AVALON
ADVANCED MATERIALS

Restoring North American Critical Minerals Control

Rare Earths | Lithium | Processing

Corporate Presentation

October 2026

CAUTIONARY STATEMENT

FORWARD-LOOKING STATEMENT

This presentation contains "forward-looking information" within the meaning of applicable Canadian securities legislation. Forward-looking information includes, but is not limited to, information that are not based on historical fact contained in this presentation, including through documents incorporated by reference herein, are forward-looking statements that involve risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in the forward-looking statements . Such forward-looking statements reflect Avalon Advanced Materials Inc.'s (the "Company") current views with respect to future events and include, among other things, statements regarding targets, estimates and/or assumptions in respect of reserves and/or resources , and are based on estimates and/or assumptions related to future economic, market and other conditions that, while considered reasonable by the Corporation, are inherently subject to risks and uncertainties, including significant business, economic, competitive, political and social uncertainties and contingencies. These estimates and/or assumptions include, but are not limited to: grade of ore; rare metal and by-product commodity prices; metallurgical recoveries; operating costs; achievement of current timetables for development; strength of the global economy; availability of additional capital; and availability of supplies, equipment and labour. 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 26, 2025 (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.

Financial Projections

The Company's financial projections are inherently speculative and may prove to be inaccurate. Any financial projections provided in this presentation have been prepared in good faith based upon the estimates and assumptions considered reasonable by management. However, projections are no more than estimates of possible events and should not be relied upon to predict the results that the Company may attain. Future oriented financial information in this presentation includes statements with respect to (i) capital expenditures; (ii) post-tax net present values; (iii) after-tax rate of returns; (iv) proposed revenues over the course of the project life; (v) operating and production costs; and (vi) projected EBITDA. The projections are based upon a number of estimates and assumptions and have not been examined, reviewed or compiled by independent accountants or other third-party experts, including assumptions with respect to the Company's anticipated future revenues; foreign exchange rates and price fluctuations; corporate income tax rates; working capital requirements; capital expenditures including construction costs and timing, and annual operating costs; type of facility feedstock including minimum requirements; sale price of lithium hydroxide; and purchase price of spodumene. These assumptions may vary from the actual results. Accordingly, there is no assurance that future events will correspond to management's assumptions or that actual results during the periods covered will approximate the financial projections. Any variations of actual results from projections may be material and adverse. Future-oriented financial information and financial outlooks, as with forward-looking information generally, are, without limitation, based on the reasonable assumptions of the Company and management as at the date hereof. The Company's actual financial position and results of operations may differ materially from management's current expectations and, as a result, revenue, profitability, and EBITDA may differ materially from any revenue, and profitability profiles provided in this presentation. Such information is presented for illustrative purposes only and may not be an indication of our actual financial position or results of operations.

Industry Data

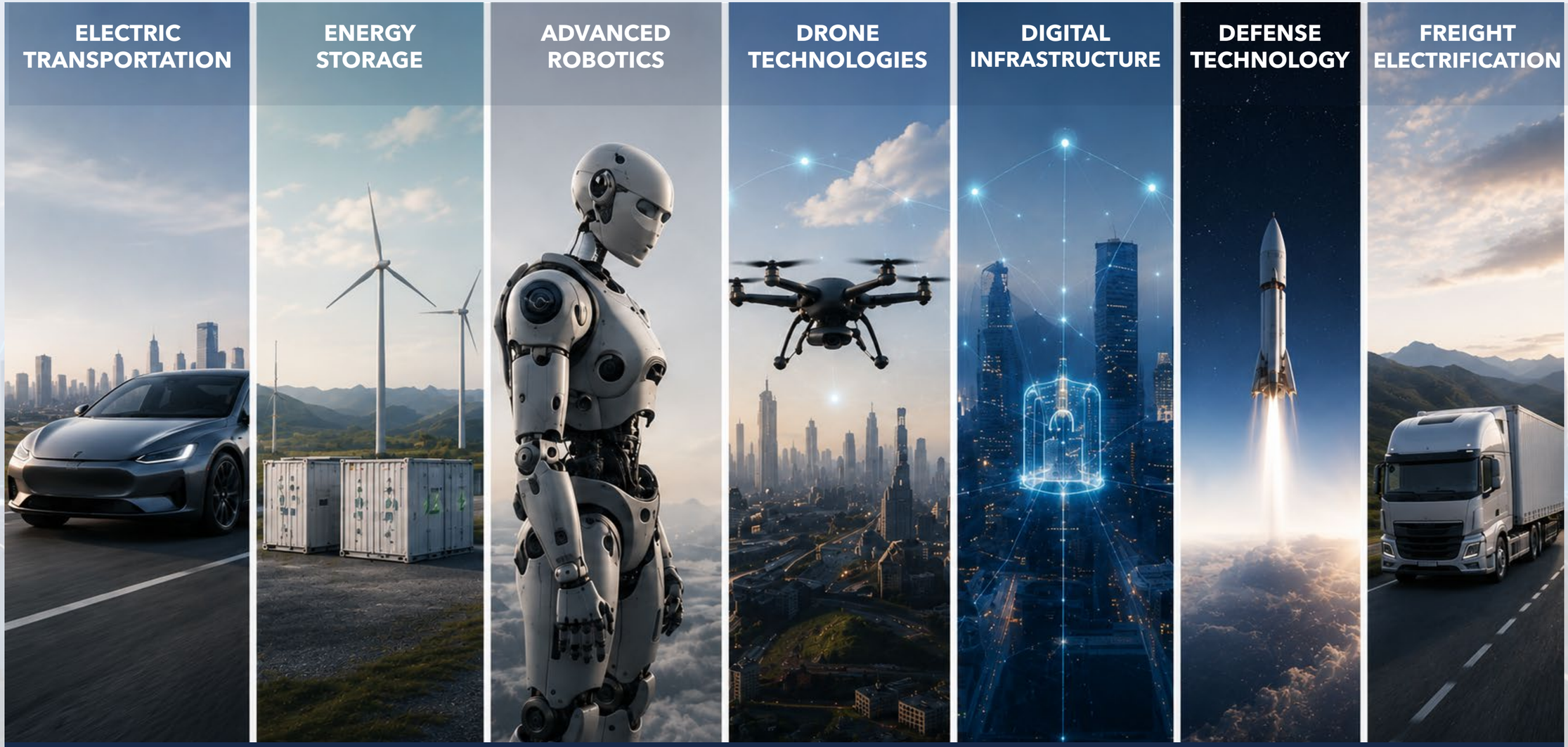
This presentation also contains or references certain market, industry and peer group data which is based upon information from independent industry publications, market research, analyst reports and surveys and other publicly available sources. Although the Company believes these sources to be generally reliable, such information is subject to interpretation and cannot be verified with complete certainty due to limits on the availability and reliability of raw data, the voluntary nature of the data gathering process and other inherent limitations and uncertainties. The Company has not independently verified any of the data from third party sources referred to in this presentation and accordingly, the accuracy and completeness of such data is not guaranteed.

