



President's Letter 2018

Firstly, I would like to express my appreciation to Avalon's loyal shareholders for your continuing support through these challenging times. The resource bear market deepened in 2018, making access to capital even more difficult than it was in 2017. Despite these challenges, we made significant progress in 2018 on our Separation Rapids and East Kemptville projects - with the completion of updated Preliminary Economic Assessments on both projects based on new development models.

Both projects present compelling business cases for initiating production at a small scale, with modest capital requirements and greatly reduced environmental footprints. We now expect to be in a better position to attract development capital in 2019, with the prospect of achieving initial production and cash flow at East Kemptville in 2020. We are also seeing renewed interest in rare earths and anticipate an accelerated work program on the Nechalacho Project in 2019.

We remain committed to our goal of building a diversified advanced materials business that can grow over time with advances in new technology, particularly in aerospace, automotive and renewable energy. The pace of innovation in new technology is accelerating and, in many cases, this is being enabled by exploiting the unique properties of rare

metals that lack well-established supply chains. Many of these, including lithium, tin and rare earths, were identified in a 2018 report for the US government as critical minerals having significant supply chain risk. Avalon is well-positioned to help establish these new supply chains using its diversified asset base and expertise in developing innovative process solutions.

East Kemptville Tin Project: Reviving and restoring the land

Avalon's East Kemptville Tin Project in Yarmouth County, Nova Scotia, is a closed mine site with a legacy environmental liability caused by acid mine drainage from waste materials. Avalon has conceived an environmental rehabilitation solution involving processing the waste materials in a new small-scale plant to recover saleable tin concentrates (and potentially other critical materials such as indium). This model was described in Avalon's Preliminary Economic Assessment ("PEA") finalized in the summer. The study concluded that this small-scale re-development model is economically viable at current tin prices, with a modest initial capital requirement.

Since completing the PEA, Avalon has collaborated with Cronimet Mining Processing SA (Pty) Ltd ("CMPSA") to demonstrate that new ore-sorting technology can be incorporated into the process flowsheet with attendant benefits in reducing overall capital requirements. The successful application of ore-sorting technology offers a number of potential benefits through the rejection of unmineralized waste rock before it is fed into the processing plant - leading to a significant reduction in the size of the plant and attendant reduction in both capital and operating costs. It will also reduce the volume of tailings

generated requiring disposal.

A follow-up bulk sampling program to optimize the ore-sorting solution, combined with a confirmation drilling program, both planned for early 2019 will then be utilized to finalize the small-scale site re-development economic model to the feasibility level of confidence. Later in 2019 it is contemplated that Avalon and CMPSA will enter into a partnership for the collaborative development of the project.

In 2018, Avalon continued its work toward securing full tenure to the East Kemptville site and completing important permitting milestones, such as a Species at Risk Act study. Discussions with the Nova Scotia government officials were successful in getting the Special License renewed in 2018, and extensive work was ongoing at year-end to prepare applications to convert the Special Licence into a Mineral Lease and secure the required Crown Land Lease.

As someone who grew up in Nova Scotia, I am delighted to have the opportunity to implement an innovative, economically-viable, environmental solution for the East Kemptville site, bringing new jobs to the southwestern part of the province. This solution also creates a positive precedent that can be applied elsewhere: extracting value from a closed mine site previously considered a perpetual liability, while also cleaning up the site. I know Avalon's many loyal Nova Scotia shareholders are also excited to see this project finally realized.

Separation Rapids Lithium Project: Our patience will be rewarded

Avalon's Separation Rapids Lithium Project, our original rare metals asset, is also well-positioned to finally achieve initial production. Located in northwestern Ontario, the resource contains the rare high-purity lithium mineral petalite: a preferred form of

CORPORATE INFORMATION

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lithium used in a number of specialty glass formulations. While the growing demand for lithium from the battery industry continues to attract all the headlines, the glass industry actually represents 25-30% of global demand for lithium and is also growing. There is no substitute for lithium in many of the high strength glass applications where it is used. Surging demand from the battery industry, especially in China, is creating supply chain risk for glass industry consumers and opportunities for Avalon to bring new supplies of high purity lithium minerals to the market.

