

2022

SUSTAINABILITY REPORT



AVALON
ADVANCED MATERIALS INC.

Critical Materials for a
Sustainable Future



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Forward Looking Statements

This Report contains “forward-looking statements” within the meaning of the United States Private Securities Litigation Reform Act of 1995 and applicable Canadian securities legislation. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as “potential”, “scheduled”, “anticipates”, “continues”, “expects”, “is expected”, “targeted”, “planned”, “believes”, “will”, “intends” or variations of such words and phrases or the negative thereof. Statements that are not based on historical fact contained in this Report, including through documents incorporated by reference herein, 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 reflect the Company’s current views with respect to future events and include among other things, statements with respect to the Company integrating sustainability into all aspects of its business, that the Company pursues sustainability in all areas of its business and actively promotes improved mineral industry practice with investors, potential partners and government, that the Company will strive to ensure that our projects are energy efficient and protective of the environment, the existence of any significant potential for creating additional shareholder value through exceptional sustainability performance, remaining committed to doing Avalon’s part to advocate for improved sustainability performance, the anticipation that it would proceed with certain plans, activities or achieve certain goals or efficiencies, assumptions related to future economic, market or other conditions that while considered reasonable by the Company, are inherently subject to risks and uncertainties, including significant business, economic, competitive, political and social uncertainties and contingencies.

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, the possibility of cost overruns or unanticipated costs and expenses,

the impact of proposed optimizations at the Company’s projects, actual results of exploration activities, mineral reserves and mineral resources and metallurgical recoveries, discrepancies between actual and estimated production rate, mining operational and development risks and delays, regulatory restrictions (including environmental), activities by governmental authorities, financing delays, joint venture or strategic alliances risks, or other risks in the mining industry; 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 filed with the securities regulatory authorities in all provinces and territories of Canada, other than Québec, and available at www.sedar.com. Most of the foregoing factors are beyond Avalon’s ability to control or predict. There can be no assurance that the plans, intentions or expectations upon which these forward-looking statements are based will occur. The forward-looking statements contained herein are qualified in their entirety by this cautionary statement. Readers should not place undue reliance on the forward looking statements, which reflect management’s plans, estimates, projections and views only as of the date hereof. The forward looking statements contained herein are presented for the purpose of assisting readers in understanding the Company’s expected sustainability performance, the Company’s plans and objectives, and may not be appropriate for other purposes. Avalon does not undertake to update any forward-looking statements that are contained herein, except in accordance with applicable securities law. All currency in this Report is in Canadian dollars, unless otherwise noted.



President & CEO Message



Thank you for your interest in **Avalon's 11th annual Sustainability Report**. It continues to be an interesting time with the rapidly growing interest in establishing the critical minerals supply chains needed in new clean technologies. It is something we have been promoting for the last 12 years that these non-traditional mineral commodities like lithium and rare earths, needed in clean technology, can be produced in sustainable ways using efficient new process technologies!

Avalon has also been **a leader in promoting the opportunity to create the circular economy in the mining industry** by looking at closed mine sites as opportunities to profitably extract critical minerals from historic mine wastes, while remediating the long term environmental liability.

It has taken a long time for government to finally recognize this opportunity and remove the barriers to access for forward-thinking junior companies like Avalon. However, it is finally starting to get recognized as an exceptional opportunity to more rapidly establish new critical minerals supply chains in Canada.

There are many examples of closed mine sites in Canada developed decades ago to produce one traditional bulk exchange-traded where the rock contained many other minerals that had no value then but do today. We continue to try to **re-activate the closed East Kemptville Tin mine site in Nova Scotia**, where there are some 25 million tones of wastes (generating acid mine drainage) containing tin, indium, lithium, copper, zinc and other rare elements. Tin has become an important technology metal now used on all electronic circuit boards and with growing demand in many other new technologies including electric vehicles and lithium ion battery anode technologies, solar energy systems and 5G communications.



While traditional bulk commodities like coal and base metals are still mainly produced from large scale operations with significant environmental impacts it is important for investors to appreciate that emerging new commodities like lithium, cesium and tantalum with relatively small but growing markets can be produced in much more sustainable ways including starting as small, low impact quarry operations.

President & CEO Message (continued)

The key is defining a market for the product and then designing an efficient extraction process to recover it at a competitive cost to meet the requirements of the end-users and scale the operation based on product demand not just tons and grade. In many cases, especially lithium pegmatites, **the wastes can be used to generate additional by-products and production can be scaled up gradually as demand grows.**

That is what Avalon has been trying to do for over 20 years and although the regulatory barriers have been formidable, **we are pleased to report that things are changing fast with growing support from government and the investment community for establishing new critical minerals supply chains by attracting the end-users to take advantage of our diverse mineral wealth by creating the manufacturing capacity in Canada.**

With our advanced Separation Rapids Lithium Project ready to get started at a modest scale to begin serving the rapidly growing glass-ceramics markets, we will be **well positioned** to transition to production of lithium battery materials once we have an investing partner to help us establish the mid-stream processing capacity to produce lithium hydroxide. We continue to look at Thunder Bay as an ideal location for such a facility as it is the transportation hub for northwestern Ontario with good access to local and international markets via the Great Lakes and St. Lawrence Seaway. We also want to make it a regional processing facility that can purchase lithium mineral concentrates from other emerging producers from the many lithium pegmatites that occur in northwestern Ontario. As lithium minerals can be readily recovered from pegmatites without generating any toxic wastes, it is our vision that remote First Nation communities across Northwestern Ontario can take advantage of the abundance of lithium pegmatites in their traditional territories to participate directly as owners and developers in this emerging new business.

Doing this in sustainable ways while creating new economic development opportunities for remote First Nations communities in the North remains a key component of our business strategy.

This is now being recognized by the growing ESG (environmental, social, governance) investment community as being compatible with their investment criteria and is opening up new doors for Avalon to access investment capital. **This new interest motivated Avalon to obtain an independent audit of its ESG performance to secure an ESG risk rating in 2021 from Sustainalytics, a Morningstar company.**

Avalon's ESG risk rating placed it in the top 5% of companies in its sector referred to as "diversified metals". This sector is mainly comprised of operating mining companies and Avalon was the first development stage critical minerals resource company they had performed an audit on. It is gratifying to have third party confirmation that Avalon is indeed a leader amongst junior resource companies in its commitment to sustainable critical minerals supply chain development.

20 Years

Sustainable Practices

Top 5

**Diversified Metals
ESG Risk Rating**



**Well positioned for
Canadian Supply Chain**



President & CEO Message (continued)

Government policymakers here in Canada are now realizing that they will need to show visible support through regulatory change and access to funding for these supply chains to get started here. **With the focus on climate change, it is becoming a policy priority to facilitate the transition to a world that is less reliant on fossil fuels for its energy needs.** All renewable energy, energy storage and electric vehicle technologies rely on a diverse array of non-traditional critical minerals and rare elements that Canada has never produced historically despite having vast untapped potential to produce them. It is all about creating more domestic demand for elements like lithium and rare earths to encourage more private sector investment in developing these resources. Although the bulk of this demand is in international markets both the Canadian and Ontario governments are now making funding commitments to support both electric vehicle and battery manufacturing getting started here.

Time is of the essence now to take advantage of the surging global demand for lithium battery materials. Traditional mining regulations must be updated to recognize the fundamental differences in critical minerals production that involve bulk sampling at an early stage to define the derivative product and show how it can be produced sustainably using new extraction technologies including taking advantage of closed mine sites.

Another closed mine site Avalon has been looking at as an opportunity is the historic phosphate mine site hosted by the Cargill Carbonatite Complex near Kapuskasing, Ontario. It was developed purely as a source of phosphate for fertilizer products although the resource was enriched in a number of other critical minerals that were not recovered including the rare earths and scandium. Both the tailings and waste rocks contain exceptional concentrations of these rare elements associated with the phosphate minerals. Avalon's vision is to design an extraction process to recover these elements while also producing purified phosphate products for fertilizer applications, where it is now in very high demand, and potentially also for lithium ion battery LFP cathode materials.

While it has been nearly 25 years since I first started to see the potential for establishing new supplies of lithium and rare earths, it looks like our time has finally come. While the western world is moving rapidly to reduce its reliance on fossil fuels, it won't happen overnight, and it will take a huge increase in supply of materials like lithium before we can get there, while reducing our reliance on China as the sole source of supply for many of these critical materials. It is all about creating the mid-stream processing capacity to produce the derivative products and then attracting the manufacturers to establishing plants here to take advantage of the supply.

Avalon's success will inspire others in Canada (including government) to start to recognize how producing these critical minerals can be done much more efficiently and sustainably than was done in the past for bulk exchange-traded commodities in the traditional mining industry.

I would like to end by thanking our long-time, loyal shareholders for their patience and support through the challenging times we have endured over the past 10 years.

Thank you very much!

Donald S. Bubar
President & CEO

Manager, ESG & Sustainability Message

For the eleventh time for Avalon, and the first for me personally, I am pleased to welcome you to **Avalon's 2022 Sustainability Report**. This has been a year of changes, the most significant being that our former VP, Sustainability, Mr. Mark Wiseman has retired, and I have been given the opportunity to follow in his footsteps. We are very proud of our continuing record of sustainability reports, and this ongoing achievement.

We continue to track and report on our sustainability performance, as it has been demonstrated continually to ourselves, stakeholders and the communities that we work in that reporting on our sustainability performance is beneficial. It enables us to **de-risk projects, accelerate permitting timelines, and increases support from government agencies, ESG investors and potential customers.**



Achieving sustainability at the Board, management and operational levels, largely depends on our ability to identify and manage ESG risks in our investments. For this reason, Avalon considers these risks key to our corporate strategy and risk management, and has **created a culture that has embedded responsible mining practices into our identity.** We take a comprehensive and committed approach to managing ESG practices into our planning and management of activities, prioritizing environmental, social and governance.

This report covers Avalon's fiscal year, from September 1, 2021 to August 31, 2022. Despite the ongoing effects of the COVID-19 pandemic, Avalon has remained active doing the basic research work needed to start developing our projects that will supply the critical materials needed by Canada to sustainably achieve its greenhouse gas reduction targets.

This theme of change is also prevalent in our industry, with the predominance of critical minerals and their continued **and growing role in the worldwide clean energy transition.** They are essential components in clean energy technologies, and the mining industry will have to adapt to producing these critical minerals in sustainable ways with minimal environmental impacts.

Avalon aims to become a leading global supplier of sustainably-produced lithium battery materials and other rare metals needed for renewable energy production and storage.



**Avalons' Pledge to be
Carbon Neutral by 2050**



**Culture of Responsible
Mining in our DNA**



**Forefront of
Energy Transition**

Sustainability

In the spirit of continuous improvement, Avalon continues to regularly write, review and update our policies, including energy, accessibility, biodiversity, Indigenous community engagement and other sustainability policies. Included in our Sustainability Policy is **our pledge to become carbon neutral by 2050**, of which our planned development of the Separation Rapids lithium resource remains a key initiative where we can take advantage of locally-produced hydro-electric power as a clean energy source.

Avalon continues to participate in the environmental and sustainability committees of the Mining Association of Canada (“MAC”), the Prospector and Developers Association of Canada (“PDAC”) as well as the Canadian Institute of Mines (“CIM”). This enables us to remain current on industry best practices, as well as lead, comment, and influence the mining industry’s sustainability agenda.