QUALIFIED PERSON

Volker Moeller, P.Geo., and Ron Groenewegen, MAusIMM (CP), each a Qualified Person ("QP") as such term is defined by National Instrument 43-101 – Standards of Disclosure for Mineral Projects, have reviewed and approved the technical information included in this presentation within their respective areas of responsibility. Mr. Moeller reviewed and approved information related to the Nechalacho Rare Earths and Zirconium Project, and Mr. Groenewegen reviewed and approved information related to the Lake Superior Lithium / Thunder Bay lithium refinery project. Unless specifically indicated herein, these QPs have not reviewed or approved any non-technical, market-oriented statements.

Avalon: A Strategic Critical Minerals Platform for the Next Industrial Cycle

RARE EARTHS & LITHIUM POWERING ELECTRIFICATION, DEFENSE, DIGITAL INFRASTRUCTURE & AUTOMATION



POWERING THE FUTURE OF CRITICAL TECHNOLOGIES

ASSET OVERVIEW

A diversified portfolio of strategically important critical minerals assets across Canada.

MAGMIC RARE EARTHS INC
NECHALACHO PROJECT (Basal Zone)

Location:
- Thor Lake, Northwest Territories

Stage:
- Historical FS [1] completed in 2013
- After-Tax NPV (8%) C$1.2B
- After-Tax IRR ~20%
- CAPEX C$1.6B
- MRE [1] (August 2026) - establishing current resource foundation for project advancement
- PEA underway (Fall '26 targeted publication), evaluating a cleaner, more capital-efficient development pathway

Mineralization:
- Light REEs (e.g., Nd, Pr)
- Heavy REEs (e.g., Tb, Dy)
- 15 of 17 REEs
- Zirconium, Tantalum, Niobium

LAKE SUPERIOR LITHIUM INC (LSLI)
LITHIUM PROCESSING FACILITY

Location:
- Thunder Bay, Ontario

Stage:
- PEA completed in 2024 (43-101 compliant)
- After-Tax NPV (8%) C$4.1B
- After-Tax IRR 48%
- CAPEX C$1.3B
- FS underway, advancing toward construction readiness and partnership engagement

Commodity:
- Production of Lithium Hydroxide

Key Points:
- 100% owned land for proposed lithium processing facility
- Existing strategic infrastructure
- MOU with Metso Corp. and Qualcomm Technologies Inc.

Strategic Partnership & Divestment Opportunities

Lilypad Cesium Project – Fort Hope, Ontario

Mineralization:
- Cesium

Stage:
- Early Exploration

East Kemptville Tin - Yarmouth, Nova Scotia

Mineralization:
- Tin, Mineral Resource Estimate

Stage:
- PEA 2018 (43-101 compliant)

Warren Township Anorthosite Project - Timmins, Ontario

Mineralization:
- Calcium Feldspar

Stage:
- Early Exploration

(1) 2026 MRE (SK-1300 compliant) is the current resource estimate, while the 2013 FS (43-101 compliant) is historical and should not be regarded as a current feasibility study or current statement of reserves/economic viability.

Magmic Rare Earths, Inc. and Lake Superior Lithium, Inc. have been established to provide focused structures to advance Avalon's rare earth and lithium assets, support project-level partnerships, and create a pathway for strategic and capital participation.

Asset Locations

- Corporate Headquarters
  Toronto, ON
- Lake Superior Lithium Inc.
  Thunder Bay, ON
- Nechalacho Project
  Thor Lake, NWT
- Lilypad Cesium Project
  Fort Hope, ON
- East Kemptville
  Yarmouth, NS
- Warren Township Project
  Timmins, ON

A CRITICAL RISK.
A BROKEN SYSTEM.

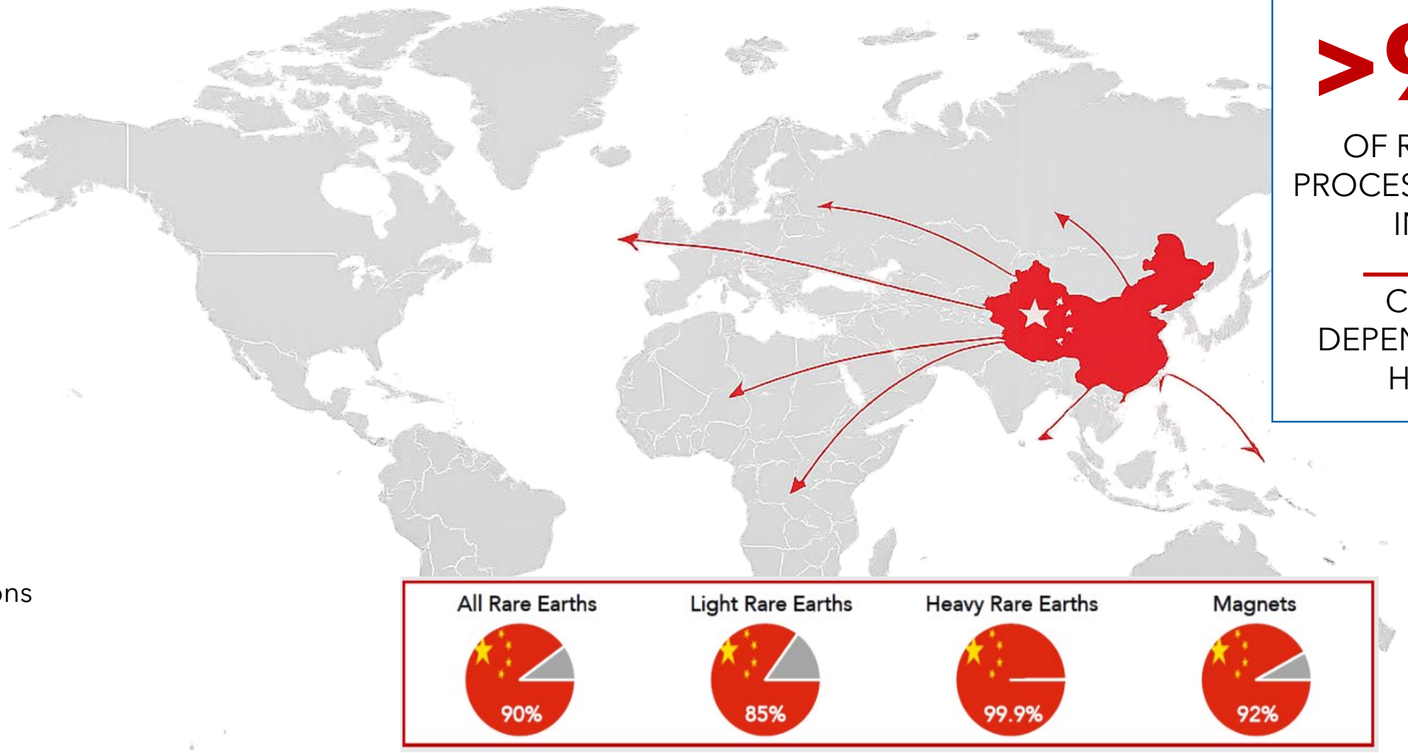
CHINA DOMINATES THE SUPPLY CHAINS THAT POWER OUR FUTURE

Supply Concentration
A significant portion of global critical mineral processing is concentrated in a single region.

Geopolitical Risk
Policy shifts, export controls, and global tensions create supply chain vulnerability.

Demand Outpacing Supply
Rapid growth in demand for critical minerals is outpacing supply, increasing pressure on global systems.

