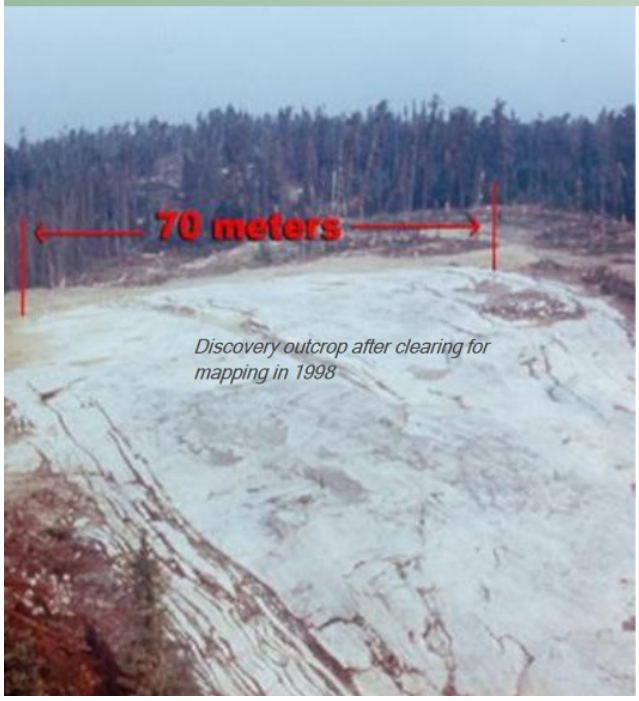
**Separation Rapids Lithium Project** is 70 km by road north of Kenora, Ontario. The deposit is one of the largest “complex-type” lithium-cesium-tantalum pegmatite deposits in the world, unusual in its enrichment in the rare, high purity lithium mineral petalite. A PEA was completed in 2018 resulting in a pre-tax NPV8% of $156 million, post tax IRR of 22.7%, CapEx of $77.7 million with a 20 year mine life. Avalon is currently doing process development work to optimize the process flowsheet and produce new petalite product samples for glass-ceramic manufacturers who have expressed strong interest in Avalon’s product. Also of interest is that Avalon is testing advanced processing methods such as sensor-based ore-sorting and dense media separation.

Next steps include processing a larger bulk product sample for customer qualification, which would then lead to off-take agreements to support project development. In 2020, subject to financing, other work will include a $3-5 million program to prepare for construction of mine and process plant in 2020-21 to produce lithium mineral concentrates. Added to this will be a FS, environmental assessments, and project permitting.

**Separation Rapids Lithium Project**

## Separation Rapids Lithium

*A rare LCT type of pegmatite deposit enriched in the lithium minerals* ***petalite*** *and* ***lepidolite***




**Large, high quality resource amenable to open pit mining, discovered in 1996**

- PFS initially completed in 1999 on model to produce petalite for glass and ceramics, model updated in 2018 as a PEA
- Secure Tenure under Lease: 100% owned
- 6,000 acres of exploration lands
- Road access, proximity to clean hydro-power allow low carbon intensity
- Strong community support: will diversify local economy and create jobs
- No acid mine drainage or toxic heavy metals in the deposit

Source

**Will Scarlett Rare Earths Recovery Project (near Marion, Illinois, USA) – Avalon to earn-in up to 50% from project owner Coal Strategy Advisors**

The Will Scarlett Project is interesting as Avalon plans to process rare earths from coal mine wastes. Sampling of the waste has revealed high concentrations of total rare earth oxides in excess of 500 ppm. Also notable is that no significant uranium or thorium has been detected associated with the rare earths at Will Scarlett. The coal mine also has other metallic elements such as cobalt, nickel, lithium, manganese and zinc in mine waste materials.

Avalon President and CEO, Don Bubar, stated:

“In our research to date on rare earths in coal mine wastes, Will Scarlett stands out as exceptional in terms of the levels of rare earths present in the AMD. Like our East Kemptville Tin Project in Nova Scotia, Will Scarlett provides Avalon with

an opportunity to extract value out of previously-mined waste materials at a relatively low cost, and potentially fully remediate the long term environmental liability associated with acid mine drainage at the site.”

Avalon plans to participate in the installation and operation of a demonstration facility (pilot plant) to scale up the process at the Will Scarlett site, assuming funding can be arranged. The goal is to demonstrate how this technology can recover separated rare earths at a much lower cost than traditional solvent extraction technology, thereby making it economic to recover rare earths from lower grade resources, such as mine wastes.

**Lilypad Cesium Property**

**Lilypad Cesium Property** (150 km northeast of Pickle Lake, Ontario) is at exploration stage with cesium-lithium-tantalum mineralization. Past discoveries has included cesium assaying up to 6.205% $Cs_2O$ over 1.70 metres and tantalum mineralization assaying over 0.10%$Ta_2O_5$ found in numerous tantalum-cesium-lithium pegmatite dykes. This summer Avalon plans to follow up on encouraging results obtained during past work programs.

**Warren Township Anorthosite Project**

**Warren Township Anorthosite Project** (100 km west of Timmins, Ontario). The tenement hosts a significant resource of high purity anorthosite, consisting of up to 98% high calcium plagioclase feldspar. The PFS was completed in 2003.

**East Kemptville Tin-Indium Project**

**East Kemptville Tin-Indium Project** (45 km northeast of Yarmouth, Nova Scotia). PEA completed in 2018. There is the opportunity to sustainably fully rehabilitate the site through recovery of tin from stockpiles using new ore-sorting technology at a very low CapEx. Currently the project is on hold.