Separation Rapids, Ontario

Avalon continues to undertake baseline environmental field studies in support of ongoing and future permitting of the **Separation Rapids Lithium Project**. We continue to be pleased with the results of the environmental baseline work, which continues to confirm the lack of significant environmental impacts associated with lithium production using new technologies like Dense Media Separation to concentrate the lithium minerals.



East Kemptville, Nova Scotia

Avalon remains in discussions with the government of Nova Scotia, on the re-activation of the former tin mine by re-processing historic mine wastes using new technologies like sensor-based ore sorting to recover tin and other critical minerals like lithium while remediating the long-term environmental liability. Tin is now an important technology metal in growing demand for many new technologies including electronics, electric vehicles and solar energy production.

Disclosures

In the following pages we continue to report and review our performance in the Environmental, Social and Governance space using GRI disclosure methods and a modified form of the Mining Association of Canada’s Towards Sustainable Mining (TSM) framework and map both to the United Nations Sustainable Development Goals. It continues to be our belief that these give our various stakeholders the information they need to make informed decisions when deciding whether to invest in or do business with Avalon.

I would like to personally thank all my colleagues at Avalon for their contributions to this year’s report. In addition, my thanks for the continued support of the Board of Directors in the creation of this report. It is another demonstration of Avalon’s commitment to sustainability at all levels of the organization.

Regards

Amiel Blajchman,
Manager, ESG & Sustainability

2022 Sustainability Performance

The following table summarizes Avalon's performance against our stated FY2022 sustainability goals as set in the 2021 Sustainability Report.



Achieved



Partially Achieved



Not achieved

N/A (Not applicable)

FY 2022 Goal

Status

Comments

Health and Safety

Zero fatalities



Zero lost time accidents



Bill Mercer participated in the PDAC Health and Safety Committee prior to his retirement.

Zero medical aid accidents



Support the Prospectors and Developers Association of Canada (PDAC) efforts to improve exploration industry safety performance through active membership on the PDAC Health and Safety Committee



Successfully run the "Exploration Health and Safety" course at 2021 PDAC Convention, if requested

N/A

Avalon was not requested

Inventory and proactively handle all rock and rock-derived materials in storage, whether geological or metallurgical, and either disposing of appropriately or ensuring appropriate storage conditions, thus reducing corporate environmental risks



Avalon has up to date inventories of all off site storage locations. The highest risk materials have been previously disposed of. Remaining historic samples in storage in Yellowknife still require appropriate disposal.





FY 2022 Goal

Status

Comments

Environmental and Permitting

Monitor and respond to proposed and actual regulatory changes in all jurisdictions in which Avalon operates (independently or through industry associations)



Avalon is kept abreast of regulatory developments and changes through a variety of channels including regulatory officials, industry associations, mail lists, and industry contacts.

Engage with government and regulators to provide industry advice and perspective on more effective, practical, and achievable governance in cleantech materials development



Avalon continued to engage with government and regulators both directly and via industry associations such as PDAC, OMA and MAC

Prepare preliminary site design for a demonstration plant at the Separation Rapids quarry site. Complete the baseline studies initiated in 2021 if financing is available.



Avalon began preliminary site design for the demonstration plant, and continued to conduct baseline studies.

Facilitate communication between MAC and PDAC; specifically, to provide updates to PDAC on applicable MAC and regulatory initiatives as they develop



Conducted by Mark Wiseman, and continued by Amiel Blajchman at PDAC Sustainability Committee meetings

Participate in PDAC's conference Sustainability Program



Both Mark Wiseman and Amiel Blajchman participated in various capacities at the PDAC's conference Sustainability Program.

Run the PDAC Environment Training Course, if requested

N/A

Course did not run in 2022.

Implement environmental programs to facilitate necessary permitting for all project phases



Various environmental baseline programs were conducted to facilitate future permitting

Train employees on physical and mental health services offered through employee assistance plan



All eligible employees have been trained on physical and mental health services

Zero reportable environmental incidents in field work



There were no reportable environmental incidents at any of Avalon's project sites during fiscal 2022.



FY 2022 Goal

Status

Comments

Community, People, and Outreach

Implement the Community Response Procedure for local Communities of Interest to utilize in case of concerns, including website and dedicated telephone number for advancing projects, if office opens		Avalon has always, and continues to, implement its whistleblower protection policy, and a formal Community Concern Procedure was also completed. Some electronic procedures await a dedicated office.
Develop and implement a communications plan for advanced projects		While several projects are under development, there are no current advanced projects necessitating a communications plan.
Continued engagement with Indigenous governments and organizations at projects, including helping facilitate collaborations with other institutions		Avalon continues to be a leader in Indigenous engagement at current and potential project sites. Local leadership can directly engage in dialog with any member of Avalon management, including the President and CEO.
Advocate for better industry sustainability practices and increase public awareness about the minerals/metals sector through industry associations		Avalon advocates for increased focus on sustainability practices throughout the critical material supply chains and continues to publicly call for increased education around the necessity of these
Complete implementing the COVID-19 policy and provide training for employees and contractors		COVID-19 policy was drafted, but no training has been undertaken
Create a workplace based on mutual respect, fairness, and integrity where employees are encouraged to innovate and grow within the organization over the long-term		Avalon continues to promote a safe and healthy workplace, with mutual respect, fairness and integrity amongst employees.
Implement the Community Response Procedure for local Communities of Interest to utilize in case of concerns, including website and dedicated telephone number for advancing projects, if office opens		Avalon has always, and continues to, implement its whistleblower protection policy, and a formal Community Response Procedure was also completed. Some electronic procedures await a dedicated office.
Develop and implement a communications plan for advanced projects		While several projects are under development, there are no current advanced projects necessitating a communications plan.

FY 2023 Sustainability Goals

2023 goals have been set by Avalon's management team for the Company's fiscal year 2022 (September 1, 2022 - August 31, 2023). Progress towards these goals will be reported in the 2023 Sustainability Report.

Avalon has also set pre-operational or operational goals, to be accomplished as projects with funding advance to production. Finally, long-term goals illustrate the high-level, long-term objectives of the company.

FY 2023 Goal	Pre-Operational/Operational	Long Term
Health and Safety		
Zero fatalities	To never cause harm to people in the pursuit of production and profits	Engage with government and regulators to provide industry advice and perspective on more effective, practical, and achievable regulation and support of cleantech materials.
Zero lost time accidents	Create an injury free workplace and enhance the well-being of employees, contractors, and the communities in which we operate	Prepare preliminary site design for a demonstration plant at the Separation Rapids quarry site. Complete the baseline studies initiated in 2021 if financing is available.
Zero Medical aid accidents	Demonstrate through metrics that Avalon is among the leaders of exploration and mineral developers in health and safety standards	Facilitate communication between MAC and PDAC; specifically, to provide updates to PDAC on applicable MAC and regulatory initiatives as they develop.
Complete the procedures and systems to support the Avalon Health, Safety and Environmental (HSE) construction management plan to achieve the applicable Mining Association of Canada (MAC)'s Towards Sustainable Mining (TSM) A or AA ratings prior to the start of construction, and update it prior to the start of operations		Participate in PDAC's conference.



FY 2023 Goal

Pre-Operational/Operational

Long Term

Environmental and Permitting

Run the PDAC Environment Training Course, If requested.	Conduct review of options and initiate the approval process for the fishery management plan at Separation Rapids Project in respect of full time mine development	Develop and utilize innovative technologies in support of finding better ways to create value while protecting the environment
Complete the procedures and systems to support the Avalon HSE management plan for construction to achieve applicable TSM A or AA rating for all environmental indicators prior to the start of construction, and update it prior to the start of operations	Update and engineer the Separation Rapids Project for alternative energy source options in FS, if financed and initiated.	Become carbon neutral by 2050
Carbon net neutrality designed in all project models to the extent practical	Conduct prioritized project-specific financial and other risk assessments regarding the risks and opportunities posed by climate change that have the potential to generate substantive changes in future operations for advancing projects	Operate in jurisdictions with effective, practical, and achievable regulations through constructively engaging with government and regulators (independently or through industry associations)
Complete alternate preliminary route assessment, design and costing to decide on most effective hydro line route to the Separation Rapids site and installation method; complete any required environmental studies on preferred route, including access roads	Preserve and protect the long-term health, function and viability of the natural environment and Species at Risk	Demonstrate through metrics that Avalon is among the leaders in exploration and mineral developers in environmental standards and carbon net neutrality Positively contribute to the environmental performance of global mineral industry
Implement environmental programs to facilitate necessary permitting for all project phases		Positively contribute to the environmental performance of global mineral industry
Train employees on physical and mental health services offered through employee assistance plan		

Community, People, and Outreach

Train employees on physical and mental health services offered through employee assistance plan	Establish collaborative economic partnerships and Agreements with Communities of Interest local to project sites before operations	Be a responsible corporate citizen and contribute to the social and economic well-being of the communities associated with our activities
Investigate need for additional mental health supports	Establish community engagement committee with local Communities of Interest, including regulators and Indigenous groups in advanced projects	Establish and support authentic partnerships to create shared success and prosperity





FY 2023 Goal

Pre-Operational/Operational

Long Term

Community, People, and Outreach (continued)

Investigate need for additional mental health supports	Establish community engagement committee with local Communities of Interest, including regulators and Indigenous groups in advanced projects	Establish and support authentic partnerships to create shared success and prosperity
Implement the Community Response Procedure for local Communities of Interest to utilize in case of concerns, including website and dedicated telephone number for advancing projects, if office opens	Conduct a stakeholder mapping exercise to update Communities of Interest and assess material topics Be a responsible corporate citizen and contribute to the social and economic well-being of the communities associated with our activities	Increase public awareness about the minerals/metals sector through industry associations
Develop and implement a communications plan for advanced projects	Establish and support authentic partnerships to create shared success and prosperity Increase public awareness about the minerals/metals sector through industry associations	Support Canada's global leadership in mining and material science by advancing materials research through collaboration with universities, government, and industry
Continued engagement with Indigenous governments and organizations at projects, including helping facilitate collaborations with other institutions	Support Canada's global leadership in mining and material science by advancing materials research through collaboration with universities, government, and industry	
Advocate for better industry sustainability practices and increase public awareness about the minerals/ metals sector through industry associations		
Complete implementing the COVID19 policy and provide training for employees and contractors		
Create a workplace based on mutual respect, fairness, and integrity where employees are encouraged to innovate and grow within the organization over the long-term Include preferred communication methods and priorities regarding sustainability activities, including Sustainability Report content, in discussions with Communities of Interest local to Avalon's projects		



FY2023 Goal

Pre-Operational/Operational

Long Term

Governance and Economics

Update identified Avalon corporate policies for Board of Directors or Senior Management review and approval, as applicable	Update Avalon's Sustainability Policy to incorporate project construction and production phases	Conduct our business openly, honestly, ethically to keep our promises and commitments
Promote Avalon's sustainability focus and associated advantages in ongoing efforts to acquire strategic partners, investment, or other support for Avalon's projects	Establish management bonus system that includes sustainability performance	Create shareholder value through the development and operation of one or more projects in a sustainable and profitable manner
Update Avalon's Sustainability Policy	Formalize procedure to onboard site workers to include better communication of Avalon policy information, while maintaining legal requirements (i.e., plain language explanation)	
Update governance Policies as required	Acquire strategic partners, investment, or other support for Avalon's projects due, in part, to Avalon's sustainability leadership and associated advantages.	