STRATEGIC DEPENDENCY IS A GROWING RISK
A secure domestic supply chain is critical to long-term economic and energy security.



>90%
OF RARE EARTH PROCESSING OCCURS IN CHINA

CREATING DEPENDENCY AND HIGH RISK

CHINA'S CONTROL ACROSS THE CRITICAL MINERALS SUPPLY CHAIN

Mining
Raw materials extracted globally

Export
Materials shipped internationally

Processing & Refining
Highly concentrated processing capacity

Manufacturing
Finished products distributed globally

Source: MUFG Capital Markets Strategy (February 2026)

LESSONS FROM CHINA'S RARE EARTH PLAYBOOK: 2005-2015

Avalon's Market Capitalization

2005	Avalon acquires 100% interest in the Thor Lake/Nechalacho property
2005-2010	China's dominance in REEs grows; export quotas constrain global supply and concentrate processing in China
Sept 2010	REE shipments to Japan are halted amid a maritime dispute. Prices surge into 2011, and global juniors see outsized investor attention.
July 2010	China slashes its second-half REE export quota by ~72%, stoking tightness
2013	Historical Definitive Feasibility Study[1] for Nechalacho completed and announced with strong economics
2014	WTO rules China's quotas illegal
2015	China scraps export quotas, replacing w/ licenses. Supply normalizes; prices retrace; funding for non-Chinese projects tightens–many Canadian juniors de-rate. REE prices fall 30-50%

TODAY: WHAT HASN'T CHANGED

China still dominates global REE processing

Critical mineral supply remains concentrated

Western supply remains structurally constrained

(1) The 2013 FS (43-101 compliant) is historical and should not be regarded as a current feasibility study or current statement of reserves/economic viability.

Management Team

Scott Monteith, President & CEO

Scott Monteith, CEO of Avalon since May 2023, is an experienced entrepreneur and founder of Monteco Ltd.

Lorin Crenshaw, CFO

Mr. Crenshaw brings nearly 30 years of financial leadership, including as CFO of Compass Minerals, Orion S.A., and Albemarle's global lithium business, with earlier Wall Street experience as an equity investor at Citigroup and debt investor at PGIM.

Crystal Yi Gordon, Director, Accounting & Financial Reporting

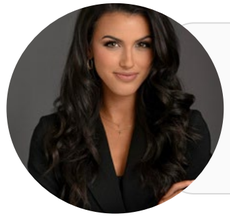
Ms. Gordon brings over 20 years of international finance leadership experience across public companies and global operations, overseeing financial reporting, disclosure, and strategic financial planning.

Burl Joseph, Project Director, Nechalacho

Mr. Joseph brings over 15 years of experience delivering large-scale mining and infrastructure projects in northern environments, leading Nechalacho through engineering, permitting, and execution planning.

Christopher Senyk, VP, Corporate Development

Mr. Senyk brings extensive experience across lithium, battery materials, and specialty chemicals, supporting Avalon's corporate strategy, partnerships, and commercial growth initiatives.



Vienna Psihos, Director, Public Affairs & Government Relations

Ms. Psihos is an experienced government relations professional with a strong track record in Ontario's policy and funding landscape, including her recent leadership role at the Treasury Board Secretariat.

Bliss Baker, Strategic Advisor

Mr. Baker brings over 30 years of public affairs experience, advising senior government leaders, including two Prime Ministers and Cabinet Ministers, with senior executive roles across renewables, and energy.

Glen Smith, Project Director, LSLi

Mr. Smith brings over 35 years of experience in metallurgical and process engineering, supporting the advancement of complex projects from feasibility through to operations.

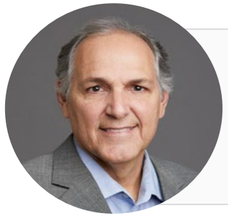
Board of Directors

Alan Ferry, Chair

Mr. Ferry, with 28 years in mining finance, is Avalon's director since 2000, and chairs the Audit Committee.

Scott Monteith, CEO, Director

Scott Monteith, CEO of Avalon since May 2023, is an experienced entrepreneur and founder of Monteco Ltd.



Flavio Hees, Director

VP of Geology and Mining at Sibelco, oversees over 130 mines, focuses on optimizing assets and compliance. He holds a master's in Geotechnical Engineering.

Naomi Johnson, Director

Ms. Johnson, Titan Mining VP since 2018, joined Avalon's Board in 2019 and chairs the Compensation Committee.

Timothy Haig, Director

A successful entrepreneur in renewable fuels and cleantech, known for transforming lab ideas into public companies, leading motivated teams, and upholding integrity and ethics.

Alec Kodatsky, Director

Alec Kodatsky, with over 20 years in finance, is Co-President of Forthlane Partners and a former top mining sector analyst. He holds a B.Sc. in Mining Engineering and an MBA.

Harvey Yesno, Director

Harvey Yesno, former Chief of Eabametoong First Nation and Grand Chief of Nishnawbe Aski Nation, led NADF and worked with Ontario's Ring of Fire Secretariat.

PJ Juvekar, Director

PJ Juvekar, former top-ranked Wall Street analyst with 30+ years of experience in capital markets, industrials, and the energy transition. Currently Senior Advisor to Boston Consulting Group and Nouryon.

Avalon: A Strategic Critical Minerals Platform for the Next Industrial Cycle

INVESTMENT THESIS

Structural Demand Tailwinds

- **REE:** Permanent magnet demand scaling across electrification, wind energy, and advanced industrial technologies, reinforced by defense-driven and global realignment of supply chains away from China.
- **Lithium:** EVs and energy storage driving battery demand, alongside urgent buildout of regional refining capacity in NA.

Multiple Value Creation Levers

- Management reset
- Board refresh: ~60% new directors
- Strengthening capital structure
- Further resource validation
- Securing strategic funding
- Additional strategic partnerships
- Non-core asset monetization
- Broadening of shareholder base

Unique Diverse Portfolio

- Nechalacho REE - 2026 MRE confirms large, well-defined resource, building on substantial historical technical work. Historical FS [1] (2013) - After-Tax NPV @ 8%: C$1.2B and 19.6% IRR; 2026 MRE
- Thunder Bay Facility PEA (2024) After-Tax C$4.1B NPV & 48% IRR

UNLOCKING VALUE THROUGH STRATEGIC EXECUTION

Valuation Disconnect

- Market cap materially below intrinsic asset values
- Management committed to closing this gap through disciplined execution against multiple value creation levers

Strong Partnerships

Strategic collaborations with leading industry players, enhancing capabilities and enabling execution and market reach

- Nordmin Engineering Ltd.
- Primero Americas Inc
- Wood Engineering
- Metso Corp.
- Qualcomm

Government Alignment

- Advancing rare earth and lithium assets central to national defense, technological advancement, energy and industrial policy (strengthening critical mineral supply chains).

(1) The 2013 FS (43-101 compliant) is historical and should not be regarded as a current feasibility study or current statement of reserves/economic viability.

POSITIONING AVALON FOR A POTENTIAL U.S. EXCHANGE LISTING

A strategic step to broaden investor access, enhance market visibility and strengthen long-term capital markets flexibility.

BROADER INVESTOR ACCESS

A U.S. exchange listing could increase visibility with U.S. retail investors, institutions, analysts, brokers and market participants.

