



October 9, 2024

Avalon Unveils Third-Party Economic and Labour Study for its Thunder Bay, Ontario Lithium Processing Facility

Toronto, Ontario - [Avalon Advanced Materials Inc.](#) (“Avalon” or the “Company”) (TSX: [AVL](#) and OTCQB: [AVLNF](#)), today shared the results of a third-party study conducted by RIAS Inc. (RIAS), an Ottawa-based consulting firm. This report, based on the recent Preliminary Economic Assessment (PEA) and customized input-output multipliers from Statistics Canada, details the significant economic and labour impacts from Avalon’s proposed lithium processing facility in Thunder Bay, Ontario (“The Lake Superior Lithium Project” or the “Project”).

The full report is available on the Company’s [website](#).

Scott Monteith, CEO of Avalon, stated: “the report illustrates the substantial benefits to the City of Thunder Bay and aligns well with the Sustainable Jobs Act, helping create the net-zero workforce of the future. The positive impacts will ripple through the community, supporting local businesses and enhancing the region’s overall economic vitality. This initiative promises long-term prosperity, enriching the city and creating lasting value for its residents.”

Local to National Benefits over the Project Lifespan (2027- 2058)

The Project will have a significant economic multiplier effect across the Thunder Bay community, to the Northwestern Ontario region, to the province, and to the country through GDP, labour income, and employment. The study assessed the economic impacts of the two principal phases of the Project: construction, beginning in 2027, and operations, starting in 2028.

The report also underscores the Project’s transformative role in developing human capital, furthering the aims of the Sustainable Jobs Act, creating a stronger synergy between economic growth and workforce development. With 128 workers projected to be permanently employed full-time during operations (100 in non-administrative roles and 28 in administrative positions), the Project will offer opportunities in trades such as millwrights, mechanics, electricians, metallurgical engineers, and process operators.

Ken Boshcoff, Mayor of Thunder Bay remarked: “Avalon’s Project is poised to play a crucial role in revitalizing Canada’s economy, particularly in Northwestern Ontario. It aligns perfectly with Premier Ford’s strategy to unite northern resources with southern industrial strength, boosting the region’s presence in technologies like electric vehicles and battery storage. With the numerous advantages of Avalon’s site, it’s very encouraging to see how the Project will create jobs and ensure long-term prosperity.”

KEY HIGHLIGHTS:

Metrics	Local	Regional	Provincial	National
Construction Phase				
GDP (million)	\$698 to \$718	\$721 to \$765	\$733 to \$836	\$754 to \$878
Labour Income (million)	\$125 to \$137	\$139 to \$165	\$152 to \$212	\$164 to \$234
Person-Years of Employment ⁽¹⁾	945 to 1,133	1,153 to 1,553	1,312 to 2,232	1,490 to 2,589
Operational Phase				
GDP (billion)	\$21.3 to \$21.4	\$25.4	\$26.2 to \$26.5	\$31.0
Labour Income (billion)	\$0.851 to \$0.915	\$2.9	\$3.4	\$5.4 to \$5.6
Person-Years of Employment ⁽¹⁾	9,866 to 10,911	42,724 to 43,426	49,767 to 52,176	77,412 to 79,874
Total Impacts (2027-2058)				
GDP (billion)	\$22.0	\$26.0	\$27.0 to \$27.4	\$31.6 to \$32.0
Labour Income (billion)	\$0.975 to \$1.0	\$3.0	\$3.6 to \$3.7	\$5.6 to \$5.8
Person-Years of Employment ⁽¹⁾	10,811 to 12,044	43,877 to 44,979	51,078 to 54,408	78,903 to 82,464

(1): Person-Years of Employment refers to the amount of work provided by one person employed full-time for one year, used to measure total labor input over time for a project or activity.

This study builds upon preliminary analysis conducted by the Northern Policy Institute (NPI), a report commissioned by the Thunder Bay Community Economic Development Commission (CEDC), which assessed Thunder Bay's operational readiness for a lithium processing facility.

The NPI report provided an initial assessment of the region's capacity to support a lithium processing facility. This new report delves deeper into defining and outlining the needs and benefits of a skilled workforce. The CEDC is committed to helping develop the workforce capable of meeting the demands of this emerging lithium processing sector.