Sustainability Performance and Reporting

Produce FY2023 Sustainability Report	Develop, formalize and audit HSE management systems appropriate to the project phase	Consistently improving sustainability performance and awareness through annual benchmarking, policy, and procedure development
	Conduct sustainability reporting protocol review to identify and initiate implementation of required management of systems that will permit TSM reporting, including input from Communities of Interest.	Demonstrate through metrics that Avalon is among the leaders in exploration and mineral developers in reporting standards and recommended frameworks
	Investigate and implement options for electronic-tracking and management of sustainability performance	
	Integrate financial and sustainability reporting, once audits demonstrate compatibility with financial systems	



Towards Sustainable Mining

Avalon annually reports on the Mining Association of Canada (MAC)'s Towards Sustainable Mining (TSM) protocols. The guidance that is provided assists all mining companies in measuring and improving their performance in eight areas of operational performance. Information on the protocols, frameworks and grade can be found on MAC's TSM, excluding Tailings Management and Preventing Child and Forced Labour.

Avalon has transitioned to MAC's new TSM exploration protocol, which recognizes the need for a simplified version of the performance protocols used by operating companies. The following is a summary of Avalon's FY2022 performance in reaching its TSM performance indicators.

	Answer	Evidence
General Questions		
Has the company communicated the commitment to personnel?	Yes	Internal meetings, as well as directly in our Annual Report.
Does the company have activities in World Heritage Sites?	No	
Does the company have activities in natural parks?	No	
Does the company have activities in national parks?	No	
Does the company have activities in nature conservation areas?	No	
Does the company have activities in wilderness areas?	No	
Does the company have activities in Natura 2000 areas?	No	Just applies to Europe, of which Avalon presently has no activities.
Does the company have activities in other valuable areas from the viewpoint of nature preservation, established by the authorities?	No	
Does the company have activities in nationally or provincially valuable landscape areas?	No	
Does the company have activities in recreational areas of the state?	No	
Does the company have activities on Indigenous land such as the Sámi Homeland in Scandinavia or traditional or treaty land in Canada ?	Yes	Separation Rapids property lies within the traditional land use area of the Wabaseemoong Independent Nations ("WIN") of Whitedog; Lilypad is near Eabametoong First Nation land;
Does the company carry out exploration at some sites with the consent of the landowner if on privately owned land?	No	Exploration occurs only on mining lease and/or mining tenured land
Does the company have a written agreement with the landowner inf on privately owned land?	No	

Indigenous and Community Relationships

Assessment of Performance Level: AA

Level B

Does the company have a website?	Yes; https://avalonadvancedmaterials.com/
Is it possible to provide feedback for the company (for example via website)?	Yes; on our website, phone numbers and email addresses provided for Corporate Headquarters and Investor Relations.
Are employees familiarized with the company values and operating principles relating to Community of Interest activities?	Yes; All directors, employees, contractors, consultants, officers and representatives must be aware of the Company's policy and have a responsibility to adhere to it. Avalon's Code of Business Conduct and Ethics, p.5).
Does the company utilize local services for its operations?	Yes; 2022 Sustainability Report provides evidence of Expenditures by Vendor Group, evidence of local and local indigenous expenditures for local services.
Have Community of Interests in the area been identified?	Yes; Operations with significant actual and potential negative impacts on local communities. Prior to each work phase proceeding each project undergoes a rigorous environmental assessment process to evaluate the potential environmental and social impacts and to identify mitigation measures where necessary. Engagement on this is sought from potentially impacted local communities, including Indigenous communities and governments. Avalon seeks out opportunities for both short and long-term benefits to the local communities commensurate to project activity (GRI 413-2, 2022 Sustainability Report).
Does the company provide information of its activities and targeting on its website or other channels?	Yes; under PROJECTS, all projects information provided. https://avalonadvancedmaterials.com/projects/ . Targets are provided on website through links to Annual Sustainable Reports.
Does the company communicate in the local language of the Community of Interests?	Yes; English.

If you have answered "Yes" to all of the Level B questions, continue to the Level A questions. If you have not answered "Yes" to all of the Level B questions, assess the company as a Level C.

Level A

Is the company's website available in relevant languages of the host jurisdiction?	Yes; English is main language of all project areas.
Has the company prepared a communication and interaction plan?	Yes; Approved communication plan Yes, Avalon does keep an effective Indigenous engagement dialogue keeping all indigenous groups aware of project activities.

Indigenous and Community Relationships (continued)

Level A

Has the company utilized local expertise in its recruitment (employees and contractors)?	Yes; Drilling and blasting were contracted out to a local certified Indigenous business.
Are employees familiarized in the company interaction activities with the Community of Interest groups?	Yes; Employees that engage with COI are familiarized with interaction activities.
Does the company inform key Community of Interests about starting field work?	Yes; Engagement occurs with potentially affected First Nations and Government agencies.
Does the company document and respond to Community of Interest feedback?	Yes. Avalon's engagement with Communities of Interest is documented and with follow-up. Communities of Interest are able to contact the appropriate manager for consultation, most frequently through the Manager, ESG & Sustainability, and the; President and CEO. The Chair of the Board of Directors is accessible to Communities of Interest for outreach on unanswered concerns.
Has the time period of fieldwork been taken into account from the viewpoint of the Community of Interests (e.g., agriculture, cottage season, reindeer herding, time of day)?	Yes.
Is the company identifiable when working in the field?	Yes.
Does the company strive to enable dialogue with all Community of Interests by utilizing different communication channels?	Yes; Avalon has a Community Response Procedure for local Communities of Interest to utilize in case of concerns, including website and dedicated telephone number for advancing projects, if office opens.
Is local management involved in Community of Interest activities?	Yes; all executives are involved and one Board member, former EFN Chief Harvey Yesno, is actively involved in First Nations community engagement.
Does the company transfer geological data obtained from exploration performed with the landowner's permission to the national register where one exists (e.g. Finland)?	N/A
If the activity is carried out on Indigenous land (e.g., the Sámi homeland in Scandinavia or traditional or treaty land in Canada)	Yes; Separation Rapids property lies within the traditional land use area of the Wabaseemoong Independent Nations ("WIN") of Whitedog; Lilypad is near Eabametoong First Nation ("EFN") land; Warren Township Feldsar, Avalon entered into a Memorandum of Understanding with the Chapleau Cree First Nation (CCFN).
* Has the company consulted with that Community of Interest prior to submitting an exploration permit application?	Yes; All permits are circulated to identified Communities of Interest.

If you have answered "Yes" to all of the Level A questions, continue to the Level AA questions. If you have not answered "Yes" to all of the Level A questions, assess the company as a Level B

Indigenous and Community Relationships (continued)

Level AA

Does the company take part in developing community relationships activities with other exploration companies?	Yes; Avalon participates in multiple committees with MAC and PDAC.
Has the company arranged a meeting with key Community of Interests to clarify future exploration plans and Community of Interest empowerment?	Yes; informed WIN, MNO of activities, as well with other First Nations who potentially will be impacted by Avalon's projects.
Are efforts being made to identify potential conflicts of interest with Community of Interests in advance?	Yes; This is key component of engagement.
Has a person responsible for Community of Interest cooperation been appointed?	Yes; Avalon's Board of Directors is updated by the CEO on relevant developments. Avalon management regularly engages with its Communities of Interest to provide project updates and obtain feedback. As well, Communities of Interest may contact the appropriate manager for consultation, most frequently through the Manager, ESG & Sustainability; President and CEO. The Chair of the Board of Directors is accessible to Communities of Interest for outreach on unanswered concerns.
Are communications and dialogue with the Communities of Interest reported internally in the company?	Yes; During Board meetings, the Board of Directors receives regular input from Avalon's management team regarding economic, environmental, community and risk management concerns, both internal and external. Avalon's Board of Directors is updated by the CEO on relevant developments.
Does the site management regularly evaluate the functionality of the interaction and the need for further action?	Yes; (G4-MM7) The Community Response Procedure, a formal community concern procedure, was developed and approved in 2021 and will be promoted and implemented as engagement moves ahead on active projects. (102-21) Avalon's Board of Directors is updated by the CEO on relevant developments. Avalon management regularly engages with its Communities of Interest to provide project updates and obtain feedback.
Is feedback from Communities of Interest sought to be taken into account in the planning and execution of the work?	Yes; Avalon continues indigenous engagement on potential project sites. Local leadership can directly engage in dialog with any member of Avalon management; have with periodic updates and engagement as projects develop.
Has local traditional knowledge been taken into account in the planning of fieldwork?	Yes; Field work includes involving COI engagement.
Has the company organized open events to Communities of Interest about exploration and its different stages?	Yes, historically Avalon has participated in community events when invited.

If you have answered "Yes" to all of the Level AA questions, continue to the Level AAA questions. If you have not answered "Yes" to all of the Level AA questions, assess the company as a Level A.

Environment

Assessment of Performance Level: AA

Level B

Has the company compiled basic information on the environmental, natural and cultural values and other land use (such as nature reserves, Natura 2000, hiking, landscape and groundwater areas, cultural heritage sites and zoning reserves) of the claim area and taken these into account in the planning?	Yes; Action taken in FY2022: Baseline study field work updates at the Separation Rapids pit site and field work for Avalon Separation Rapids Quarry Site. Assimilative Capacity Study, Storm Bay.
Does the company report internally on environmental management annually?	Yes; Through annual sustainability reports.
Does exploration make use of the infrastructure created by the area's previous activities (e.g., forestry, tourism, agriculture)?	Yes: Forestry roads are used.
Has the selection of contractors emphasized environmental safety? Have employees and contractors been familiarized with the permit conditions with regard to the environment?	Yes; Avalon includes its sustainability questionnaire on Requests for Proposals. The contractors' health and safety record, including sustainability questionnaire responses, are factored into Avalon's ultimate choice of contractor.
Have employees and contractors been familiarized with the permit conditions with regard to the environment?	Yes.
Does the company require the contractor to have spill response equipment on hand?	Yes.
Has the timing of operations been considered in fieldwork from the environmental viewpoint (e.g., nesting times)?	Yes.

If you have answered "Yes" to all of the Level B questions, continue to the Level A questions. If you have not answered "Yes" to all of the Level B questions, assess the company as a Level C.

Level A

Has the company defined resources, responsibilities and obligations related to environmental management?	Yes. Applies Precautionary Principle or approach in its management of environmental risk. During Board meetings, the Board of Directors receives regular input from Avalon's management team regarding economic, environmental, community and risk management concerns, both internal and external. Each year, senior management and the Board review the Company's sustainability goals in the annual Sustainability Report.
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Environment (continued)

Level A

Are potential impacts on nature values identified and taken into account in planning activities?	Yes. Avalon operations are all located in Canadian jurisdictions with well-developed water quality and biological performance criteria. However, occasionally there are data-poor minerals with lesser known impacts on the environment for which effluent criteria or guidelines have not yet been established. In such cases, Avalon attempts to develop its own guidelines.
Does the exploration plan describe the procedures and methods used to take environmental and nature values into account?	Yes. Prior to development proceeding, each project undergoes a rigorous environmental assessment process to evaluate the potential environmental and social impacts and to identify mitigation measures where necessary.
Are employees familiar with recognizing and taking into account the special nature values existing in the claim area?	Yes.
Does the company have guidelines, or has it provided training to employees on how to consider environmental issues in claim areas?	Yes. Training remains the responsibility of the ESG department.
Does the company take into account the special natural and environmental values of the site when selecting the exploration methods and equipment to be used at the site?	Yes; Continue to advance biodiversity management plans for financed projects in consultation with regulators, Indigenous peoples, and other Communities of Interest.