IMPROVED MARKETABILITY

A post-consolidation share price more consistent with U.S. exchange norms may help address price-level constraints that can limit investor engagement.

STRATEGIC ALIGNMENT

Avalon's critical minerals portfolio is North American in scope; the Company's public market profile should evolve with the next stage of development.

CAPITAL MARKETS FLEXIBILITY

The proposed consolidation is intended to preserve flexibility as Avalon evaluates potential U.S. exchange listing requirements.

SHARE CONSOLIDATION COMPLETED
Avalon will continue evaluating a potential U.S. exchange listing as part of its broader long-term capital markets strategy.

NECHALACHO PROJECT

BASAL ZONE

MAGMIC RARE EARTHS

One of the most advanced rare earth deposits in North America, located in the Northwest Territories Canada, with the potential to supply a range of magnet rare earth elements and other strategic materials

Global Supply Risk
Today, China controls > 90% of global rare earth processing. That's a high risk to our supply, economy, and national security.

Rare Earths Power Modern Technology
Rare earths are the backbone of modern technology and impact everyday life

Restoring Domestic Supply Advantage
Nechalacho combines scale, high-value rare earth enrichment, and a cleaner development path – supporting secure, sustainable supply within North America.

920 lbs
of rare earth elements in a single US F-35 fighter jet

1 kg
of rare earth elements in electric vehicles (EVs)

2 tons
of rare earth magnets in a single 3MW wind turbine

9200 lbs
of rare earth materials in each SSN-774 Virginia-class submarine

REDUCING DEPENDENCE. STRENGTHENING SECURITY

DRIVING THE CLEAN ENERGY REVOLUTION

ENABLING ADVANCED DEFENSE

BUILDING ECONOMIC OPPORTUNITY

Enabling Critical Technologies

Electric Vehicles **Wind Turbines** **Smart Phones** **Missiles** **Radar** **Defense**

NECHALACHO PROJECT

Project Overview

MAGMIC RARE EARTHS

Strategic Location
Located at Thor Lake, Northwest Territories, - 100 km southeast of Yellowknife

100% Owned Basal Zone
Avalon owns 100% of resources below 150 metres (Basal Zone)

Basal Zone Ownership
An unrelated third party owns resources above 150 meters (Tardiff Zone)

High Demand for Growing Industries
Supports defense, nuclear, EVs, semiconductors, wind energy, and communicat ions

Permitting Advantage
- Regulatory pathway de-risked with Land Use Permit and Water Licence secured.

ADVANCING TO EXECUTION

Objective
- PEA (expected to be followed by a Feasibility Study) based on a cleaner, more cost-effective process and new economic considerations.
- Secure funding and strategic partners to advance project

Funding
- Advancing a diversified funding strategy that includes non-core asset divestments, government-backed financing, and strategic partnerships tied to offtake and supply agreements.

Development Phase
PEA underway
- Engaged Wood Canada Ltd. to advance the PEA, with the objective of establishing a cleaner, more cost-effective flowsheet than contemplated in the historical 2013 FS and incorporating updated economic assumptions.

wood.
Global engineering leader engaged

NECHALACHO PROJECT (Basal Zone)

HIGH-VALUE RARE EARTH EXPOSURE

MAGMIC RARE EARTHS

1 Deposit 18 Elements of Economic Interest

High value
High demand
Strategic advantage

MAGNET RARE EARTH ELEMENTS – THE CORE VALUE ENGINE

65 Tb Terbium

Improves high temperature performance in permanent magnets used in EVs, wind turbines, and defense technologies.

66 Dy Dysprosium

Provides heat resistance and magnetic strength in high performance motors and advanced defense applications.

59 Pr Praseodymium

Key component in NdPr permanent magnets used in EV motors, wind turbines, and industrial automation.

60 Nd Neodymium

Critical input for powerful permanent magnets used in electric vehicles, wind turbines, robotics, and electronics.

LIGHT RARE EARTHS

57 **La** Lanthanum	58 **Ce** Cerium	62 **Sm** Samarium

HEAVY RARE EARTH ELEMENTS

63 **Eu** Europium	64 **Gd** Gadolinium	67 **Ho** Holmium	68 **Er** Erbium	69 **Tm** Thulium	70 **Yb** Ytterbium	71 **Lu** Lutetium	39 **Y** Yttrium

TRANSITION METALS

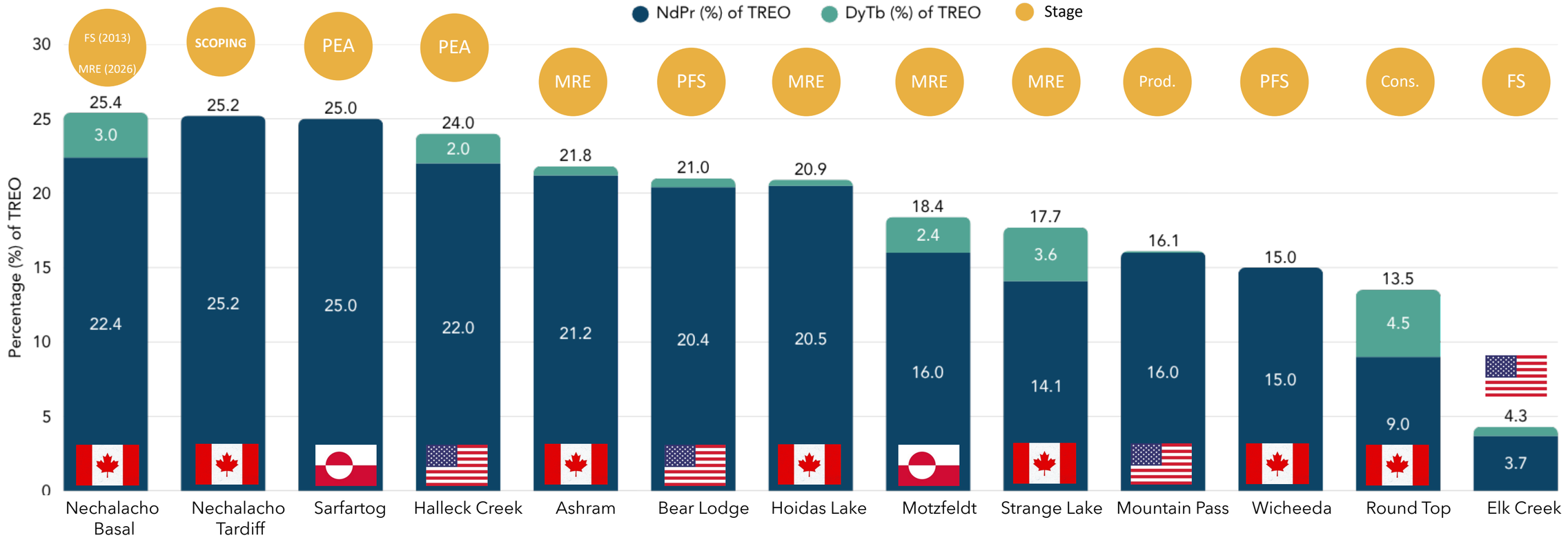
40 **Zr** Zirconium	41 **Nb** Niobium	73 **Ta** Tantalum

NECHALACHO PROJECT (Basal Zone)

HIGHEST MAGNET REE RATIO & AMONG THE MOST ADVANCED DEVELOPMENT PATHS IN NA PEER GROUP

One of few projects to have achieved FS-level – with unmatched quality (NdPr / DyTb proportion)

Peer Projects Viewed by NdPr + DyTb % of TREO



Source: Company public filings and equity research, as of August 2026. Nechalacho project-stage designation reflects the historical 2013 FS and the current 2026 MRE.