Focusing on the glass market opportunity, Avalon completed an updated PEA on the Separation Rapids Project for initial production of lithium mineral concentrates, while allowing for potential future scale-up to include production of lithium battery materials. This smaller scale, staged development model reduces capital expenditure requirements substantially compared with the battery materials PEA model Avalon completed in September 2016, while generating attractive returns and reducing overall business risk.

Next steps involve securing off-take agreements with end-users to support the business case and attract development capital. Numerous expressions of interest have been received from potential customers for Avalon's lithium products and discussions are ongoing. Once commitments are secured, Avalon can finalize the design and engineering of the process plant, as well as permitting requirements and secure financing to commence construction. I am optimistic that we will soon have news on how project development will proceed.

Mapping and sampling work on the western part of the property in 2018 resulted in the discovery of a new lithium (petalite) pegmatite, named the Snowbank Pegmatite, that yielded assays of up to 2.51% Li₂O over 1.1 metres. The new find illustrates how much potential there is for more discoveries in the Separation Rapids area to extend the life of the new operation.

Nechalacho Rare Earth Elements Project: Revive and refocus on new opportunities

Avalon re-activated the Nechalacho Rare Earth Elements Project, Thor Lake, NWT in 2018 due to strong demand for the 'magnet rare earths' neodymium and praseodymium ("Nd-Pr"). Rare earth magnets remain vital to many clean technology applications requiring high efficiency, lightweight electric motors and generators. Concerns about security of supply of these elements are growing, as the trade dispute between China and the United States

escalates. China still controls over 90% of global primary rare earth supply and investors well remember when China restricted rare earths exports in 2010 over a territorial dispute in the South China Sea.

We are now investigating the possibility of developing Nechalacho as a near-term, small-scale producer of Nd-Pr rich concentrates for export involving a simple mining, crushing and optical sorting operation. Avalon completed a field program in September to conduct additional sampling in the area of the T-Zone and Tardiff Lakes Zones to begin assessing their potential as sources of Nd-Pr rich concentrates.

Shareholders will note that previous work by Avalon on the Nechalacho property focused on the heavy rare earth-rich Basal Zone deposit, which was the subject of the company's 2013 Feasibility Study. This remains a longer term growth opportunity.

Sustainability Reporting

Avalon maintained its commitment to reporting on its environmental and social responsibility performance in 2018 with the release of its seventh annual comprehensive Sustainability Report entitled Refocus, Revive & Restore. We continue to see benefit in providing leadership and promoting excellence in responsible business practices through reduced social licence risk and better access to markets for our cleantech material products. I believe this will also result in improved access to capital from the growing numbers of socially-responsible and impact investors.

Avalon once again placed among Corporate Knights' 2018 Future 40 Responsible Corporate Leaders in Canada this year. Avalon has now been ranked as a Future 40 Responsible Corporate Leader three times in the last four years. This is well-earned recognition for everyone at Avalon and the sustainability culture we have developed!

A relentless resource bear market and delays in reaching key project milestones resulted in a depressed valuation for our stock in 2018. Clearly, our share price has yet to reflect the underlying value of our assets.

I am confident that this will change in 2019, with increased awareness of the importance of establishing new critical materials supply chains and recognition of how well-positioned Avalon is to create them in Canada.

We have two Directors who will not be standing for re-election at Avalon's 2019 AGM, Ken Thomas and Patricia Mohr. On behalf of the shareholders, I want to thank both Ken and Pat for their years of service and wish them success in their future endeavours. And thank you, once again, to our shareholders, for your continued support, patience and loyalty. I am looking forward to 2019 as a breakthrough year towards our goal of achieving initial production and cash flow.

On behalf of Avalon's Board of Directors,



Donald S. Bubar
President and Chief Executive Officer

January 8, 2019