If you have answered "Yes" to all of the Level A questions, continue to the Level AA questions. If you have not answered "Yes" to all of the Level A questions, assess the company as a Level B

Level AA

Does the company have an environmental database and/or sufficient documentation on environmental issues to support exploration planning?	Yes; Avalon conducts environmental impact assessments for its advanced projects, collecting and utilizing extensive baseline environmental data utilizing standard accepted methodologies, timelines, and Quality Assurance/Quality Control protocols.
If necessary, does the company participate in the maintenance of the roads in its claim areas?	Yes.
Is the company involved in developing best practice-based methods of operation together with contractors and other actors in the industry?	Yes; Avalon supported the Prospectors and Developers Association of Canada (PDAC) efforts to improve exploration industry safety performance through active membership on the PDAC Health and Safety Committee

Environment (continued)

Level AA

Does the company monitor the impact of its operations on the environment?

Yes. Results of monitoring are regularly reported to government regulators, local communities. Avalon intends to develop specific and detailed management plans for any project development to monitor aquatic effects, site run off, spill contingency, waste management and other potential risks to water. No sites had active (continuous) water discharges. No site discharges had potential for environmental impacts in 2022.

If you have answered "Yes" to all of the Level AA questions, continue to the Level AAA questions. If you have not answered "Yes" to all of the Level AA questions, assess the company as a Level A.

Safety

Assessment of Performance Level: AAA

Level B

Does the company use processes for risk assessment and management?

Yes. During Board meetings, the Board of Directors receives regular input from Avalon's management team regarding economic, environmental, community and risk management concerns, both internal and external. These are held at least four times a year (there were 6 meetings held in FY2022) or as necessary to address other matters that may arise between quarterly meetings.

When required, the Directors act on this input by providing direction to senior management or through amendments, to the Company's policies. Current policies are found on Avalon's website. Avalon's risk management practices include a formal process to identify, evaluate, rank, mitigate, monitor, and assign responsibility for all types of risks facing the Company. High level and moderate risks must be regularly monitored and mitigated to within acceptable levels. Emergency preparedness is a component of risk management.

Does the company have work instructions concerning safe working methods?

Yes. In support of Avalon's Sustainability Policy, a health, safety and environment management plan and emergency response plans have been developed that detail health and safety requirements for all of Avalon's active project sites as part of the Occupational Health and Safety Management System. Regular occupational health, safety and environment meetings, inspections and risk assessments are completed at all active sites and reported through the organization. While accident prevention is the priority, accident and incident management and emergency response are all components of the health and safety programs at all sites. All site workers are required to participate in daily risk assessment prior to the start of work and prior to any significant change in work activity during the shift.



Safety (continued)

Level B

Has the company taken occupational health into account in work planning?

Yes. Health and safety is a core Company value. While safety is the responsibility of all employees and contractors, Avalon's VP, Sustainability has overall responsibility for health and safety management systems. Avalon's corporate values state that "We will never cause harm to people in the pursuit of production and profits or in the conduct of our business." Avalon ensures the workforce has the proper resources to work safely in full compliance with all health and safety regulations. Avalon works in jurisdictions with well-developed health and safety regulations, and all have worker safety and compensation systems for the management of injured workers. In support of Avalon's Sustainability Policy, a health, safety and environment management plan and emergency response plans have been developed that detail health and safety requirements for all of Avalon's active project sites as part of the Occupational Health and Safety Management System. Contractor health and safety systems and performance are assessed against Avalon's standards prior to engaging them. Avalon has a Risk Management Policy and Procedure that is utilized to identify and manage risk at all stages of its operations. Risk assessments are completed before all new site activities and management plans and procedures developed as required based on these assessments.

Has safety been emphasized in the contractors' selection criteria?

Yes. Avalon includes its sustainability questionnaire on Requests for Proposals. The contractors' health and safety record, including sustainability questionnaire responses, are factored into Avalon's ultimate choice of contractor. (403-7) Only qualified contractors with solid HS performance and appropriate HS management systems are utilized.

Has safety been emphasized in the contractors' selection criteria?

Yes. Avalon includes its sustainability questionnaire on Requests for Proposals. The contractors' health and safety record, including sustainability questionnaire responses, are factored into Avalon's ultimate choice of contractor. (403-7) Only qualified contractors with solid HS performance and appropriate HS management systems are utilized.



Safety (continued)

Level B

Does the company provide safety induction for its employees?	Yes. All employees receive site-specific induction training prior to any work activities. This includes the identification and management of site-specific risks. All drillers also receive specific training on drilling hazard management and safety requirements prior to arrival on site from their employer. (403-2) Regular occupational health, safety and environment meetings, inspections and risk assessments are completed at all active sites and reported through the organization. While accident prevention is the priority, accident and incident management and emergency response are all components of the health and safety programs at all sites. All site workers are required to participate in daily risk assessment prior to the start of work and prior to any significant change in work activity during the shift. This is supported by near miss and accident reporting and associated actions to reduce future risks related to them. All accidents and incidents are investigated and actions to reduce or eliminate the associated risks and potential for a repeat incident are taken.
Does the company take care of the first aid preparedness of the employees?	Yes. Avalon has a joint health and safety committee located in the Toronto office, and periodic walk-throughs are conducted to assess first aid supplies and protective equipment.
Do the company's employees carry a first aid kit when in the field?	Yes.
Does the management assess accidents and take the necessary measures to prevent recurrences of similar accidents?	Yes. (403-3) All accidents and incidents are investigated and actions to reduce or eliminate the associated risks and potential for a repeat incident are taken.
Are safety inspections carried out at the exploration site?	Yes. (403-2) Regular occupational health, safety and environment meetings, inspections and risk assessments are completed at all active sites and reported through the organization.
Are staff involved in planning safety objectives?	Yes. All site workers are required to participate in daily risk assessment prior to the start of work and prior to any significant change in work activity during the shift. workers have participated in site-specific training and have contributed to these training programs and the development of emergency response plans.
Does the company report safety metrics incl. near miss -cases?	Yes. Avalon continued to track all health and safety metrics as currently instituted and completed an internal review of Avalon metrics vs their peers. No new metrics were identified this fiscal year. (403-2) Near-miss and accident reporting and associated actions to reduce future risks related to them. All accidents and incidents are investigated and actions to reduce or eliminate the associated risks and potential for a repeat incident are taken.



Safety (continued)

Level B

Do the vehicles used by the company have initial extinguishing equipment and first aid kit? Yes.

If you have answered "Yes" to all of the Level B questions, continue to the Level A questions. If you have not answered "Yes" to all of the Level B questions, assess the company as a Level C.

Level A

Have the contractors been involved in carrying out risk assessments and a risk management plan? Yes; All site workers are required to participate in daily risk assessment prior to the start of work and prior to any significant change in work activity during the shift.

Have the results and management methods of risk assessments been made available to the company's management, employees and contractors? Yes; Health and safety responsibility is assigned at all levels within the Company as part of the health, safety, and environment management plan. Material, high-level risks are periodically reported to the Board of Directors at their request, or on the recommendation of management to ensure that risk management systems are in place and operating to manage these risks to acceptable levels. Increased scrutiny occurs when there is a significant change in a project's status or phase.

Are the roles and responsibilities defined in the risk management plan? Yes; Health and safety responsibility is assigned at all levels within the Company as part of the health, safety, and environment management plan.

Has a written version of the contact details of the key persons responsible for safety been made and is it available to staff? Yes; All employees receive site-specific induction training prior to any work activities. This includes the identification and management of site-specific risks. All drillers also receive specific training on drilling hazard management and safety. All employees receive site-specific induction training prior to any work activities. This includes the identification and management of site-specific risks.

Have the safety related communication responsibilities been defined? Yes; Company wide responsibilities is given

Are adequate resources assigned to safety management, with the scope of operations in mind? Yes.

Have the company's permanent field workers completed an Occupational First Aid course level 1? N/A. No permanent field workers

Are safety indicators reported regularly to the management of the site/exploration area? Yes; Regular occupational health, safety and environment meetings, inspections and risk assessments are completed at all active sites and reported through the organization. While accident prevention is the priority, accident and incident management and emergency response are all components of the health and safety programs at all sites. All site workers are required to participate in daily risk assessment prior to the start of work and prior to any significant change in work activity during the shift.





Safety (continued)

Level A

Is there a checklist or other tools available for safety checks?	Yes; Only official responsibility is at executive-level.
Are any additional measures being negotiated with contractors regarding the safety of exploration?	Yes: All contractors with safety risks are required to fill out Avalon's Sustainability Questionnaire. Only qualified contractors with solid HS performance and appropriate HS management systems are utilized. Contractors are required to utilize only trained employees that are qualified and fit for work.
Have safety tasks and responsibilities been communicated internally?	Yes; Only official responsibility is at executive-level.
Has the company's employees been provided with training related to initial extinguishing and fire safety?	Yes; An Avalon employee attends the office building's management group's health and safety committee meetings, as well as fire warden training. All Toronto-based employees participate in an emergency fire drill and evacuation a minimum of once a year.

If you have answered "Yes" to all of the Level A questions, continue to the Level AA questions. If you have not answered "Yes" to all of the Level A questions, assess the company as a Level B

Level AA

Are safety instructions updated annually?	Yes; There are daily updates on sites. All site workers are required to participate in daily risk assessment prior to the start of work and prior to any significant change in work activity during the shift.
Does the company keep records of the safety introductions given to the personnel?	Yes.
Does the company assess the results of safety inspections internally?	Yes; (403-2) Regular occupational health, safety and environment meetings, inspections and risk assessments are completed at all active sites and reported through the organization.
Have the company's personnel and contractors been informed about the company's safety objectives and their implementation?	Yes; Workers and Contractors are given a questionnaire and given daily field risk assessments.
Has the company offered employees the opportunity to participate in Occupational First Aid course level 2?	Yes.
Does the company know the location of the defibrillator closest to the headquarters?	Yes; it is clearly posted.

If you have answered "Yes" to all of the Level AA questions, continue to the Level AAA questions. If you have not answered "Yes" to all of the Level AA questions, assess the company as a Level A.