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NECHALACHO PROJECT (Basal Zone)

A CLEAN APPROACH TO RARE EARTH PROCESSING

MAGMIC RARE EARTHS

Avalon and Engina Corporation have successfully recovered 15 rare earth elements from Nechalacho concentrate with >90% total recovery in preliminary bench-scale testing using a novel CO2-based extraction process.

TWO DIFFERENT WAYS TO GET RARE EARTHS OUT OF ORE

CONVENTIONAL PROCESSING (INDUSTRY STANDARD)

Strong acids & high heat → Complex process → Large volumes of waste → Environmental challenges

- Uses harsh chemicals and high heat
- Higher chemical and water use
- Significant waste and emissions
- More difficult to permit

AVALON / ENGINA HYBRID SUPERCRITICAL REFINING PROCESS (NOVEL APPROACH)

CO2-based extraction → Closed-loop system → Lower waste → Designed to reduce impact, capex and opex

- Uses CO_2-based extraction in a closed-loop system
- Designed to reduce chemical use, waste, and environmental impact
- Lower water and chemical use potential
- Supports Western supply chain objectives

WHAT WE HAVE ACHIEVED

> 90% Demonstrated recovery of **15 rare earth elements** from Nechalacho with 90% recovery yields

Preliminary bench scale results

High recovery across the full suite of rare earths

Novel process designed to reduce environmental impact

WHY THIS MATTERS?

Reduced Environmental Footprint Potential
Designed to use fewer chemicals and generate less waste

Potential Economic Benefits
Higher recovery and lower cost potential, (subject to validation)

Permitting Advantage
Cleaner process may support a more favorable permitting pathway

Aligned with Strategic Supply Chain Priorities
Supports development of secure, diversified supply chains

WHATS NEXT?

Wood Canada Ltd. advancing engineering evaluation and process optimization work.

NECHALACHO'S UPDATED MRE HIGHLIGHTS SIGNIFICANT MAGNET-CRITICAL REE SCALE NOT REFLECTED IN AVALON'S VALUATION[(1)(2)]

Avalon trades at only ~1% to 2% of its Study NPV, well below the peer average, despite strong technical advancement and Nechalacho's significant exposure to magnet-critical NdPr and DyTb.

KEY TAKEAWAYS

- ✓ Deep valuation discount to REE developer peers
- ✓ High magnet-critical REE intensity: NdPr + DyTb
- ✓ Among peer leaders in contained NdPr/DyTb scale
- ✓ Nechalacho PEA underway to assess an updated process relative to the historical 2013 FS and update project economics.
- ✓ U.S. listing may broaden institutional access, enhance liquidity and support valuation re-rating

PROJECT ADVANCEMENT[(3)]

August 2026 MRE builds on the technical foundation established by the historical 2013 FS and provides updated basis for advancing Nechalacho project.

		Mkt Data	Asset Metrics (Main Asset)[(3)(4)(5)]					M&I+I Grade				M&I+I Contained		Valuation
Company Name	Ticker	Market Cap	Main Asset(s)	Asset Location	Dev. Stage	Study NPV 8%	Downstream Assets	TREO Grade	HREO / TREO[(6)]	NdPr / TREO	DyTb / TREO	NdPr Cont.	DyTb / Cont.	P/ Study NPV8%
		(US$mm)				(US$mm)	(Y / N)	(%)				(Kt)		(x)
Rare Earth Developers														
IMC Rare Earths	IMC-US	$740	Itarantum	Brazil	MRE	--	N	0.1%	15.2%	17.0%	2.1%	230	28	--
Arafura Rare Earths	ARU-AU	$739	Nolans	Australia	FS	$1,859	Y	2.6%	--	26.4%	--	384	--	0.40x
Brazilian Rare Earths	BRE-AU	$699	Multiple	Brazil	Scope.	$630	N	--	--	--	--	--	--	1.11x
Rare Element Resources	REEMF-US	$520	Bear Lodge	Wyoming, USA	MRE	--	Y	4.0%	--	20.4%	--	64	--	--
Mkango Resources	MKA-CA	$211	Songwe Hill	Malawi	FS	$461	N	1.1%	--	21.1%	1.0%	216	10	0.46x
Rare Earths Americas	REA-US	$201	Multiple	Brazil	MRE	--	Y	1.9%	--	21.0%	1.6%	1,896	145	--
American Rare Earths	ARR-AU	$144	Halleck Creek	Wyoming, USA	PEA	$733	N	0.3%	11.0%	--	--	--	--	0.20x
Leading Edge Materials	LEM-CA	$46	Norra Karr	Sweden	PEA	$1,029	N	0.5%	52.0%	14.0%	5.7%	77	31	0.04x
Tactical Resources	TREO-US	$41	Peak Project	Texas, USA	Expl.	--	N	--	--	--	--	--	--	--
Defense Metals	DEFN-CA	$36	Wicheeda	BC, Canada	PFS	$992	N	2.1%	--	15.2%	0.2%	112	2	0.04x
Namibia Critical Metals	NMI-CA	$28	Lofdal	Namibia	PFS	$182	N	0.2%	55.7%	11.0%	5.5%	12	6	0.15x
Vital Metals	VML-AU	$15	Tardiff	NWT, Canada	Scope.	$445	N	1.3%	--	25.2%	--	636	--	0.03x
Mean		**$285**				**$704**		**1.29%**	**26.8%**	**17.1%**	**2.3%**	**363**	**32**	**0.30x**
Median		**$173**				**$630**		**1.09%**	**15.2%**	**18.7%**	**1.6%**	**164**	**10**	**0.18x**
Avalon	**AVL-CA**	**$22**	**Nechalacho**	**NWT, Canada**	**MRE/FS(REE)/PEA(Li)**	**$4,228**	**Y**	**1.36%**	**18.2%**	**22.9%**	**2.7%**	**592**	**70**	**0.01x**
Avalon (Excl. Lithium)	**AVL-CA**	**$22**	**Nechalacho**	**NWT, Canada**	**FS(REE)**	**$1,199**	**Y**	**1.36%**	**18.2%**	**22.9%**	**2.7%**	**592**	**70**	**0.02x**

Sources: Company public filings, FactSet

(1) Pricing data as of October 2026 (2) Avalon NPV based on Nechalacho and Lake Superior Lithium technical reports; all study NPVs converted to USD at study FX rate (3) 2026 MRE (SK-1300 compliant) is the current resource estimate, while the 2013 FS (43-101 compliant) is historical and should not be regarded as a current feasibility study or current statement of reserves/economic viability. (4) Study NPV8% sourced from technical report sensitivity tables where not otherwise disclosed (5) Rare Earth Americas grade and contained resource shown as the sum of the Constellation and Alpha projects (6) No current study economics provided for Rare Earths Americas assets or the Bear Lodge Project

