

July 10, 2023

Avalon Signs MOU with Metso, a World Leader in Critical Minerals Technology, to Advance the Development of Ontario's First Lithium Processing Facility

TORONTO, Ontario, Canada – Consistent with its strategy to become a leading North American vertically integrated lithium producer, [Avalon Advanced Materials Inc.](#) (TSX: AVL and OTCQB: AVLNF) (“Avalon” or the “Company”) is pleased to announce it has signed a memorandum of understanding to create a strategic partnership with **Metso Corporation** (“Metso”), a global leader in clean, sustainable critical-mineral processing technology.

The agreement, signed at Canada House in London UK, will immediately see the parties seek to establish terms to develop a lithium hydroxide production facility to process lithium mineral concentrates that are essential for the North American electric vehicle (EV) battery value chain.

Avalon intends to deploy Metso's world-leading technology to construct and operationalize a full-service lithium processing facility at the Company's recently acquired Thunder Bay, ON. industrial site. Upon completion of the project, Avalon will be the first vertically integrated lithium producer in Ontario, while ensuring Canada's EV battery manufacturing base has a stable, proximate and long-term supply of this strategically vital resource.

"Metso's platform and technological solutions perfectly complement Avalon's vision to complete an integrated lithium value chain in Ontario, predicated on innovative process solutions," said Zeeshan Syed, President of Avalon. "We view Metso as an integral part of this rapidly growing sector, and a foundational partner in developing internationally best-in-class processing capabilities that are environmentally sustainable, allowing Avalon to meet the soaring demand for battery-grade lithium."



Zeeshan Syed, President of Avalon Advanced Materials Inc. (left), and Mikko Rantaharju, Vice-President of Hydrometallurgy at Metso Corp. (right) sign at Canada House, London, UK a memorandum of understanding to pursue the development of Ontario's first lithium hydroxide processing facility.

The Non-Binding Memorandum of Understanding stipulates:

- The pursuit of a definitive agreement to establish a lithium hydroxide processing facility in Thunder Bay, ON.
- Avalon to license Metso technology and solutions to produce lithium hydroxide cathode materials to serve the EV market.
- Allow Metso to conduct testing and engineering work across Avalon's portfolio of critical-mineral projects, including the Company's flagship deposit at Separation Rapids near Kenora, ON.
- The parties anticipate reaching a definitive agreement on or before Sept. 1, 2023.

Metso's sustainable next-generation production and processing technologies are being deployed internationally by governments and clean-energy producers in order to address and deliver the necessary supply required by the emerging EV battery industry. Avalon's strategic partnership with Metso is a first in Canada, and is a significant step towards helping the Company execute on its vertically-integrated business strategy—and in turn, entrench Ontario's position as an advanced manufacturing hub serving not only North America, but the world.

"Metso is looking forward to partnering with Avalon and be part of its long-term vision to be a mid-stream supplier in the lithium hydroxide space. We are aligned with Avalon's vision of the future and proud to play a key role in technology supply and advancement into clean energy solutions," said Mikko Rantaharju, Head of Hydrometallurgy at Metso. "We are also extremely excited to be partnering with the first Ontario conversion facility with Metso's technology. The innovation advantages of the alkaline process allow for elimination of the use of potentially harmful chemicals such as sulfuric acid and comparatively reduces overall solid waste and emissions, making it environmentally friendlier and overall, safer for workers and local surrounding communities."

Canada's Critical Minerals Strategy

This partnership complements Avalon's strategic business objectives, while also providing direct support to the federal government's Critical Minerals Strategy to increase the supply of responsibly sourced critical minerals and develop domestic supply chains for the green and digital economy, as announced by Natural Resources Minister, the Honourable Jonathan Wilkinson, as well as the Honourable Francois-Phillippe Champagne, Minister of Innovation, Science and Industry.

The planned Thunder Bay processing facility and upstream lithium project in the Kenora region will create an estimated 500 jobs. It will also enable broader development of northwestern Ontario's regional lithium assets by other producers seeking to utilize the proximity of Avalon's processing capacity. The facility will also help foster new economic development opportunities for local and regional First Nations communities.

"We're honoured to play a role in securing Canada's clean-energy future, and understand the important work that's still required across both the public and private sectors to deliver on the Province of Ontario and Ottawa's stated goals," Mr. Syed added.

About Avalon Advanced Materials Inc.

Avalon Advanced Materials Inc. is a Canadian mineral development company focused on vertically integrating the Ontario lithium value chain. The company is currently developing its Separation Rapids lithium deposit near Kenora, ON. while continuing to advance other projects in its portfolio, including its 100%-owned Lilypad Spodumene-Cesium-Tantalum Project located near Fort Hope, ON.

In addition to extraction activities, Avalon is executing on its key strategic objective of developing Ontario's first midstream lithium hydroxide processing facility, a vital link bridging the gap between upstream lithium production and downstream EV battery manufacturing. Social responsibility and environmental stewardship are corporate cornerstones. Avalon is listed on the TSX.

About Metso Corporation

Metso is a leader in providing sustainable technologies, end-to-end solutions and services for the aggregates, minerals processing and metals refining industries globally. With process and product expertise, Metso helps customers increase productivity, improve energy and water-use efficiency and raise their overall environmental performance.

For battery minerals, Metso provides sustainable technology and equipment for the entire production chain, from the mine to battery materials and black mass recycling with project scopes ranging from equipment packages to plant deliveries.

Headquartered in Helsinki, Finland, Metso employs over 16,000 people in close to 50 countries with sales in 2022 of EUR 5.3 billion. The company is listed on the Nasdaq Helsinki.

For investor relations and media inquiries, please e-mail the Company at ir@AvalonAM.com, or phone Zeeshan Syed, President, at (647) 300-4706.

Forward-Looking Statements

This news release contains "forward-looking statements" within the meaning of the United States *Private Securities Litigation Reform Act* of 1995 and applicable Canadian securities legislation. Forward-looking statements include, but are not limited to, project work plans, new strategic goals and related opportunities, that the Company's mission is to vertically integrate lithium processing within Ontario, and that in the weeks ahead Mr. Monteith and the leadership team expect to implement key steps in their Phase 1 strategy. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as "potential", "scheduled", "anticipates", "continues", "expects" or "does not expect", "is expected", "scheduled", "targeted", "planned", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be" or "will not be" taken, reached or result, "will occur" or "be achieved". Forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of Avalon to be materially different from those expressed or implied by such forward-looking statements. Forward-looking statements are based on assumptions management believes to be reasonable at the time such statements are made. Although Avalon has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. Factors that may cause actual results to differ materially from expected results described in forward-looking statements include, but are not limited to market conditions, and the possibility of cost overruns or unanticipated costs and expenses as well as those risk factors set out in the Company's current Annual Information Form, Management's Discussion and Analysis and other disclosure documents available under the Company's profile at www.SEDAR.com. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Such forward-looking statements have been provided for the purpose of assisting investors in understanding the Company's plans and objectives and may not be appropriate for other purposes. Accordingly, readers should not place undue reliance on forward-looking statements. Avalon does not undertake to update any forward-looking statements that are contained herein, except in accordance with applicable securities laws.