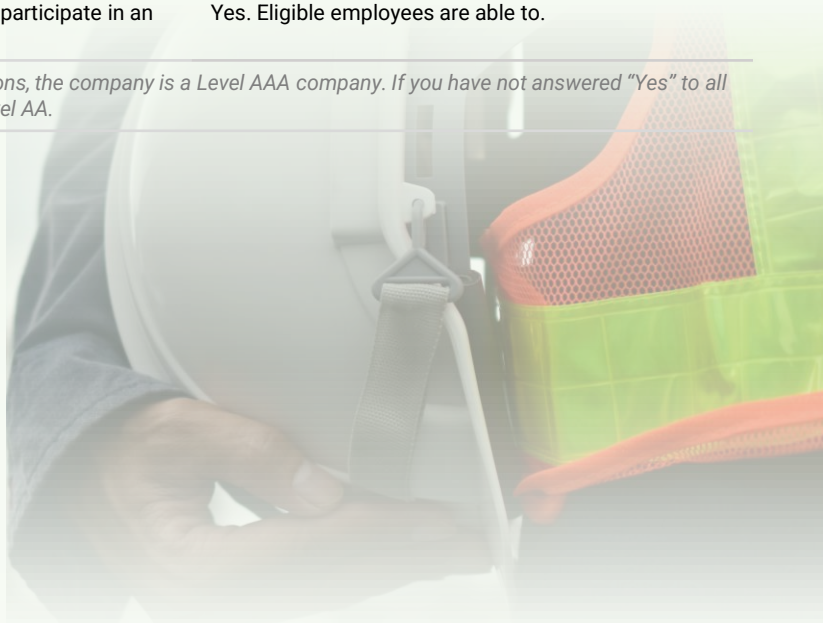


Safety (continued)

Level AAA

Does the company's management promote the continuous improvement of occupational health and the prevention of accidents?	Yes; Long Term goals. Consistently improve health and safety performance and awareness of employees and contractors working in the field (p.13 of 2021 Report). During Board meetings, the Board of Directors receives regular input from Avalon's management team regarding risk management concerns, both internal and external.
Does the company encourage its employees to live a healthy lifestyle during and outside working hours?	Yes; Discussed in ongoing meetings.
Have new practices been introduced to promote health and safety at work?	Yes; Health and safety is discussed.
Has the company achieved the safety targets it has set?	Yes.
Are the annual health and safety targets measurable and based on the principle of continuous improvement?	Yes.
Does the company also communicate its best practices to other operators in the industry in common forums of the sector?	Yes: Supports the Prospectors and Developers Association of Canada (PDAC) efforts to improve exploration industry safety performance through active membership on the PDAC Health and Safety Committee. Support the PDAC efforts to improve exploration industry safety performance through active membership on the PDAC Health and Safety Committee.
Is there a defibrillator at the company's local headquarters?	Yes.
Does the company have an emergency system based on satellite positioning?	N/A; due to exploration activities.
Has the company offered employees the opportunity to participate in an Occupational First Aid level 3 course?	Yes. Eligible employees are able to.

If you have answered "Yes" to all of the Level AAA questions, the company is a Level AAA company. If you have not answered "Yes" to all of the Level AAA questions, assess the company as a Level AA.



Global Reporting Initiative (GRI Index)

Below is the table of Avalon's disclosures to the Global Reporting Initiative's standards. Reporting is completed in accordance with GRI Standards: Core Option.

Please note that, due to Avalon not significantly changing its form, governance or approach to material topics during the fiscal year, many of the Disclosures in the Index below contain repetitive text from Avalon's previous reports.

GRI 100 Series: General Disclosures

Organizational Profile

Name of the organization	102-1	Avalon Advanced Materials Inc. (Avalon or the Company)
Activities, brands, products, and services	102-2	Avalon is a mineral resource exploration and development company that owns five projects across Canada, all potential sources of critical minerals for clean technologies. Avalon is also evaluating opportunities to apply new extraction technologies to recover rare earths and other metals from historic mine wastes, including acid mine drainage, at closed mine sites across North America, while remediating the long-term environmental liability.
Location of headquarters	102-3	Toronto, Ontario, Canada.
Location of operations	102-4	Canada. See Avalon's website at Projects for specific project locations.
Ownership and legal form	102-5	Avalon is a Canadian corporation continued under the Canadian Business Corporations Act. It is a publicly traded company with common shares listed on the Toronto Stock Exchange, on the OTCQB in New York and it also trades on the Frankfurt Stock Exchange in Germany.
Markets served	102-6	As none of Avalon's projects are currently in production, the Company does not yet serve any market with a product or service. Avalon is primarily targeting the clean technology sector, where new demand is being created for elements such as lithium, tantalum, cesium and the rare earths.
Scale of Organization	102-7	See Avalon's 2022 Year End Financial Statements available publicly on SEDAR .
Information on employees and other workers	102-8	As of August 31, 2022, Avalon had five permanent, full-time employees (two female, three male), and one part time employee (female) . The workforce is based in Toronto, Ontario, Canada. Avalon employs contracted individuals in some corporate roles, as well as project site roles, as needed.
Supply Chain	102-9	Avalon purchases goods and services to develop the properties it owns. It does not currently sell any products or services.
Significant changes to the organization and it's supply chain	102-10	There were no significant changes during FY2022 in Avalon's ownership, scale, or supply chain.

Organizational Profile (continued)

Precautionary Principle or approach	102-11	Avalon applies the precautionary approach in its management of environmental risk. This approach reflects the need to take prudent action in the face of potentially serious risk without having to await the completion of further scientific research for confirmation. The precautionary approach incorporates a cost benefit analysis to ensure that the lack of full scientific certainty is not used as a reason for postponing cost-effective measures to prevent environmental degradation.
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External Initiatives	102-12	Avalon has publicly subscribed to the principles and practices of the Prospectors and Developers Association of Canada (PDAC)'s e3 Plus: A Framework for Responsible Exploration and the Mining Association of Canada (MAC)'s Towards Sustainable Mining (TSM) framework.
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Membership of associations This information refers to memberships maintained at the organizational level. In addition, Avalon supports its President and CEO, Don Bubar’s participation on the Advisory Board to the Faculty of Science of McGill University, as Director of PDAC’s Mining Matters earth science education program and as a Board member of the Nature Foundation supporting the Canadian Museum of Nature in Ottawa.	102-13		
		Association	Involvement/Membership Level
		Association for Mineral Exploration British Columbia	Member; Health and Safety Committee Member
		Canadian Critical Minerals and Materials Alliance	Founding Member
		International Standards Organization TC298 Rare Earth Canadian Mirror Committee	Committee Member
		Mining Association of Canada	Member of the Board; Environmental Committee Member; Science Committee Member; Community of Interest Panel
		NWT & Nunavut Chamber of Mines	Member
		Prospectors and Developers Association of Canada	Lands Committee Member; Health and Safety Committee Chair; Indigenous Affairs Committee Member; Conventions Planning Member; Corporate Social Responsibility Committee Member; Geoscience Committee Member; Awards Committee Member

Strategy

Statement from senior decision-maker	102-14	Avalon applies the precautionary approach in its management of environmental risk. This approach reflects the need to take prudent action in the face of potentially serious risk without having to await the completion of further scientific research for confirmation. The precautionary approach incorporates a cost benefit analysis to ensure that the lack of full scientific certainty is not used as a reason for postponing cost-effective measures to prevent environmental degradation.
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Key impacts, risks, and opportunities	102-15	Avalon has publicly subscribed to the principles and practices of the Prospectors and Developers Association of Canada (PDAC)'s e3 Plus: A Framework for Responsible Exploration and the Mining Association of Canada (MAC)'s Towards Sustainable Mining (TSM) framework.
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Ethics and Integrity

Values, principles, standards, and norms of behavior	102-1	See Avalon's website at About - Governance .
Mechanisms for advice and concerns about ethics	102-17	The Whistleblower Protection Policy establishes procedures for managing complaints received regarding accounting, internal accounting controls, auditing matters or violations of the Company's Code of Business Conduct and Ethics. All good faith reports of suspected violations will be treated fairly and without reprisals. Investigations will be conducted into all allegations of inappropriate behaviour. The Whistleblower Protection Policy provides contact persons ethics independent of management for those who wish to file a report and is found on Avalon's website at About - Governance. When an operation is in place, Avalon will employ additional external mechanisms for reporting concerns, including a community concern mechanism already in draft.

Governance

Governance structure	102-18	Avalon is a widely held public company that is overseen by its Board of Directors and managed by its senior management team. For further information, see Avalon's website at About - Directors and Committees .
Delegating authority	102-19	During Board meetings, the Board of Directors receives regular input from Avalon's management team regarding economic, environmental, community and risk management concerns, both internal and external. These are held at least four times a year (there were 6 meetings held in FY2022) or as necessary to address other matters that may arise between quarterly meetings. When required, the Directors act on this input by providing direction to senior management or through amendments, to the Company's policies. Current policies are found on Avalon's website at About - Governance .
Executive-level responsibility for economic, environmental, and social topics	102-20	Avalon's President and CEO, Don Bubar, is the primary contact for informing the Board of Directors of any concerns. Reporting to the President, Avalon has also appointed Jim Andersen, VP, Finance and CFO; Georgi Doundarov, Sr. Metallurgical Engineer, and Amiel Blajchman, Manager, ESG & Sustainability, to be responsible for the day-to-day management of economic, environmental, safety, process development, risk management programs and social topics, and to provide quarterly updates to the Board of Directors on these matters.
Consulting stakeholders on economic, environmental, and social topics	102-21	Avalon's Board of Directors is updated by the CEO on relevant developments. Avalon management regularly engages with its Communities of Interest to provide project updates and obtain feedback. As well, Communities of Interest may contact the appropriate manager for consultation, most frequently through the President and CEO. The Chair of the Board of Directors is accessible to Communities of Interest for outreach on unanswered concerns.
Composition of the highest governance body and its committees	102-22	See Avalon's website at About - Directors and Committees .
Chair of the highest governance body	102-23	Alan Ferry is the non-executive Chair of Avalon's Board of Directors.



Governance (continued)

Nominating and selecting the highest governance body	102-24	The responsibility of nominating an individual as a Director of the Company falls under the Compensation, Governance and Nominating (CGN) Committee. In making its recommendations, the CGN Committee will consider the candidates' competencies and skills (including experience in economic, environmental, or social topics); ability to devote sufficient time and resources; diversity; and compliance with the requirements of the applicable securities' regulatory authorities. The CGN Committee periodically reviews the size and composition of the Board and Board Committees and accepts recommendations from the President and CEO. As a publicly traded company, all members of Avalon's Board of Directors are re-elected by shareholders' votes at the Company's Annual General Meeting.
Conflicts of interest	102-25	The Board of Directors conducts periodic reviews of the Company's Code of Business Conduct and Ethics, which all Directors and employees are subject to. Additionally, Directors are bound by the rules of the Canada Business Corporations Act. The Act obliges Directors to disclose material interest in any transaction or arrangement that the Board is contemplating. Directors who have divulged such an interest are prohibited from participating in the analysis or voting on the disclosed transaction. The Company's Code of Business Conduct and Ethics was updated in fiscal 2021. Avalon periodically reviews and updates all its corporate policies.
Role of highest governance body in setting purpose, values, and strategy	102-26	Avalon's Vision, Mission and Values statement received Board Approval in 2013. Material revisions to this and other corporate policies require Board approval. Each year, senior management and the Board review the Company's sustainability goals in the annual Sustainability Report.
Collective knowledge of highest governance body	102-27	See GRI Disclosure 102-19 on page 20.
Evaluating the highest governance body's performance	102-28	The Board of Directors conducted a self-assessment during FY2015 with respect to overall effectiveness and performance. The evaluation was conducted and reviewed internally. There were no specifications that came or were identified from the self-assessment. Similar assessments are planned to be conducted in the future.
Identifying and managing economic, environmental, and social impacts	102-29	Avalon's risk management practices include a formal process to identify, evaluate, rank, mitigate, monitor, and assign responsibility for all types of risks facing the Company. High level and moderate risks must be regularly monitored and mitigated to within acceptable levels. Emergency preparedness is a component of risk management.
Effectiveness of risk management processes	102-30	Avalon's Manager, Sustainability and VP, Finance have day to day responsibility for management of economic, health and safety, environmental and social risks. Health and safety responsibility is assigned at all levels within the Company as part of the health, safety, and environment management plan. Material, high-level risks are periodically reported to the Board of Directors at their request, or on the recommendation of management to ensure that risk management systems are in place and operating to manage these risks to acceptable levels. Increased scrutiny occurs when there is a significant change in a project's status or phase.
Review of economic, environmental, and social topics	102-31	See GRI Disclosure 102-19 on page 20.



Governance (continued)

Highest governance body's role in sustainability reporting	102-32	The Manager, Sustainability is responsible for all aspects of sustainability reporting. The annual Sustainability Report is reviewed by members of senior management, the Board of Directors, and the Sustainability Advisory Committee.
Communicating critical concerns	102-33	See GRI Disclosure 102-19 on page 20.
Nature and total number of concerns	102-34	Avalon did not experience any health and safety, environmental, or financial critical concerns over the course of FY2022. Mechanisms for addressing critical concerns is as described in Avalon's Whistleblower Protection Policy found on Avalon's website at About – Governance .
Remuneration policies	102-35	Avalon's CGN Committee aims to evaluate and maintain fair and reasonable levels of compensation. Compensation to Avalon's executive officers, including the President and CEO, has three components: base salary, cash bonuses and long term incentives. Bonus compensation is an occasional cash component of management compensation to permit the recognition of outstanding individual efforts, performance (including health, safety, environmental and community), achievements and/or accomplishments by members of the Company's management team. The stock option plan and other long term incentives are intended to align employees' performance with the interests of the shareholders in the continued growth of the Company. The Board receives remuneration for acting as Directors. See Avalon's 2022 Year End Financial Statements with Management Discussion and Analysis publicly available on SEDAR or Avalon's annual Information Circular available on its website at Investors - Regulatory Filings .
Process for determining remuneration	102-36	Senior executive compensation is governed through the approval of the CGN Committee. Compensation of non-executive employees is determined by management and is based on market conditions, values, and individual performance. Avalon currently does not rely on remuneration consultants to establish compensation levels but has in the past utilized external salary surveys to determine market values.
Stakeholders' involvement in remuneration	102-37	The Company's methodology and practices with respect to remuneration are described in detail in the Company's 2022 Information Circular. No issues were raised by the shareholders with respect to remuneration at the Company's Annual General Meeting held in February 2022.

Stakeholder Engagement

List of stakeholder groups	102-40	See 'Defining Report Content, Materiality, and Boundaries' on page 49 of Avalon's 2016 Sustainability Report.
Collective bargaining agreements	102-41	None.
Identifying and selecting stakeholders	102-42	See 'Defining Report Content, Materiality, and Boundaries' on page 49 of Avalon's 2016 Sustainability Report.



Stakeholder Engagement (continued)

Approach to stakeholder engagement	102-43	As reflected in the table below, Avalon regularly conducts Communities of Interest engagement at a level commensurate with project activity. Engagement is part of the way Avalon conducts business and is not undertaken specifically as part of the report preparation process.
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Avalon 2022 Engagement Summary

	Separation Rapids			Lilypad			Nechalacho			East Kemptville			Multiple		
	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020
Total Non-Indigenous	343	368	263	0	14	14	141	154	136	18	61	141	799	1131	981
Contacts	7	48	57	0	14	14	60	69	52	18	34	87	31	120	175
Engagements	336	320	206	0	0	0	81	85	84	0	27	54	768	1011	806
Government/Regulators	70	109	252	0	14	2	8	66	76	18	37	49	271	231	253
Other	273	259	11	0	0	2	133	88	56	0	14	31	528	828	728
NGOs	0	0	0	0	0	10	0	0	4	0	10	6	0	72	0
Surface Rights Holder	0	0	0	0	0	0	0	0	0	0	0	55	0	0	0
Total Indigenous	71	70	86	1	299	29	0	0	44	0	3	32	0	30	2
Contacts	48	68	64	1	299	29	0	0	40	0	3	8	0	4	2
Engagements	23	2	22	0	0	0	0	0	4	0	0	24	0	26	0
Indigenous Governments and Organizations	29	60	58	1	1	11	0	0	36	0	0	32	0	0	0
Indigenous Business	42	10	26	0	14	18	0	0	2	0	3	0	0	0	0
Indigenous Other	0	0	2	0	284	0	0	0	6	0	0	0	0	30	2
Indigenous Rights Violations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Engagement in fiscal 2022 was related to field activities at Separation Rapids and Lilypad Projects and with regulators and industry associations on government regulatory and policy issues. There was little engagement activity at Nechalacho or East Kemptville. Regrettably, during the Pandemic, face to face engagement with Indigenous people was put on hold. Avalon continued to keep Indigenous groups informed of our activities.

Key topics and concerns raised	102-44	As reflected in the table below, Avalon regularly conducts Communities of Interest engagement at a level commensurate with project activity. Engagement is part of the way Avalon conducts business and is not undertaken specifically as part of the report preparation process.
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Reporting Practice

Entities included in the consolidated financial statements	102-45	See Avalon's 2022 Year End Financial Statements available publicly on SEDAR . This Sustainability Report does not cover inactive or non-material entities that may be mentioned within the Company's Financial Statements.
Defining report content and topic Boundaries	102-46	See 'Defining Report Content, Materiality, and Boundaries' on page 49 of Avalon's 2016 Defining Sustainability Report.
List of material topics	102-47	See 'Defining Report Content, Materiality, and Boundaries' on page 49 of Avalon's 2016 Sustainability Report.
Restatements of information	102-48	There have been no restatements of Avalon's previous Sustainability Reports.



Reporting Practice (continued)

Changes in reporting	102-49	See 'Defining Report Content, Materiality, and Boundaries' on page 49 of Avalon's 2016 Defining Sustainability Report.
Reporting period	102-50	September 1, 2021 to August 31, 2022 (Avalon's 2022 fiscal year, or FY2022).
Date of most recent report	102-51	November 28, 2022.
Reporting cycle	102-52	Annual.
Contact point for questions regarding the report	102-53	Avalon's Manager, ESG & Sustainability, Amiel Blajchman, can be reached at sustainability@AvalonAM.com or +1-416-364-4938.
Claims of reporting in accordance with the GRI Standards	102-54	This Sustainability Report has been prepared in accordance with the GRI Standards: Core option.
GRI content index	102-55	This complete GRI Content Index begins on page 18.
External assurance	102-56	This Sustainability Report has not been externally assured. At this time, there is a low level of risk in the information presented herein and the fundamental systems used to gather data. Previous annual sustainability reports have been reviewed by Sustainalytics in the process of their assessment of ESG risk in fiscal 2021.

GRI 200 Series: Economic GRI

GRI 201: Economic Performance

Direct economic value generated and distributed

201-1

	FY 2022	FY 2021	FY 2020	FY 2019	FY 2018
Revenue					
Interest	\$21,766	\$6,127	\$24,787	\$42,819	\$61,777
Management Fees	0	5,122	109,351	10,204	0
Expenses	4,064,299	3,966,153	7,922,144	3,594,034	3,520,753
Loss from Operations	(4,042,533)	(3,954,904)	(7,788,006)	(3,541,011)	(3,458,976)
Gain on Sale of property, plant and equipment	0	0	2,373,261	0	0
Net Loss before income taxes	(4,042,533)	(3,954,904)	(5,414,745)	(3,541,011)	(3,458,976)
Deferred Income Tax Recoveries	96,690	199,781	47,481	154,676	218,232
Net Loss for the Year	\$(3,945,843)	\$(3,755,123)	\$(5,367,264)	\$(3,386,335)	\$(3,240,744)



GRI 201: Economic Performance (continued)

Financial implications and other risks and opportunities due to climate change	201-2	By the nature of the products the Company intends to offer, Avalon is well positioned to take advantage of the transition to a low carbon economy. Opportunities that exist for Avalon due to climate change include lithium for batteries for stationary energy storage or electric vehicles, and indium and rare earths in green power generation systems. Projects will consider climate change risk in design, construction, operations, and closure.
Defined benefit plan obligations and other retirement plans	201-3	Avalon currently has no defined benefits plan but plans to establish some type of pension plan in the future when a long-term revenue generating, producing operation has been established.
Financial assistance received from government	201-4	Avalon received \$60,523 through the Canada Emergency Commercial Rent Assistance .

GRI 203: Indirect Economic Impacts

Infrastructure and investments and services supported	203-1	There were no infrastructure developments, services or investments supported by Avalon during FY2022.
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GRI 204: Procurement Practices

Proportion of spending on local suppliers	204-1
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43%

of 2022 spending at Separation Rapids from Indigenous and Local vendors.

Separation Rapids Expenditures by Vendor Group						
	FY 2022		FY 2021		FY 2020	
Indigenous Vendors	\$110,190	25%	\$356,452	52%	\$6,977	2%
Local Vendors	\$76,237	17%	\$129,667	19%	\$86,058	24%
Other Vendors	\$250,213	57%	\$195,032	29%	\$269,512	74%
TOTAL	\$436,640		\$681,151	\$362,547	\$362,547	

Lilypad Expenditures by Vendor Group						
	FY 2022		FY 2021		FY 2020	
Indigenous Vendors	\$0	0%	\$6,243	2%	\$0	0%
Local Vendors	\$0	0%	\$187,665	66%	\$0	0%
Other Vendors	\$75,644	100%	\$90,967	32%	\$17,146	100%
TOTAL	\$75,644		\$284,875	\$17,146		

GRI 300 Series: Environment

GRI 302: Energy

Energy consumption within the organization 302-1 Avalon consumed 532.85 gigajoules (GJ) internally over FY2022. See table below for year-over-year comparison.

Energy consumption outside of the organization 302-2 Avalon consumed 83.15 GJ externally over FY2022. See table below for year-over-year comparison.

↓ 56%

Decrease external energy use from 2018 to 2022.

Energy Use (GJ)					
	FY 2022	FY 2021	FY 2020	FY 2019	FY2018
Internal	532.85	2189.67	357.99	389.29	1206.64
External	83.15	36.95	139.89	313.24	359.86

Note that due to a data error, 2021 Energy Use was misreported in the 2021 Sustainability Report.

Reduction of energy consumption 302-4 Energy consumption decreased by 1656.82 GJ from FY2021. This is attributed to the completion of the bulk sample program at Separation Rapids, reducing the use of diesel fuel. This was coupled with a decrease in external energy consumption due to reduced executive travel. See table above for year-over-year comparison.

GRI 303: Water and Effluents

Interactions with water as a shared resource 303-1 Potential risks to water are identified as part of a risk management program and appropriate management strategies identified. Avalon's manager, Sustainability has overall responsibility for managing Avalon's activities that may impact water. Avalon conducts or will conduct environmental impact assessments for its advanced projects, collecting and utilizing extensive baseline environmental data utilizing standard accepted methodologies, timelines, and Quality Assurance/Quality Control protocols. Baseline water quality data normally spans more than two years. Avalon utilizes decades of locally available climatic data for the design and management of water and wind and to design for critical storm events such as temperature extremes, the 1 in a 100-year storm and probable maximum storm events. Aquatic, terrestrial species and Species at Risk Act-compliant studies detail species local to project sites and management plans are developed as necessary to protect them. This includes engagement with local Indigenous groups, regulators, and communities regarding a wide variety of water uses, discharges, short and long-term water quality criteria and goals and including the cumulative impacts of other potential environmental impacts and climate change. Results of monitoring are regularly reported to government regulators, local communities and are also summarized in Avalon's annual Sustainability Report. Avalon also prepares rehabilitation plans for post closure land use that include the long-term protection of water quality post closure. Avalon is engineering its processing facilities to minimize water use and maximize recycling. Water is planned to be withdrawn from large local sources in a manner that will not have any significant impact on water flow and water levels and thus have no measurable impact on the biota. Planned pilot scale testing of water treatment systems ensures that the minimal water quantities discharged and returned to the local sources meet or improve upon effluent criteria, and where those are not available, Avalon has historically established its own criteria for the protection of receivers. In keeping with best practices, site specific and detailed management plans will be developed for each project location to monitor aquatic effects, site run off, spill contingency, waste management and other potential risks to water.

GRI 303: Water and Effluents (continued)

Management of water discharge-related impacts	303-2	Avalon operations are all located in Canadian jurisdictions with well-developed water quality and biological performance criteria. However, occasionally there are data-poor minerals with lesser known impacts on the environment for which effluent criteria or guidelines have not yet been established. In such cases, Avalon attempts to develop its own guidelines. Avalon has worked extensively with MAC and the Canadian Ministry of the Environment and Climate Change to establish the water quality and biological criteria that were incorporated into the new Metal and Diamond Mines regulations. The Company is also engaged with regulators in the establishment of regulations and guidelines associated with new acts at the provincial, territorial, and federal levels. Avalon has historically selected non-fish habitat for siting of its proposed tailings management facilities and discharge locations where possible. Where not possible, Avalon engaged and will engage with Indigenous communities and regulators regarding their preferred water discharge location, which include considerations of the receiver water and biotic health, use(s) and how best to minimize potential for impacts.
Water withdrawal	303-3	Avalon removed approximately 168.03 m3 from the municipal water system at the Company head office in Fiscal 2022.
Water Discharge	303-4	All the 168.03 m3 of water removed was returned , the water from head office operations to the municipal water system for treatment and eventual release.
Water Consumption	303-5	Avalon considers water usage for Fiscal 2022 to be nil as all water withdrawn is eventually returned to the natural environment.

GRI 304: Biodiversity

Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	304-1	The East Kemptville Project is located near the Tobeatic Game Reserve in Nova Scotia, to the north of the property. Avalon's other project sites are not located in or near protected or high biodiversity value areas.
Significant impacts of activities, products, and services on biodiversity	304-2	Currently, Avalon has no material construction, manufacturing plants, mines or transportation infrastructure that have the potential to have significant impacts on biodiversity in protected areas or areas of high biodiversity outside protected areas.
Habitats protected or restored	304-3	See Disclosure G4-MM01 on page 34 .
IUCN Red List species and national conservation list species with habitats in areas affected by operations	304-4	See page 39 of Avalon's 2019 Sustainability Report.

GRI 305: Emissions

Direct (Scope 1) GHG emissions	305-1	Avalon generated total Scope 1 Emissions of 5.54 tonnes of CO2e. See table below for year over-year comparisons. Scope 1 emissions decreased substantially due to the impact of Covid restrictions and completion of work programs.
Energy indirect (Scope 2) GHG emissions	305-2	Avalon generated total Scope 2 Emissions of 25.58 tonnes of CO2e. See table below for year-over-year comparisons. Scope 2 emissions remained low due to a large decrease in electricity/steam power consumption at the company's head office due to reduced activity in the building due to the COVID-19 pandemic.
Other indirect (Scope 3) GHG Emissions	305-3	Avalon generated total Scope 3 Emissions of 6.21 tonnes of CO2e. See table below for year-over-year comparisons. Scope 3 Emissions decreased primarily due to reduced executive travel.
Nitrogen oxides (NOX), sulfur oxides (SOX), other significant air emissions	305-7	NOX are included in the CO2e totals for Scope 1, 2 and 3 Emissions. Due to the factors used to convert units of energy/distance to CO2e, only for some types of emissions are the NOX tones calculated separately, and then converted to CO2e. SOX is not a material component of the and Company's emissions at this time.

↓ 89%

Decrease Scope 1 emissions
from 2018 to 2022.

GHG Emissions (Tonnes CO2e)					
	FY 2022	FY 2021	FY 2020	FY 2019	FY2018
Scope 1	5.54	135.43	2.3	3.77	52.36
Scope 2	25.58	19.65	15.09	15.46	23.78
Scope 3	6.21	3.63	11.13	13.98	27.25

Note that due to a data error, 2021 Scope 2 Emissions were misreported in the 2021 Sustainability Report.

GRI 306: Waste 2021

Waste generated 306-3

Waste generated (tonnes)	
	FY 2022
Waste	1.58
Paper/Cardboard	0.50
Shredding	0.00
Cans/Bottles/Plastics	0.02
Organics	0.17
Grease	0.00
Fluorescent Lights	0.00
Cigarette Butts	0.00
Scrap Metal	0.00
Other	0.00
TOTAL	2.27

↓ 0.83 tonnes

Reduction of water
generated and reused from
2021

Note due to rounding, numbers
totalled may not equal



GRI 306: Waste 2021

Waste diverted from disposal	306-4	0.69 tones of waste were diverted from disposal by the company's head office during FY2022. All this waste was non-hazardous and diverted to municipal recycling sites.
Waste directed to disposal	306-5	1.58 tones of non-hazardous waste were directed to disposal from the Company's head office in Toronto, Ontario. This waste was directed to offsite landfill facilities.

GRI 307: Environmental Compliance

Non-compliance with environmental laws and regulations	307-1	There have been no instances of non-compliance with laws and regulations in FY2022.
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GRI 308: Supplier Environmental Assessment

New suppliers screened using environmental criteria	308-1	Avalon includes its sustainability questionnaire on Requests for Proposals. The contractors' health and safety record, including sustainability questionnaire responses, are factored into Avalon's ultimate choice of contractor.
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GRI 400 Series: Social

GRI 401: Employment

New employee hires and employee turnover	401-1	Avalon hired one new employee during the reporting period. Overall turnover rate was 22%.
Benefits provided to full-time employees that are not provided to temporary or part-time employees	401-2	Part-time employees who worked less than 24 hours per week or temporary employees are not covered under Avalon's group insurance benefits plan compared to full time employees.
Parental leave	401-3	All full time and permanent part time employees of Avalon are entitled to parental leave as lawful in the province of Ontario.



GRI 403: Occupational Health and Safety

Occupational health and safety management systems	403-1	Health and safety is a core Company value. While safety is the responsibility of all employees and contractors, Avalon's Manager, Sustainability has overall responsibility for health and safety management systems. Avalon's corporate values state that "We will never cause harm to people in the pursuit of production and profits or in the conduct of our business." Avalon ensures the workforce has the proper resources to work safely in full compliance with all health and safety regulations. Avalon works in jurisdictions with well-developed health and safety regulations, and all have worker safety and compensation systems for the management of injured workers. In support of Avalon's Sustainability Policy, a health, safety and environment management plan and emergency response plans have been developed that detail health and safety requirements for all of Avalon's active project sites as part of the Occupational Health and Safety Management System. Contractor health and safety systems and performance are assessed against Avalon's standards prior to engaging them. Avalon has a Risk Management Policy and Procedure that is utilized to identify and manage risk at all stages of its operations. Risk assessments are completed before all new site activities and management plans and procedures developed as required based on these assessments.
Hazards identification, risk assessment, and incident investigation	403-2	Regular occupational health, safety and environment meetings, inspections and risk assessments are completed at all active sites and reported through the organization. While accident prevention is the priority, accident and incident management and emergency response are all components of the health and safety programs at all sites. When there are active sites, all site workers are required to participate in daily risk assessment prior to the start of work and prior to any significant change in work activity during the shift. This is supported by near miss and accident reporting and associated actions to reduce future risks related to them. All accidents and incidents are investigated and actions to reduce or eliminate the associated risks and potential for a repeat incident are taken.
Occupational health services	403-3	Avalon's Manager, Sustainability is responsible for the development of the health and safety and risk management system. All employees are responsible for their own safety and the safety of others around them in the workplace, and for the identification and management of risk. Avalon provides training for all employees in the identification and management of risk, with an emphasis on supervisory training and root cause analysis. Accident and incident reports are reviewed by the Manager, Sustainability. Where reports are inadequate, they become involved in the ongoing investigation to ensure that the risks have been properly identified and addressed.
Worker participation, consultation, and communication on occupational health and safety	403-4	Avalon is a small company with part time, occasional workers employed at sites. These workers have participated in site-specific training and have contributed to these training programs and the development of emergency response plans. They are also involved in the training of site contractors. The Manager, Sustainability participates in the development of the health and safety training programs, risk assessment training, risk assessment and the preparation of emergency response plans. Avalon has a joint health and safety committee located in the Toronto office, and periodic walk-throughs are conducted to assess first aid supplies and protective equipment. An Avalon employee attends the office building's management group's health and safety committee meetings, as well as fire warden training. All Toronto-based employees participate in an emergency fire drill and evacuation a minimum of once a year.

GRI 403: Occupational Health and Safety (continued)

Worker training on occupational health and safety	403-5	All employees receive site-specific induction training prior to any work activities. This includes the identification and management of site-specific risks. All drillers also receive specific training on drilling hazard management and safety requirements prior to arrival on site from their employer.
Promotion of worker health	403-6	All full-time, permanent and part-time employees who worked more than 24 hours per week at Avalon are covered under a benefits plan that includes health promotion and services. Employees are given multiple, confidential methods to receive medical and healthcare directly through the Company's insurance provider. The health issues and risks of each employee remain confidential from the Company.
Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	403-7	All contractors with safety risks are required to fill out Avalon's Sustainability Questionnaire. Only qualified contractors with solid HS performance and appropriate HS management systems are utilized. Contractors are required to utilize only trained employees that are qualified and fit for work. Avalon provides site specific training to all employees at site. Daily field risk assessments are required, as well as whenever there is a significant change in work activity during the day. Avalon and contractors are covered by government employee compensation and protection plans and are required to carry EHS insurance where necessary.
Workers covered by an occupational and safety management system	403-8	All employees are covered by an occupational health and safety management system.

Work-related injuries 403-9

Fiscal Year	Lost Time Injury Frequency	Medical Aid Injury	Total Recordable Frequency	Severity Frequency	Time Lost Injuries	Medial Aid Injuries	Total Recordable Injuries	Total Hours	Lost or Light Duty Days
FY 2022	0	0	0	0	0	0	0	11,520	0
FY 2021	0	9.23	9.23	0	0	1	1	21,664	0
FY 2020	0	0	0	0	0	0	0	24,492	0
FY 2019	0	0	0	0	0	0	0	27,207	0
FY 2018	0	0	0	0	0	0	0	32,462	0
FY 2017	0	5	5	18	0	1	1	43,268	4

Work-related ill health	403-10	There were no fatalities at any of Avalon's sites in FY2022. There were no reportable work-related health issues in FY2022. Work-related risks will be significantly greater in number when Avalon is in operations. Avalon developed procedures and took appropriate and successful COVID-19 protection measures.
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GRI 404: Training and Education

Percentage of employees receiving and career development reviews

404-3

Permanent employees take part in an annual performance review, conducted by their direct regular performance supervisor or Board of Directors as determined by the employment category.

GRI 405: Diversity and Equal Opportunity

Diversity of governance bodies and employees

404-1

Executive employees are defined as the President, VPs and the Controller. All other employees are Professional level.

Age and Gender of Avalon Employees

	under 30 Female	under 30 Male	30-50 Female	30-50 Male	over 50 Female	over 50 male	Total	Minority
Professional	0	0	1	0	1	0	2	2
Executive	0	0	0	1	1	2	4	2
TOTAL							6	4

Age and Gender of Avalon Board of Directors

	% of Board	% Minority
Male – 4	67%	17%
Female - 2	33%	0
>50	100%	0

GRI 406: Non-discrimination

Incidents of discrimination and corrective actions taken

406-1

Avalon had no reported incidents of discrimination at any of its work sites in FY2022.

GRI 411: Rights of Indigenous Peoples

Incidents of violations involving rights of indigenous peoples

411-1

There were no reported rights violations involving Indigenous peoples, nor any other group or individual, in FY2022.

GRI 412: Human Rights Assessment

Employee training on human rights policies or procedures	412-1	Each year every Avalon employee is required to sign a Policy Compliance Certificate. This states that the employee has read, understands, and agrees to abide by the Company's policies and procedures, including Avalon's Anti- Harassment, Bullying and Violence Policy.
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GRI 413: Local Communities

Operations with local community engagement, impact	413-1	Avalon's level of engagement with Communities of Interest is commensurate with project activity. No formalized programs have yet been implemented for projects, given Avalon's present low impact activities. Impact assessments are completed at all advanced development programs projects and development activities developed under Indigenous Accommodation Agreements.
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Operations with significant actual and potential negative impacts on local community.	413-2	Given that only low impact exploration activities have taken place at Avalon's projects, there have been no known negative significant impacts to local communities from Avalon's activities. Prior to each work phase proceeding each project undergoes a rigorous environmental assessment process to evaluate the potential environmental and social impacts and to identify mitigation measures where necessary. Engagement on this is sought from potentially impacted local communities, including Indigenous communities and governments. Avalon seeks out opportunities for both short and long-term benefits to the local communities commensurate to project activity.
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GRI 414: Supplier Social Assessment

New suppliers that were screened using social criteria	414-1	See 308-1
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GRI 419: Socioeconomic Compliance

Non-compliance with laws and regulations in the social and economic area	419-1	Avalon had no fines, nor any non-monetary sanctions levied against it in FY2022
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G4 Mining and Metals Sector Disclosures

G4 Sector Disclosures:

Amount Of Land (Owned Or Leased, And Managed For Production Activities Or Extractive Use) Distributed Or Rehabilitated

G4-MM1

All sites have financial assurance filed for identified as liabilities for rehabilitation for insurance purposes.

Avalon Land Holding and Disturbed Area	
	Hectares
Land Owned, Leased or Managed	15,352
Land Disturbed	34
Land Rehabilitated/Transferred	0

The Number And Percentage Of Sites Requiring Biodiversity Management Plans and Percentage Of Those Sites With Plans In Place

G4-MM2

One hundred percent of Avalon sites requiring biodiversity management plans have such in place. All of Avalon's project sites with significant past or ongoing activities have financially assured rehabilitation plans in place to mitigate potential disturbance-related impacts to biodiversity. Given the low level of impact at all sites at their present stages of development, impacts to biodiversity are not significant. The East Kemptville Project is located adjacent to the Tobeatic Wilderness Area in Nova Scotia, on the northern boundary of the property.

Total Amounts Of Overburden, Rock, Tailings, And Sludges And Their Associated

G4-MM3

Should the East Kemptville Project move ahead, Avalon will inherit a 5.9 million tonne low grade ore stockpile, a tailings management area with 18.8 million tonnes of acid-generating tailings and additional waste dumps totaling another four million tonnes. The project design includes the full remediation of these historical liabilities. There are no material rock or tailings piles at Separation Rapids, or Lilypad. Avalon possesses 94 drums of flotation process waste in Yellowknife, Northwest Territories awaiting disposal. An analysis conducted in 2017 confirmed that the average concentrations of elements are well within the Metal Mining Effluent Regulation limits and below to marginally above the Canadian Council of Ministers of the Environment guidelines

Number of Strikes and Lockouts Exceeding One Week's Duration

G4-MM4

None.

Total Number of Operations Taking Place In Or Adjacent to Indigenous Peoples' Territories, where there are formal Agreements

G4-MM5

Avalon has no operations but has advanced development projects near Indigenous communities. Avalon has a Memorandum of Understanding with the Wabaseemoong Independent Nations and initiated discussions with the Métis Nation of Ontario at the Separation Rapids Project in Northwestern Ontario. Avalon is advancing with a Memorandum of Understanding with the Acadia First Nation near the East Kemptville Project in Nova Scotia. Avalon has initiated discussions with the Fort Hope Eabametoong First Nation related to the Lilypad Project near Pickle Lake, Ontario. Avalon signed a Memorandum of Understanding with the Chapleau Cree First Nation in 2009. Should the Warren Township Project advance, this MOU will be re-visited.

G4 Sector Disclosures: Mining and Metals (continued)

Significant Disputes Relating To Land Use	G4-MM6	Avalon had no significant disputes relating to Avalon land use, customary rights of local communities, or Indigenous people in FY2022. The Ministry and Wabaseemoong Independent Nation that have the authority for development at Separation Rapids remain supportive of the project.
Grievance Mechanisms To Resolve Disputes Relating To Land Use	G4-MM7	The Community Response Procedure, a formal community concern procedure, was developed and approved in 2021 and will be promoted and implemented as engagement moves ahead on active projects.
Number (and Percentage) of Company Operating Sites Where Artisanal and Small-Scale Mining (ASM) Takes Place On, or Adjacent To, The Site; The Associated Risks and the Actions Taken to Manage and Mitigate These Risks	G4-MM8	Avalon has zero operations or sites where artisanal or small-scale mining occurs either on the site itself or adjacent to.
Sites Where Resettlements Took Place, the Number Households Resettled in Each, and How Their Livelihoods Were Affected in the Process	G4-MM9	Avalon has zero operations or sites where any resettlement took place.
Number And Percentage of Operations With Closure Plans	G4-MM10	Avalon currently has no operations. Avalon's Separation Rapids, and East Kemptville Projects have closure plans appropriate for the level of Avalon activity at those sites, including budgeted exploration activity clean-up and financial assurance. Closure activities for the Warren Township site are being developed. Avalon's CEO must approve all closure cost for projects. Please see Avalon's 2022 Year End Financial statements, available publicly on SEDAR , for details.



UN Sustainable Development Goals Map

UN Goal	Avalon Disclosure	
UN1 No Poverty	GRI 204-01 GRI 413-01 G4-MM5	G4-MM6 G4-MM7
UN2 Zero Hunger	GRI 201-01 GRI 203-01 GRI 411-01 GRI 413-01	G4-MM5 G4-MM6 G4-MM7
UN3 Good Health and Well-Being	TSM Safety and Health GRI 305-01 GRI 305-02 GRI 305-07 GRI 306-03 GRI 306-04	GRI 401-02 GRI 403-02 GRI 403-03 G4-MM1 G4-MM3
UN4 Quality Education	GRI 102-27 GRI 404-01 GRI 404-02	
UN5 Gender Equality	GRI 102-22 GRI 102-24 GRI 201-01 GRI 203-01 GRI 204-01 GRI 401-01 GRI 401-02	GRI 401-03 GRI 404-01 GRI 404-03 GRI 405-01 GRI 405-02 GRI 406-01 GRI 414-01
UN6 Clean Water and Sanitation	TSM Water Stewardship GRI 303-01 GRI 303-02 GRI 303-03 GRI 303-04 GRI 304-01 GRI 304-02	GRI 304-04 GRI 306-02 GRI 306-03 GRI 306-04 GRI 306-05 G4-MM1 G4-MM2 G4-MM3
UN7 Affordable and Clean Energy	GRI 201-01 GRI 203-01	GRI 302-01 GRI 302-02





UN Sustainable Development Goals Map (continued)

UN Goal	Avalon Disclosure	
UN8 Decent Work and Economic Growth	TSM Safety and Health	GRI 403-01
	GRI 102-41	GRI 403-02
	GRI 201-01	GRI 403-03
	GRI 204-01	GRI 403-04
	GRI 302-01	GRI 404-01
	GRI 302-02	GRI 404-03
	GRI 303-03	GRI 405-01
	GRI 303-04	GRI 406-01
	GRI 401-01	GRI 414-01
	GRI 401-02	G4-MM4
	GRI 401-03	
UN9 Industry, Innovation and Infrastructure	TSM Energy and Greenhouse Gas Emissions GRI 201-01	GRI 203-01
UN Goal	Avalon Disclosure	
UN10 Reduced Inequalities	GRI 401-01 GRI 404-01	GRI 404-03
UN11 Sustainable Cities and Communities	TSM Indigenous and Community Relationships TSM Energy and Greenhouse Gas Emissions TSM Crisis Management and Communications GRI 203-01	
UN12 Responsible Consumption and Production	TSM Water Stewardship GRI 302-01 GRI 302-02 GRI 303-03 GRI 303-04 GRI 305-01	GRI 305-02 GRI 305-04 GRI 305-05 GRI 305-06 GRI 305-07 GRI 306-03 GRI 306-04 G4-MM1 G4-MM3





UN Sustainable Development Goals Map (continued)

UN Goal	Avalon Disclosure	
UN13 Climate Change	TSM Energy and Greenhouse Gas Emissions GRI 302-01 GRI 302-02	GRI 305-01 GRI 305-02 GRI 305-07
UN14 Life Below Water	GRI 304-01 GRI 304-02 GRI 304-04 GRI 305-01 GRI 305-02	GRI 305-07 GRI 306-03 GRI 306-05 G4-MM1 G4-MM2
UN15 Life on Land	TSM Biodiversity Conservation GRI 304-01 GRI 304-02 GRI 304-04 GRI 305-01 GRI 305-02	GRI 305-07 GRI 306-03 GRI 306-05 G4-MM1 G4-MM2
UN16 Peace, Justice, and Strong Institutions	GRI 102-16 GRI 102-17 GRI 102-21 GRI 102-22 GRI 102-23 GRI 102-24	GRI 102-25 GRI 102-29 GRI 102-37 GRI 307-01 GRI 406-01 GRI 414-01
UN17 Partnerships for the Goals	TSM Indigenous and Community Relationships	





For more information, visit:
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