NECHALACHO: HEAVY AND LIGHT REE DEPOSIT – CURRENTLY UNDERRECOGNIZED BY THE MARKET

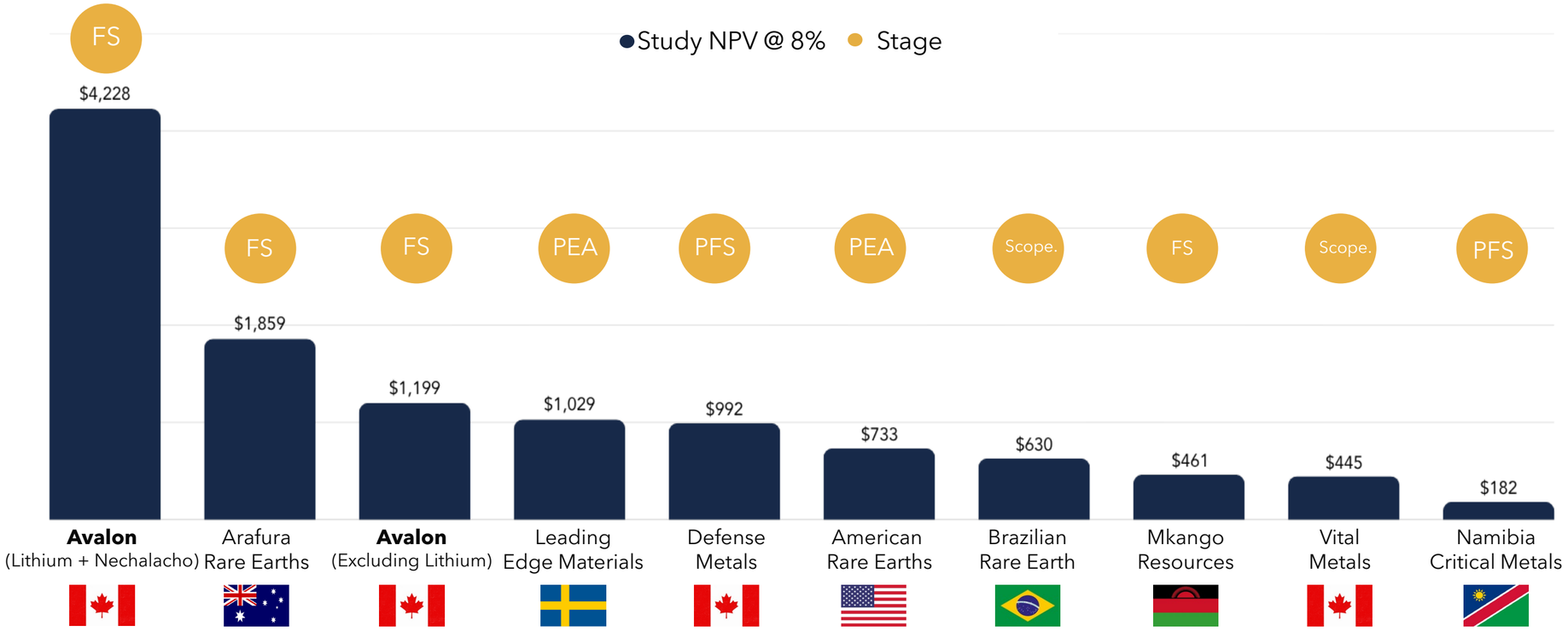
NECHALACHO 2013 FS + Lithium 2024 PEA STUDY NPV

$4.2 BILLION

PEA underway, in collaboration with Wood Canada Ltd, to assess an updated process relative to the historical 2013 FS and update project economics.

AVALON OFFERS TECHNICALLY WELL-ADVANCED HEAVY AND LIGHT REE EXPOSURE TRADING AT A MATERIAL DISCOUNT TO COMPARABLE REE DEVELOPERS

(US$ millions)



Note: Market data as of October 2026. Study NPV figures reflect latest publicly disclosed technical/economic studies and are converted to USD at study exchange rate. Multiples calculated as market capitalization divided by after-tax Study NPV @ 8%, unless otherwise noted. Sources: company filings, technical reports, investor presentations, and public market data.

VALUATION DISCONNECT

RELATIVELY STRONG STUDY NPV VERSUS PEERS

$4.2B versus $0.8B peer average

ADVANCED TECHNICAL STATUS

Benefits from extensive historical technical work

HIGH MAGNET-CRITICAL REE RATIO

Differentiated by high concentration of magnet-critical REEs (NdPr and DyTb) as % of TREO, supporting strategic relevance to magnet supply chains.

2013 FS (43-101 compliant) is historical and should not be regarded as a current feasibility study or current statement of reserves/economic viability.

NECHALACHO:

Heavy and Light REE Deposit – Currently Underrecognized by the Market

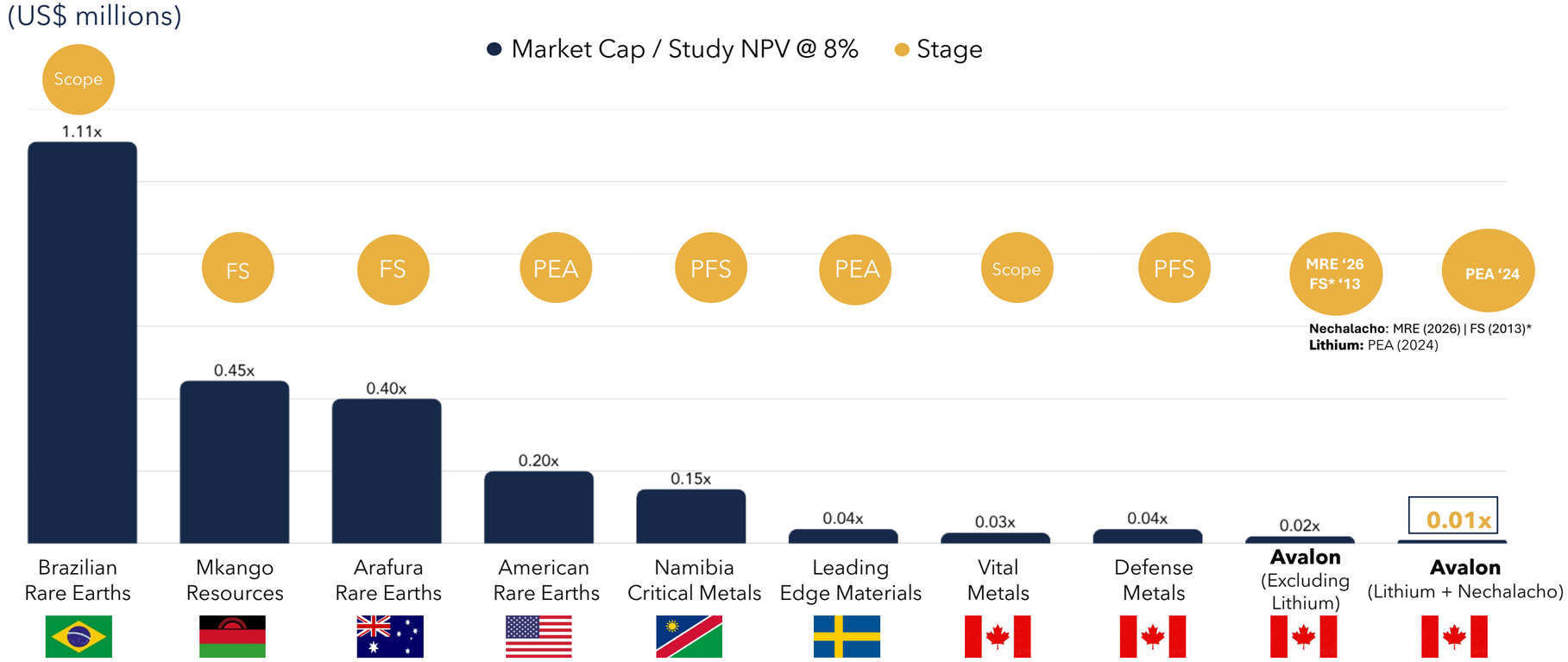
PEA underway, in collaboration with Wood Canada Ltd, to assess an updated process relative to the historical 2013 FS and update project economics.

0.01x
P/ Study NPV
AVALON

0.30x
PEER AVERAGE

MATERIAL DISCOUNT
TO PEER AVERAGE

AVALON TRADES AT A FRACTION OF PEER VALUATION DESPITE NECHALACHO'S SCALE, TECHNICAL ADVANCEMENT & HEAVY REE EXPOSURE



Note: Market data as of October, 2026. Study NPV figures reflect latest publicly disclosed technical/economic studies and are converted to USD at study exchange rate. Multiples calculated as market capitalization divided by after-tax Study NPV @ 8%, unless otherwise noted. Sources: company filings, technical reports, investor presentations, and public market data.

VALUATION DISCONNECT

SIGNIFICANT DISCOUNT TO PEERS

AVL trades at ~0.01x Study NPV versus peer average of 0.30x.

RE-RATING POTENTIAL

Achieving milestones has potential to narrow valuation gap

HIGH MAGNET-CRITICAL REE RATIO

Differentiated by high concentration of magnet-critical REEs (NdPr and DyTb) as % of TREO, supporting strategic relevance to magnet supply chains.

*2013 FS (43-101 compliant) is historical and should not be regarded as a current feasibility study or current statement of reserves/economic viability.

LSLi LAKE SUPERIOR LITHIUM INC.

LAKE SUPERIOR LITHIUM PROJECT

A proposed lithium chemical processing facility designed to convert spodumene concentrate into battery-grade lithium chemicals for electric vehicles and energy storage systems.

Demand is accelerating rapidly
Lithium demand grew ~30% in 2025 and continues to expand as electrification scales globally

Batteries are becoming the dominant end-use
Battery applications are expected to represent ~96% of total lithium demand by 2040

Supply is tightening as demand scales
Market deficits are expected to emerge this decade, reinforcing the need for new supply

Lithium is critical to energy security, decarbonization, and industrial growth.

~30%	~14-30%	~80%+	~96%
Lithium Demand in 2025	Expected demand growth in 2026	Demand driven by EVs & batteries	Battery share of lithium demand by 2040

ELECTRIC VEHICLES	ENERGY STORAGE	RENEWABLE ENERGY	INDUSTRIAL ELECTRIFICATION

Enabling Critical Technologies

- Electric Vehicles
- Grid Storage
- Consumer Electronics
- Wind Turbines
- Data Infrastructure
- Defense Applications

LAKE SUPERIOR LITHIUM PROJECT

PROJECT OVERVIEW

LSLi LAKE SUPERIOR LITHIUM INC.

A strategically located lithium hydroxide asset in Ontario, well positioned to support the growing electric vehicle and energy storage supply chain.

Strategic Location

Located at Thunder Bay, Ontario, located in proximity of feed sources and main infrastructure

100% Owned

100% Avalon Owned

Optimized Site

Site is ideally positioned to optimize supply chain efficiency and product logistics

Technology Collaboration

Collaboration with Qualcomm Technologies Inc. to support digital infrastructure

Strong Partnerships

Partnership with Metso Corp. to leverage sustainable processing technologies

Metso

Qualcomm

ADVANCING TO EXECUTION

Objective

- Aims to support the rapidly expanding electric vehicle market by establishing a state-of-the-art lithium hydroxide facility in Thunder Bay, Ontario

Funding

- Exploring funding options, including non-core asset divestments, government loans, grants, and strategic partnerships related to offtake and supply agreements.

Development Phase

Feasibility Study underway with:

- Engaged Nordmin Engineering Ltd. to advance from a positive September 2024 PEA toward a Feasibility Study, positioning the Project for construction readiness and strategic partnerships

Nordmin Engineering

KRECH OJARD

PRIMERO

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LAKE SUPERIOR LITHIUM PROJECT

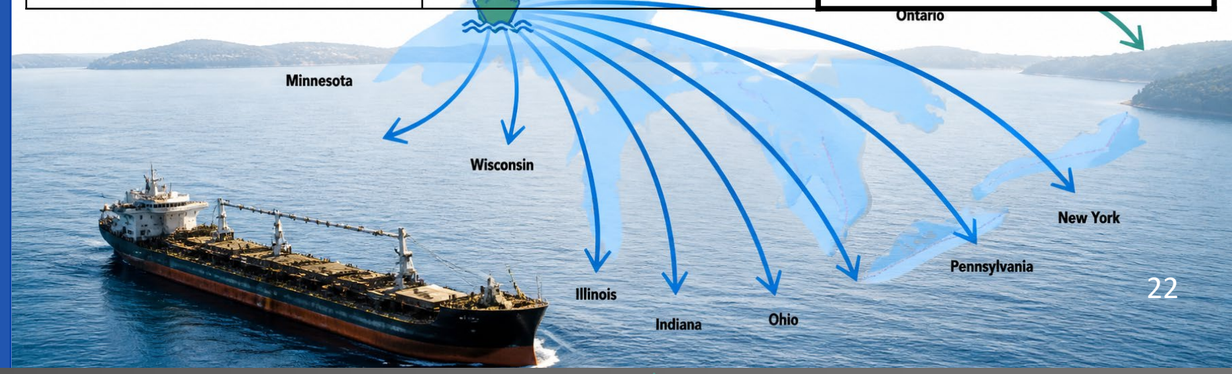
STRATEGIC INVESTMENT OVERVIEW

- **Strategic Location:**
  Proximity to key markets and resources, supporting efficient supply chains
- **Infrastructure Advantage:**
  Robust infrastructure, including existing buildings, extensive rail connectivity, and a deep-water port
- **Supporting Government Incentives:**
  Leverage Canadian, and U.S. government incentives for green energy and technology projects
- **Meeting High Demand:**
  The facility will help meet the escalating demand for lithium in EVs and renewable energy storage
- **Scalable Growth Potential:**
  Capable of processing spodumene concentrate, with a facility designed with scalability in mind, capable of expanding to meet future market demands
- **Sustainability Commitment:**
  Implement environmentally friendly processes to minimize ecological impact and support sustainability goals
- **Integrated Lithium Platform:**
  Host processing, recycling, chemical, and cell manufacturing capabilities at the Thunder Bay site
- **Community Partnerships:**
  We prioritize partnerships with First Nations communities, ensuring that benefits are extended to all regional communities

LSLi LAKE SUPERIOR LITHIUM INC.

2024 PEA Financials (CAD $)

$35,360 Base Case LiOH $/t LiOH (USD $26,000/t LiOH)	**$4.1B** After-Tax NPV @ 8% Discount	**30 Year** Operating Life
$1,360 Spodumene conc. $/t (USD $1,000/t Spodumene @ 6%)		**2.5 Year** Payback Period
48% After-Tax IRR		**30,000 tpa** Annual LiOH production



LAKE SUPERIOR LITHIUM PROJECT

A MORE EFFICIENT AND SUSTAINABLE PATH TO BATTERY-GRADE LITHIUM

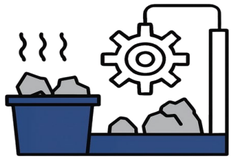
LSLi LAKE SUPERIOR LITHIUM INC.

Metso

Avalon, in partnership with Metso, is advancing a proprietary alkaline process that converts spodumene to battery-grade lithium hydroxide using **cleaner chemistry, lower inputs, and a more sustainable footprint**

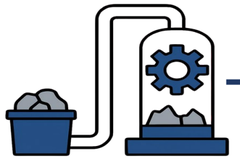
THE METSO ALKALINE PROCESS

1. Calcination & Milling



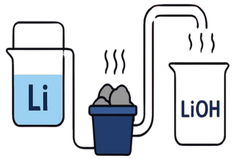
Spodumene concentrate is calcined and milled to liberate lithium

2. Alkaline Pressure leach



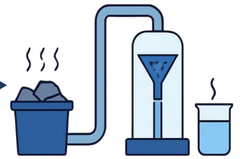
Milled spodumene is leached with soda ash in a high-pressure reactor

3. Lithium Conversion



Lithium in solution is converted to lithium hydroxide using lime

4.Purification



Solution is filtered to remove impurities and maximize purity

5.Crystallization & Drying

Purified solution is evaporated, crystalized and dried to produce battery-grade lithium hydroxide monohydrate

Cleaner Process
No sulfuric acid, fewer hazardous byproducts and a neutral, inert residue

Lower Operating Intensity
Significantly less water and chemical consumption

Permitting Advantage
Simpler environmental profile supports permitting and community acceptance

Technology
Pilot- tested for the Lake Superior Lithium Project and commercially operating in Texas

A cleaner process with the potential to reduce operating risk, improve permitting outcomes, and support long term cost efficiency

Our Goal
Deliver battery-grade lithium with a lower environmental footprint and stronger economics

LEVERS TO CLOSE VALUATION DISCONNECT

ACHIEVED

Leadership Team Rebuilt

CEO appointed in 2023; all other senior leaders joined within the past 12 months

Governance Reset

5 of 8 directors joined since 2023, bringing operational and capital markets expertise.

Secured Tactical Funding & Strengthened Balance Sheet

- C$18.7M capital raise (October 2025)
- Eliminated ~$3M convertible note (October 2025)
- Completed Sibelco JV reorganization, eliminating $7.5M in debt and ~15% dilution overhang (April 2026)

Advancing Technical Studies

- Initiated Nechalacho PEA; expected to be followed by Feasibility Study.
- Commenced Feasibility Study at Lake Superior Lithium Project
- Announced refreshed Nechalacho MRE – revalidating scale and development potential

NEXT STEPS TO UNLOCK VALUE

Secure Strategic Funding

- Finnvera LOI supports potential €100M export credit financing
- SCP Resource Finance appointed as Strategic Capital Advisor
- Private: Pursue strategic equity at the asset level
- Public: Pursue Canadian & U.S. government support programs

Commercial Enablement

Rare Earths

- Complete and publish PEA (Fall 2026)
- Generate customer samples
- Advance strategic offtake and asset-level investment

Lithium

- Secure feedstock source
- Secure offtake agreement
- Advance asset-level investment

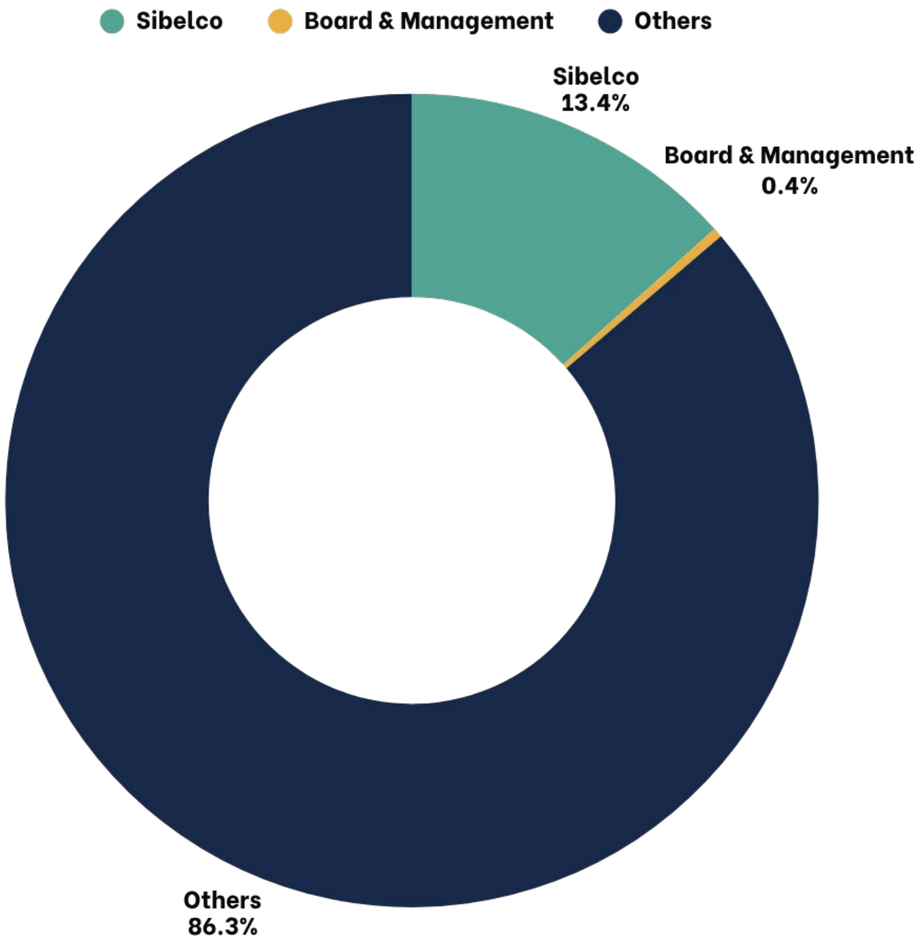
Positioned to Broaden Institutional Ownership Following Share Consolidation Through Expanded Investor Outreach and Planned U.S. Listing

Non-Core Asset Sales

- Completed Sibelco JV reorganization–debt eliminated, dilution overhang removed, and Lilypad cesium asset repositioned for potential monetization
- Monetize tin, cesium, and other valuable but non-core assets, providing non-dilutive funding

Capital Structure

Description	Value (CAD)
Ticker Symbol	TSX: AVL
Stock Price	$6.04
52-Week High / Low	$24.30- $4.52
Common Shares Outstanding	4.64M
RSU & DSU	19K
Stock Options (additional shares if converted)	154K
Warrants (additional shares if converted)	1.18M
Fully Diluted Shares	5.99M
Market Capitalization	$28.0M

As of October 15, 2026

OWNERSHIP STRUCTURE