Doug Blair, President of Rias Inc. noted: "Avalon's Lithium Project is meticulously planned, with a strategic focus on long-term economic growth, community impact, and sustainability. Through firsthand experience and comprehensive impact assessments, we've seen how projects like this one can transform

communities, boost local economies, and create lasting employment opportunities. Avalon is well-positioned to deliver these real-world benefits."

About Avalon Advanced Materials Inc.

Avalon Advanced Materials Inc. is a Canadian advanced manufacturing company focused on vertically integrating the Ontario lithium supply chain. The Company, through its joint venture with SCR-Sibelco NV, is currently developing its Separation Rapids lithium deposit near Kenora, ON, while also continuing to advance the Snowbank lithium and Lilypad lithium-caesium projects. Avalon is also working to develop its Nechalacho rare earths and zirconium project located in the Northwest Territories. This deposit contains critical minerals for use in advanced technologies in the communications and defense industries among other sectors.

In addition to these upstream activities, Avalon is executing on a key initiative to develop Ontario's first midstream lithium hydroxide processing facility in Thunder Bay, ON, a vital link bridging the lithium resources of the north with the downstream EV battery manufacturing base in the south.

About RIAS Inc.

RIAS Inc. is a boutique economics consulting firm based in Ottawa, Ontario, providing economic research, analysis and strategic advice to both industry and government clients. RIAS Inc. specializes in helping our private sector clients demonstrate the value and benefits of their activities, and we have conducted numerous socio-economic impact assessments for a broad range of industry sectors and companies in Canada and the United States.

For questions, please email the Company at IR@AvalonAM.com or contact Ms. Rachel Naji, Investor Relations Associate at 416-364-4938.

Cautionary Statement Regarding Forward-Looking Information

This news release contains "forward-looking information" within the meaning of applicable Canadian securities legislation. Forward-looking information includes but is not limited to statements related to the results of the study, including expected benefits, and the timing of Project construction and operations. Generally, forward-looking information can be identified by the use of forward-looking terminology such as "add" or "additional", "advancing", "anticipates" or "does not anticipate", "appears", "believes", "can be", "conceptual", "confidence", "continue", "convert" or "conversion", "deliver", "demonstrating", "estimates", "encouraging", "expand" or "expanding" or "expansion", "expect" or "expectations", "forecasts", "forward", "goal", "improves", "increase", "intends", "justification", "plans", "potential" or "potentially", "promise", "prospective", "prioritize", "reflects", "robust", "scheduled", "suggesting", "support", "top-tier", "updating", "upside", "will be" or "will consider", "work towards", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might", or "will be taken", "occur", or "be achieved".

Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including risks associated with project development such as: environmental hazards and economic factors as they affect the cost and success of the Company's capital expenditures, the ability of the Company to obtain required permits and approvals, the ability of the Company to obtain financing, , the ability to source feedstock for the Company's proposed lithium processing facility at reasonable prices or at all, the price of lithium hydroxide, no operating history, no operating revenue and negative cash flow, land title risk, the market price of the Company's securities, the Company's commercial viability, inflation and uncertain global economic conditions, uncertain geo-political shifts and risks, successful collaboration with indigenous communities, future pandemics and

other health crises, dependence on management and other highly skilled personnel, , extensive government and environmental regulation, reliance on artificial intelligence technology to influence mining operations, volatility in the financial markets, uninsured risks, climate change, threat of legal proceedings, as well as those risk factors discussed or referred to in the annual information form of the Company dated November 28, 2023 (the “AIF”) under the heading “Description of the Business – Risk Factors”. Forward-looking information is based on the reasonable assumptions, estimates, analysis and opinions of management made in light of its experience and perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances at the date that such statements are made, but which may prove to be incorrect. Although the Company believes that the assumptions and expectations reflected in such forward-looking information are reasonable, undue reliance should not be placed on forward-looking information because the Company can give no assurance that such expectations will prove to be correct. In addition to other factors and assumptions identified in the AIF, assumptions have been made regarding, among other things: management of certain of the Company's assets by other companies or joint venture partners, the Company's ability to carry on its project activities without undue delays or unbudgeted costs, the ability of the Company to obtain sufficient qualified personnel, equipment and services in a timely and cost-effective manner, the ability of the Company to operate in a safe, efficient and effective manner, the ability of the Company to obtain all necessary financing on acceptable terms and when needed, the accuracy of the Company's operational and price assumptions on which these are based and the continuance of the regulatory framework regarding environmental matters. Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions that may have been used. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws.