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**Analysis of the Mining Association of
Canada's Promotion of Sustainability among
Member Companies:
*Benchmark and Recommendations***

Prepared for:
The Mining Association of Canada (MAC)

Prepared by:
**Five Winds International
& Strandberg Consulting**





TABLE OF CONTENTS

STUDY PURPOSE	1
EXECUTIVE SUMMARY	1
THE MINING ASSOCIATION OF CANADA – SUSTAINABILITY PROGRAM ANALYSIS.....	3
<i>A Benchmark Relative to Other Canadian Industry Associations</i>	<i>3</i>
SUMMARY OF INTERVIEW FINDINGS	20
<i>Areas of strength in MAC's promotion of sustainability among member companies</i>	<i>20</i>
<i>Potential gaps in MAC's sustainability programming</i>	<i>20</i>
BENCHMARK ANALYSIS	22
GENERAL STRENGTHS	23
RECOMMENDATIONS FOR ADVANCING MAC'S SUSTAINABILITY PROGRAMMING.....	23
APPENDIX 1: TOWARDS SUSTAINABLE MINING: GUIDING PRINCIPLES.....	26
APPENDIX 2: MEMBER COMPANY INTERVIEWEES AND QUESTIONS	27
MEMBER COMPANY INTERVIEWEES	27
INTERVIEW GUIDE	27

STUDY PURPOSE

The Mining Association of Canada (MAC) was interested in having an independent, external analysis conducted of its current activities to promote sustainability among member companies. This analysis was based on a set of benchmarks emerging from the study completed for Natural Resources Canada in 2007 on *the Role of Industry Associations in the Promotion of Sustainability*, the Project Team's understanding of best practice in this area and interviews with seven MAC member company representatives. The individuals interviewed as part of this study and the questions used to guide these interviews are provided in Appendix 2.

Findings from the research noted above were used to generate the following summary:

- Areas where MAC is strong in its promotion of sustainability among member companies,
- Areas that may be potential gaps in MAC's sustainability programming, and
- Recommendations for continuing to build on the strengths and closing the potential gaps as MAC moves forward with its sustainability programming.

This analysis will inform an upcoming strategy session MAC is holding in June 2008.

EXECUTIVE SUMMARY

The assessment of MAC's sustainability programming against best practice amongst other Canadian industry associations revealed that MAC is a high performer and exceeds best practice in eight of the areas benchmarked and was consistent with best practices of other industry associations in six areas. There are three areas where MAC's programming is consistent with industry practice, however, the eight Canadian associations studied to date are possibly underperforming their potential in these aspects, including: a formal process for issue identification; industry goals and targets; and "house in order" programs.

MAC's comprehensive sustainability approach, including its strong commitment to sustainability, a highly engaged board of directors, indicator protocols, third party verification, stakeholder engagement and transparent reporting, is the strongest sustainability approach compared to the 2007 benchmark study of 7 Canadian industry associations, and as reported in the 7 member interviews. According to the interviews, this programming has substantively:

- Improved the reputation and image of the domestic mining industry,
- Fostered commitment to sustainability amongst member firms, and
- Enhanced stakeholder trust and engagement with the industry.

From this analysis, it is clear that MAC's efforts to work with the industry in advancing its sustainability performance and accountability are paying off in significant best practice. To remain among – or ahead of – the leaders in this area, however, MAC could consider some areas for improvement, including the following:

- Improve external communications of the benefits and outcomes of the TSM strategy and program;
- Facilitate a discussion around the potential risks and opportunities of broadening the focus of TSM beyond national to international;
- Consider surveying member companies, international, national and regional stakeholders on emerging sustainability issues in the sector, and in the process, validate whether MAC should take some initial actions to address some of the additional issues that emerged in this analysis;
- Consider broadening stakeholder engagement activities and development of strategic partnerships with national and international organizations on social issues in mining industry (e.g., H&S, human rights, community development, etc.);
- Develop and formalize a strategic planning process for MAC's sustainability programming for improved results, credibility and transparency;
- Consider developing and reporting on a combination of process and outcome-based performance metrics and goals for MAC specifically and the sector generally;
- Evaluate and develop updated governance framework for MAC's sustainability programs;
- Assess and improve accountability and transparency framework; and



- Consider implementing a few key “house in order” programs to demonstrate leadership and commitment to sustainability amongst MAC staff.

THE MINING ASSOCIATION OF CANADA – SUSTAINABILITY PROGRAM ANALYSIS

A Benchmark Relative to Other Canadian Industry Associations

The Mining Association of Canada (MAC) is a national organization of the Canadian mining industry. It comprises companies engaged in mineral exploration, mining, smelting, refining and semi-fabrication. Member companies account for the vast majority of Canada’s output of metals and major industrial minerals. MAC has 30 member companies and 42 associate members (suppliers and others who support the objectives of MAC, but who are not directly in the mining business).

The analysis below is based on a set of benchmarks resulting from a study completed for Natural Resources Canada in 2007 on *the Role of Industry Associations in the Promotion of Sustainability*. For each benchmark area, the following information on MAC’s sustainability programming for its members is documented:

- A description of the benchmark or area of practice being assessed (Column 1);
- A description of MAC’s activities in the area of each benchmark (Column 2);
- Notable strengths based on the findings from the NRCan study completed in 2007, the Project Team’s understanding of best practices in the area, and interviews with member companies (Column 3);
- Potential gaps, based on the same criteria as above (Column 4); and
- A qualitative rating (also in Column 3) based on MAC’s performance relative to the seven industry associations¹ included in the initial NRCan study. This qualitative rating uses the following scheme:

<i>Exceeds Best Practice</i>	<i>Consistent with Best Practice</i>	<i>Below Best Practice</i>
<i>(only Association in benchmark sample with practice in place)</i>	<i>(A few Associations in benchmark sample have practice in place)</i>	<i>(Majority of Associations in benchmark sample have practice in place)</i>
●	◐	○

¹ The original seven industry associations included in NRCan’s study on “The Role of Industry Associations in the Promotion of Sustainability” were the Canadian Association of Petroleum Producers (CAPP), Canadian Bankers Association (CBA), Canadian Chemical Producers Association (CCPA), Canadian Association of Manufacturers and Exporters (CME), Forest Products Association of Canada (FPAC), Prospectors and Developers Association of Canada (PDAC) and Retail Council of Canada (RCC).



Sustainability/ CSR Practice	Description	Strengths	Potential Gaps
A. Sustainability Vision and Position			
<p>Association has developed an overall sustainability/ CSR vision for the sector/ membership</p>	<ul style="list-style-type: none"> • Term used: CSR, sustainability or other <ul style="list-style-type: none"> ◦ <i>Sustainability (As in "Towards Sustainable Mining")</i> • Scope, coverage and definition of CSR or Sustainability that is used (e.g., does it include commitment to environment, social, economic performance) <ul style="list-style-type: none"> ◦ <i>Subscribe to Brundtland definition of sustainable development which is environmental, social and economic well being</i> ◦ <i>As part of TSM, developed set of Guiding Principles that articulate the sustainability vision for the industry (Appendix 1)</i> • Vision adoption date, drivers <ul style="list-style-type: none"> ◦ <i>Vision adopted June 2004</i> ◦ <i>Drivers: MAC felt trust in the mining industry was eroding in Canada, wanted to do something to re-build that trust and credibility to ensure future sustainability of the industry (access to land and resources)</i> ◦ <i>Figure depicting vision and key elements of program is presented below:</i> 	<p style="text-align: center;">●</p> <ul style="list-style-type: none"> • TSM focuses on all three pillars of sustainability (environment, social and economy) • In many respects, TSM's Guiding Principles exceed best practice, but the study did not include a comprehensive detailed comparison of the various principles adopted by the 8 industry associations; other industry associations demonstrate some good practice in this area 	



Sustainability/ CSR Practice	Description	Strengths	Potential Gaps
	<ul style="list-style-type: none"> ○ Adherence to TSM Guiding Principles is global, however reporting against indicators in each priority performance area is for Canadian operations only. Reporting also not required for closed properties or exploration projects ○ Thus far three member companies have chosen to apply TSM internationally, two of these also include their closed and exploration properties 		
<p>Board has a role in CSR strategy and oversight (high level commitment)</p>	<ul style="list-style-type: none"> ● Name and mandate of Board Committee <ul style="list-style-type: none"> ○ TSM Governance Team – standing committee of board; members are CEOs of member companies and also board members. The committee was created to examine opportunities for improving the mining industry’s performance and reputation with key stakeholders ○ TSM Initiative Leaders – sub-committee reporting to the Governance Team, made up of multi-disciplinary representatives from all member companies (range from 	<ul style="list-style-type: none"> ● Clear Board mandate – responsibility rests at high level ● Board regularly 	



Sustainability/ CSR Practice	Description	Strengths	Potential Gaps
	<p>manager to VP level reps). The purpose of this committee is to develop and refine performance indicators and technical guidelines to help members implement TSM. Four Initiative Leaders are members of the Governance Team. They regularly report progress and issues to the GT. The current Chair of the GT is a member of the IL committee</p> <ul style="list-style-type: none"> ○ TSM is a standing board agenda item • Board Directors receive training on CSR/Sustainability <ul style="list-style-type: none"> ○ No • Board's commitment to CSR/Sustainability has been communicated internally and externally <ul style="list-style-type: none"> ○ Externally - letter in TSM Report from Chair of the TSM Governance Team who is a director of the board; Chair's and GT Chair's statements in the 2007 Annual Report communicates progress on TSM, etc. 	<p>communicates its commitment to TSM to external audiences</p>	
<p>Association staff have dedicated responsibility for overseeing and implementing sustainability/ CSR programs</p>	<ul style="list-style-type: none"> • Number of full time employees assigned to manage program <ul style="list-style-type: none"> ○ .75 FTE plus shared responsibilities among other staff members (all staff assist in TSM implementation through various initiatives and responsibilities) • Positions and title(s) of sustainability / CSR staff, e.g. VP of environment <ul style="list-style-type: none"> ○ .75 FTE: VP Sustainable Development and Public Affairs - responsible for overseeing whole TSM Initiative ○ Additional staff with explicit responsibilities for TSM implementation: <ul style="list-style-type: none"> ▪ VP Technical Affairs - responsible for tailings management ▪ VP Economic Affairs - responsible for energy/ GHG management ▪ Director Government Relations - supports TSM outreach ▪ President – public spokesperson on TSM 	<p>●</p> <ul style="list-style-type: none"> • Integration of TSM into all job descriptions 	
<p>Association forms linkages or partnerships with international standard bodies and/or other leading sector initiatives in sustainability / CSR</p>	<ul style="list-style-type: none"> • Strategic partnerships Association is involved with <ul style="list-style-type: none"> ○ MOU with IUCN Canada to reduce rate of biodiversity loss (building on international work of ICMM with IUCN International) ○ Letter of intent with Assembly of First Nations; attempting to formalize into an MOU June 2008. MOU will address joint advocacy on land claim issues, HR issues, mining employment, regional conflicts etc. ○ MOU with Canadian Boreal Initiative to keep each other informed of their efforts, look for collaborative opportunities, etc. 	<p>●</p> <ul style="list-style-type: none"> • A number of strategic partnerships have been formed with national and international organizations – primarily on environmental issues in mining industry 	<ul style="list-style-type: none"> • Potential lack of strategic partnerships with national and international organizations on social issues in mining industry (e.g., H&S, human rights, community development, etc.)



Sustainability/ CSR Practice	Description	Strengths	Potential Gaps
	<ul style="list-style-type: none"> • Linkages/ involvement with other leading sustainability initiatives (e.g., GRI, Global Compact or other international Code of Conduct, other Industry Association sustainability initiative) <ul style="list-style-type: none"> ○ Associate Member of ICMM; MAC contributed to development of ICMM's assurance program, participated in ICMM's biodiversity task group that developed the Good Practice Guidance, worked on international acid rock drainage issues, etc. ○ Works closely with other commodity associations on sustainability initiatives (e.g., Nickel Institute, other major mining and metals associations including Eurometaux and Minerals Council of Australia) ○ Participates in MEND program (Mine Environmental Neutral Drainage) - administered by small secretariat at CANMET, part of NRCan ○ Supports and participates in International Network for Acid Prevention ○ Supported FOCAL research on indigenous governance and extractive sector in Latin America ○ Participant in CSR Round Tables on Corporate Social Responsibility ○ Participates in NOAMI (The National Orphaned/Abandoned Mines Initiative) – played key role in getting this established ○ Internship agreement with Environment Canada and Pollution Probe to support interns studying REACH in Europe. Results to be shared with ENGOs, government and industry. Supported by NSERC ○ Sits on Board of NA Bird Conservation Initiative and Eastern Habitat Joint Venture 		
<p>A minimum level of sustainability / CSR performance has been set for members (e.g., mandatory performance criteria)</p>	<ul style="list-style-type: none"> • Description of performance criteria <ul style="list-style-type: none"> • <u>Endorsement of Guiding Principles and Reporting on Indicator Protocols</u> <ul style="list-style-type: none"> ○ MAC requires members to subscribe to set of guiding principles backed by specific performance areas (and their associated indicators) against which member companies must self-assess and publicly report annually on by their fourth year (currently 4 indicators; 1 more will be added in 2008) <ul style="list-style-type: none"> ▪ Performance indicators for biodiversity under development, likely adopted in 2008 ▪ Aboriginal Relations Policy adopted as a draft by MAC Board to be finalized pending further consultation after which it will be considered as a possible protocol. ▪ Draft mine closure policy going to MAC Board in June 2008 for adoption. Policy includes reclamation objectives and addresses mitigation of socio-economic effects of mine closure and community 	<p style="text-align: center;">●</p> <ul style="list-style-type: none"> • Minimum level performance criteria has been set for members consistent with best practice • Recent expansion to include external verification of performance is consistent with best practice although MAC's focus on verification of member company information is noteworthy • Process of protocol 	<ul style="list-style-type: none"> • Lack of mandatory global TSM application - required reporting against indicators in each priority performance area is for Canadian operations only (some companies are applying TSM at global operations) • No economic indicators (e.g. community development, community resiliency) • Could consider a specific



Sustainability/ CSR Practice	Description	Strengths	Potential Gaps
	<p><i>capacity plans for long-term economic development. Under consideration for possible indicator development</i></p> <ul style="list-style-type: none"> ○ <i>MAC aims to have 7-8 performance areas in total for members to report on. Performance areas around biodiversity, mine closure and Aboriginal relations are currently being considered</i> ○ <i>Members required to have TSM performance indicators externally verified (as of 2006)</i> ○ <i>Performance criteria measure quality and comprehensiveness of management systems</i> <ul style="list-style-type: none"> ● Description of monitoring/ verification/ corrective action or remediation process <ul style="list-style-type: none"> ○ <u>External Verification</u> <ul style="list-style-type: none"> ○ <i>MAC established process of external verification to ensure member company' reporting on TSM performance indicators is consistent, comparable, accurate and transparent</i> ○ <i>Terms of Reference for "Verification Service Providers" have been developed to ensure that:</i> <ul style="list-style-type: none"> ▪ <i>MAC member companies follow clear and consistent process for hiring verification services to ensure independence</i> ▪ <i>Verification service providers are required to meet set of minimum standards and conform to defined procedures to perform an assessment that can be relied upon by MAC members and stakeholders</i> ○ <i>Three elements or 'layers' give MAC members and stakeholders confidence in integrity of reported company performance on TSM indicators:</i> <ol style="list-style-type: none"> 1. <i>verification of company self-assessments by an external verifier</i> 2. <i>letter of assurance from CEO or authorized officer confirming the verified results (published on MAC's website)</i> 3. <i>annual post-verification review of two or three member companies' performance selected by the Communities of Interest (COI) Advisory Panel, as a third level of verification</i> <ul style="list-style-type: none"> ● <i>Post-verification review lends public credibility to TSM, highlights deficiencies and best practices, brings cohesiveness in application of self-assessment and verification, and drives continued performance improvements</i> 	<p>development is comprehensive and solid, particularly extensive engagement of stakeholders</p> <ul style="list-style-type: none"> ● Achieving Level 5 performance is good stretch goal, not easy to meet ● Including management system elements within the indicators supports implementation within the companies ● Covers some social and environmental indicators; this diversity exceeds best practice ● Evidence of ongoing evolution and continuous improvement of mandated performance indicators exceeds best practice ● Inclusion of COI Panel (stakeholders) as part of verification allows for significant transparency ● COI Panel members given full opportunity to discuss issues with 2 member companies a year, based on criteria determined by the Panel 	<p>code of practice related to product stewardship, and practices related to suppliers and transportation of product to customers; the industry will increasingly be pushed to address product/material stewardship – activities such as developing life cycle profiles of materials will, and for some metals are, becoming common practice. Other practices include risk-based research and work with tier one and tier two users to look at more sustainable applications of materials. ICMM work on materials stewardship and eco-efficiency reflects this trend</p> <ul style="list-style-type: none"> ● Economic element could be integrated with existing indicators (e.g., eco-efficiency type measures) ● Currently mandatory outcome measures are lacking; some stakeholders will be looking for specific impact indicators that have clear baselines, targets and year on year measurement of continuous improvement. While pollutant releases are reported, they are not communicated as explicit TSM requirement. Perhaps these could be more formally integrated into mandated performance



Sustainability/ CSR Practice	Description	Strengths	Potential Gaps
	<ul style="list-style-type: none"> • COI panel selects criteria for which companies to review through consensus process; criteria and number of companies reviewed may vary year to year ○ Adherence to TSM is a condition of membership spelled out in TSM Membership package. Member companies have three years to become full participants in TSM 		<p>indicators</p> <ul style="list-style-type: none"> • May wish to consider formalizing and disclosing the process for considering status of companies who are not full participants in TSM
B. Identifying Key Sustainability Issues in the Sector			
<p>Association has process for identifying key CSR/sustainability trends, issues, etc. in its sector</p>	<ul style="list-style-type: none"> • Description of strategy/ process for identifying issues, e.g. trends reports, best practice scans, stakeholder engagement, etc. <ul style="list-style-type: none"> ○ MAC's Board adopted 3-year Strategic Plan for TSM in 2002 which expired in 2005; process is in place to develop a new TSM strategic plan commencing this June ○ MAC selected 1st four performance areas as they were deemed to be of critical importance to the industry (supported by early research by Decision Partners who identified crisis management and external outreach/engagement as key areas). COI panel and members stimulated development of next two performance areas (biodiversity and aboriginal relations). <ul style="list-style-type: none"> ▪ Mine Closure was identified as a key issue area through development of the biodiversity policy – this policy addresses closure, but Initiative Leaders felt that closure was too significant an issue to just get passing mention in a biodiversity policy. ILs took this recommendation to COI panel who in turn recommended to the GT that a closure policy be developed ○ COI Advisory Panel provides input on priority issues and trends the industry needs to respond to through its meetings, though there is no formal process by which issues are identified. Typically they are raised through discussions at committee meetings (standing item on agenda) and through Panel review of draft agenda for next meeting ○ Governance Team meetings (3-4 per year) provide ongoing input on issues, though no regular (e.g. annual or every 3-year) process to scan emergent issues ○ Initiative Leaders regularly consider emerging issues, with ongoing working relationship with COI Panel and Governance Team, though not through a formal, regular process ○ MAC holds overall strategic planning exercise once every five years; TSM is considered within this process 	<p style="text-align: center;">●</p> <ul style="list-style-type: none"> • MAC has been very open to development of new performance areas/ indicator protocols – members seem satisfied with the “radar” the association has in this respect 	<ul style="list-style-type: none"> • Consider developing more formalized/ standardized approach for strategic planning and goal setting regarding sustainability generally and TSM specifically, e.g. ongoing renewal of 3-year plans, etc. • Consider integration of scenario planning or other similar type process into MAC's strategic planning – process where 3 or so likely very long term future scenarios (e.g. 20 - 25 years out) that are both possible and potentially uncomfortable would be developed, helping MAC to work with the industry on managing under these potential scenarios. This would help MAC anticipate key vulnerabilities in the industry, help its member companies manage better for an uncertain future and help position the industry as



Sustainability/ CSR Practice	Description	Strengths	Potential Gaps
	<ul style="list-style-type: none"> • Member involvement in strategy development <ul style="list-style-type: none"> ○ <i>MAC is upgrading its TSM strategy and will be engaging members in strategy renewal</i> • Issues that have been identified in the previous strategy development process and to date: <ul style="list-style-type: none"> ○ <i>Crisis Communications</i> ○ <i>Energy and Greenhouse Gas Emissions Management</i> ○ <i>External Outreach</i> ○ <i>Tailings Management</i> ○ <i>Aboriginal Relations</i> ○ <i>Biodiversity</i> ○ <i>Mine closure & reclamation</i> ○ <i>Release of minerals and metals (hydrogen sulphide, sulphur dioxide, arsenic, zinc, copper, nickel and cadmium)</i> ○ <i>Acid rock drainage</i> ○ <i>Water use and recycling</i> ○ <i>Abandoned mines</i> 		<p>international leaders</p> <ul style="list-style-type: none"> • Consider conducting assessment or evaluation of degree to which 3-year TSM strategy was achieved • Is there need for periodic (e.g. every 5 years) comprehensive review of industry sustainability issues and challenges, including trends analysis, stakeholder consultation, etc. • Consider annual or more rigorous, structured approach to issue identification by the COI Panel, Governance Team, and Initiative Leaders
<p>Association establishes programs or activities to address these issues</p>	<ul style="list-style-type: none"> • Describe programs/activities to address issues identified above <p>TSM was developed to address many of the issues noted above, including the development of indicator protocols for:</p> <ul style="list-style-type: none"> ○ Crisis Communications ○ Energy and Greenhouse Gas Emissions Management ○ External Outreach ○ Tailings Management ○ Three others under development <ul style="list-style-type: none"> ○ <i>Protocols have been developed for each indicator through stakeholder consultation. Performance is reviewed annually and protocols are continually improved with input from members and COI Panel</i> 	<p style="text-align: center;">●</p> <ul style="list-style-type: none"> • Sizeable budget for TSM programming • Program is key element of MAC's Business Plan and 5-year Strategic Plan 	



Sustainability/ CSR Practice	Description	Strengths	Potential Gaps										
	<ul style="list-style-type: none"> ○ For first four indicators above, members must self assess performance according to figure below (except for crisis communication which is either yes/ no response): <table border="1" data-bbox="723 418 1542 737"> <tr> <td>Level 1</td> <td>No systems in place; activities tend to be reactive; procedures may exist but are not integrated into policies and management systems.</td> </tr> <tr> <td>Level 2</td> <td>Procedures exist but are not fully consistent or documented; systems/processes are planned and being developed.</td> </tr> <tr> <td>Level 3</td> <td>Systems/processes are developed and implemented.</td> </tr> <tr> <td>Level 4</td> <td>Integration into management decisions and business functions.</td> </tr> <tr> <td>Level 5</td> <td>Excellence and leadership.</td> </tr> </table> <ul style="list-style-type: none"> ○ Member reporting is disaggregated, done at facility level and not corporate level <p>For other issue areas, MAC has research projects or collaborations underway:</p> <ul style="list-style-type: none"> ○ MITHE-RN - MAC is major sponsor of Metals in the Human Environment Research Network (MITHE-RN), which examines the connection between metals in the environment and the potential for adverse effects on humans plus the internship agreement with EC and Pollution Probe ○ MEND (Mine Environmental Neutral Drainage) - R&D program to finding solutions to acid rock drainage issues ○ NAOMI (National Orphaned/Abandoned Mines Initiative) - For the past several years, MAC has been working with a multi-stakeholder committee to find solutions to the legacy of orphaned and abandoned mines in Canada, including the associated liabilities, human health concerns and clean-up costs. NOAMI is jointly funded by MAC, the Prospectors and Developers Association of Canada (PDAC) and government departments, and is administered by a small secretariat at CANMET, a Natural Resources Canada program. <ul style="list-style-type: none"> ● Programs are included in the Association's Business Plan <ul style="list-style-type: none"> ○ Yes – TSM as well as priority issue areas (GHGs, Aboriginal Engagement) 	Level 1	No systems in place; activities tend to be reactive; procedures may exist but are not integrated into policies and management systems.	Level 2	Procedures exist but are not fully consistent or documented; systems/processes are planned and being developed.	Level 3	Systems/processes are developed and implemented.	Level 4	Integration into management decisions and business functions.	Level 5	Excellence and leadership.		
Level 1	No systems in place; activities tend to be reactive; procedures may exist but are not integrated into policies and management systems.												
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Sustainability/ CSR Practice	Description	Strengths	Potential Gaps
	<ul style="list-style-type: none"> • Annual budget for the sustainability/ CSR program <ul style="list-style-type: none"> ○ \$250K direct, plus approx \$35K for data collection/analysis, \$40K for TSM Report, plus associated staff salaries, etc. • How program is funded (e.g., member dues for sustainability/ CSR program, core budget, member-fund-raising, etc.) <ul style="list-style-type: none"> ○ Core budget 		
<p>Association develops measurable goals, targets and metrics (e.g., indicators) and timelines for specific programs addressing sustainability/ CSR issues in the sector</p>	<ul style="list-style-type: none"> • Describe goals, targets, metrics <ul style="list-style-type: none"> ○ Members “encouraged to strive for” at least Level 3 for all indicators except crisis management (formal target articulated in protocol); there are no formal process or outcome targets that members must meet ○ MAC has no formal targets for the association to achieve with respect to progress on its sustainability programming ○ MAC has a 1% energy intensity improvement target for the sector which has been in place for many years. According to government statistics, the sector has met this target but it is not measured at the company or facility level. 	<p style="text-align: center;">●</p> <ul style="list-style-type: none"> • Level 3 target established for industry • 1% energy intensity improvement target in place for a number of years, consistently met by members 	<ul style="list-style-type: none"> • Consider opportunity of a mandated mix of process and outcome indicators and targets • No formal requirement to improve performance each year (i.e., move from Level 3-4 over time) • Need for clear analysis and reporting of energy intensity performance at the facility level • No performance goals for the sector (e.g. reclaimed land, product stewardship, etc.) • No mandatory internal targets to achieve with respect to progress on MAC’s sustainability programming
<p>Association regularly reviews progress, checks in with members to ensure they are heading in right direction and that program is adding value, etc.</p>	<ul style="list-style-type: none"> • Frequency of progress review and assessment <ul style="list-style-type: none"> ○ Annual review of member company performance against 4 (soon to be 5) TSM KPIs <ul style="list-style-type: none"> ▪ Working groups for each indicator protocol annually review reporting results and respond accordingly (e.g., weak results in energy and ghg) 	<p style="text-align: center;">●</p> <ul style="list-style-type: none"> • Annual review of performance in each area at working group level, Board and COI levels. 	<ul style="list-style-type: none"> • May wish to formalize a regular review and renewal process for the TSM



Sustainability/ CSR Practice	Description	Strengths	Potential Gaps
	<p><i>protocol prompted decision in 2007 to develop new guidance on energy management, ghg strategies such as offsets, sinks, etc. This guidance will be completed in Fall 2008 and followed by training workshops in November-December)</i></p> <ul style="list-style-type: none"> ▪ <i>Disaggregated member performance on each indicator protocol reported through to Governance Team and Board</i> ▪ <i>Upcoming June TSM Strategy Session will constitute a review of performance/progress on TSM</i> <ul style="list-style-type: none"> • Member involvement in evaluation and review of TSM Strategy <ul style="list-style-type: none"> ○ <i>3-year TSM Strategy adopted in 2002 was extended until 2007 pending completion of objectives. In June 2008 MAC will begin a process of strategy renewal, including providing opportunities for member involvement in evaluation and review of prior Strategy.</i> • Association engagement in benchmarking activities within, or outside, the sector <ul style="list-style-type: none"> ○ <i>Current study is benchmark of MAC's sustainability programming against other Canadian sectors</i> ○ <i>Benchmarked verification process against other industry associations' approaches to verification</i> ○ <i>The indicator process provides information for association members to compare performance with one another</i> • Significant changes to the program since its inception as a result of the review process <ul style="list-style-type: none"> ○ <i>Revision of several indicator reporting protocols (based on lessons learned, feedback from members and COI panel)</i> ○ <i>Launch of external verification process (based on recommendation of members and COI panel)</i> ▪ <i>Continual improvement of external verification process based on feedback from COI Panel, members, and VSPs (verification service providers) and Lessons Learned workshop (first workshop held September 2007 involving ILs, VSPs and a rep from the COI Panel)</i> 	<p>Actions taken to address weak results when necessary</p> <ul style="list-style-type: none"> • Benchmarking of performance against other industry associations and sectors • TSM provides opportunity for members to benchmark their performance against other member companies • Upcoming June strategy session will provide an opportunity for members to evaluate and review success of strategy and program 	<p>Strategy, e.g. every 3 or 5 years</p>



Sustainability/ CSR Practice	Description	Strengths	Potential Gaps
C. Engaging Key External Stakeholders			
<p>Association has a process for identifying key stakeholders and determining which stakeholders to engage</p>	<ul style="list-style-type: none"> • Process for identifying key stakeholders <ul style="list-style-type: none"> ○ Majority of primary/ secondary stakeholders determined informally out of Whitehorse Mining Initiative (MAC got to know people through WMI Initiative, engaged in initial dialogue with them) ○ MAC then formalized stakeholder identification process through development of COI Panel. MAC established multi-stakeholder Design Team to develop COI Panel Terms of Reference, identify categories of potential representatives (and prioritized them, indicated how many per category) and sought nominees. The Design Team reviewed all candidates and recommended an original slate of 13 representatives to the GT and MAC Board, which was accepted in full. Since then the Métis were added as an additional key representative ○ In 2007, COI Panel initiated process for ongoing renewal of COI Panel membership; this involved identification of key additional stakeholder groups/perspectives for possible inclusion on Panel. A process is currently underway to nominate additional Panel members • Key stakeholders identified <ul style="list-style-type: none"> <u>Primary stakeholder groups are (and as such always represented on the Panel):</u> <ul style="list-style-type: none"> ▪ Labour [national, regional] ▪ Aboriginal organizations & communities [national, regional] ▪ NGOs [environment (mining, conservation), social including faith-based and youth groups] ▪ Mining communities ▪ Governments (although not involved in Panel, engaged through other mechanisms) <u>Other stakeholders include (may or may not be representatives of each group on Panel):</u> <ul style="list-style-type: none"> ▪ Investment community ▪ Non-MAC members of the mining industry, including the Prospectors and Developers Association of Canada (PDAC) ▪ Academics/researchers ▪ Other mining associations e.g. provincial/territorial mining associations ▪ Customers 	<ul style="list-style-type: none"> ● • Clear identification of priority and secondary stakeholders for involvement in COI Panel • Very comprehensive and transparent process for initial establishment of COI Panel • Comprehensive process developed for Panel renewal 	



Sustainability/ CSR Practice	Description	Strengths	Potential Gaps
	<ul style="list-style-type: none"> ▪ Suppliers 		
<p>Association operates programs to actively engage stakeholder groups for dialogue on the sector's economic, environmental and social performance</p>	<ul style="list-style-type: none"> • Describe programs / activities used to engage key stakeholders (e.g. identification of issues, policy and/ or program development, etc.). <ul style="list-style-type: none"> <u>TSM Community of Interest Advisory Panel:</u> <ul style="list-style-type: none"> ○ Includes 12-15 representatives from labour, Aboriginal organizations and communities, NGOs, mining communities and the investment sector, 5 MAC board members and 1 junior mining industry representative <ul style="list-style-type: none"> ▪ This number was agreed to by the Panel as an appropriate range that would allow for good representation of stakeholder groups and remain a manageable size. The first meeting had 13 reps, but has been 14 ever since ○ Founded in March 2004, meets twice a year ○ Mandate: to help MAC members and communities of interest improve the industry's performance, to foster dialogue between the industry and its communities of interest, and to provide input into the development and review of TSM goals ○ Panel annually reviews TSM indicator performance and makes recommendations to the Indicator Working Groups. Initiative Leaders Team, Governance Team and ultimately the Board on actions to be taken (if necessary) ○ COI issues a statement in annual TSM report (their perspectives on performance of industry) ○ COI Panel led by independent facilitator ○ Minutes of COI Panel meetings published on MAC website <u>Other stakeholder engagement activities and strategic partnerships</u> <ul style="list-style-type: none"> ○ Consult other stakeholders on development of indicator protocols (e.g., aboriginal communities on Aboriginal Relations Indicator, Biodiversity experts for that indicator, etc.) ○ In collaboration with Nature Canada, helped solve disagreement among federal departments on boundary for proposed Northern Bathurst National Park ○ MAC and Sierra Club collaborated to establish ad hoc advisory committee to the Deputy Minister of the Environment on Clean Air. It has 6 ENGO/health NGO reps and 6 industry reps 	<ul style="list-style-type: none"> ● • Independent stakeholder advisory panel (COI Panel) • Independent moderator for COI Panel • Minutes of Panel meetings made publicly available – transparent and credible terms of reference • COI Panel statement in TSM Annual Report 	<ul style="list-style-type: none"> • Lack of engagement of international stakeholder groups



Sustainability/ CSR Practice	Description	Strengths	Potential Gaps
<p>Association reports on types of engagements and the use of information resulting from stakeholder engagements</p>	<ul style="list-style-type: none"> • Describe reporting procedures <ul style="list-style-type: none"> ○ <i>Minutes of COI Panel meetings published on MAC website</i> ○ <i>Minutes of multi-stakeholder engagement workshops also published on MAC website (e.g., Aboriginal Engagement, Biodiversity Engagement)</i> • Describe how stakeholder engagement activities have influenced policy or program development. <p><i>Example – COI Panel influences indicator development</i></p> <ul style="list-style-type: none"> ○ <i>COI Panel issued challenge to MAC to develop biodiversity policy. COI sent members to stakeholder workshop on topic in Ottawa (October 15–16, 2006). The workshop, held in collaboration with ICMM (International Council on Mining and Metals), offered guidance for making biodiversity objectives one of the TSM performance indicators</i> ○ <i>COI challenged MAC to engage more deeply on Aboriginal issues. Panel members took part in MAC workshop on Aboriginal issues in Fort McKay, Alberta (September 27, 2006). The workshop provided opportunity to review broad range of issues involving relationships between Aboriginal governments, communities and the mining industry. The results are being used to develop guidance for MAC members on relationships with Aboriginal governments and communities</i> <p><i>Example: COI challenges MAC to make TSM condition of membership</i></p> <ul style="list-style-type: none"> ○ <i>COI challenged MAC Board to make TSM a Condition of Membership in 2004</i> 	<p style="text-align: center;">●</p> <ul style="list-style-type: none"> • Clear integration of COI Panel recommendations into MAC policies and programs • Transparent reporting to stakeholders on how feedback was used 	<ul style="list-style-type: none"> • Could enhance reporting on how engagement with other stakeholder groups has influenced program development
D. Supporting Industry Association Members			
<p>Association offers training and education programs for its members on sustainability/ CSR</p>	<ul style="list-style-type: none"> • Describe training and education programs, including certification/accreditation, if relevant. <ul style="list-style-type: none"> ○ <i>Offer annual TSM Self-Assessment workshops for member companies to deepen understanding of TSM and self-assessment process; as members become familiar with program, less interest in these workshops</i> ○ <i>Offer on-site training to members on TSM; 6 conducted to date</i> ○ <i>Run TSM Verification workshops for Verification Service Providers (held 3 in first year, 1 last year and another planned for this year). It is a requirement for VSPs</i> ○ <i>Offer training on specific issues including external outreach and crisis management. Workshops for energy and GHG and tailings planned for this fall</i> 	<p style="text-align: center;">●</p> <ul style="list-style-type: none"> • Regular training and education programs offered to members at implementer/ Initiative Leader level • Once performance gaps are identified, MAC offers workshops to address gaps 	<ul style="list-style-type: none"> • Could offer regular (e.g. every 3 years) session for member companies. Target audience could be Executive and/or Board level, content could focus on the business case of participating in TSM program and in advancing



Sustainability/ CSR Practice	Description	Strengths	Potential Gaps
	<p><i>(as these were identified as areas of lower performance in last year's reporting)</i></p>		<p>sustainability (i.e., emergent sustainability trends in industry, how evolving TSM strategy is positioned to address these trends, how members and the industry realize business value through sustainability and TSM, etc.)</p> <ul style="list-style-type: none"> • Could offer sustainability/TSM awareness sessions targeted at key players in the mineral and metals value chains to build awareness of the program (e.g. similar to Eden Project workshop where various actors in copper chain were brought together to discuss product stewardship)
<p>Association produces “how to” sustainability / CSR resource documents and tools to support its members in implementing Association’s CSR program objectives</p>	<ul style="list-style-type: none"> • Document any that pertain (e.g., documentation of the business case, electronic discussion groups, best practice guidance documents, case studies, benchmarking exercises). <ul style="list-style-type: none"> ○ <i>Guidance protocols for performance indicators (how to track and report performance in each area)</i> ○ <i>Background information and “how to” guides for members on following topics:</i> <ul style="list-style-type: none"> ▪ <i>Crisis Management Planning Guide</i> ▪ <i>Outreach and Dialogue - A Field Guide for Building Shared Understanding for Towards Sustainable Mining</i> ▪ <i>A Guide to the Management of Tailings Facilities and Developing an Operation, Maintenance and Surveillance Manual for Tailings and Water Management Facilities</i> ▪ <i>ICMM’s Good Practice Guidance for Mining and Biodiversity (MAC contributed to its development)</i> ▪ <i>Energy Efficiency Planning Guide</i> ▪ <i>Strategic Planning and Action on Climate Change</i> 	<p style="text-align: center;">●</p> <ul style="list-style-type: none"> • Clear and consistent guidance provided for members in key performance areas • Best in class “Management of Mine Tailings” Guidance – recognized throughout global industry 	



Sustainability/ CSR Practice	Description	Strengths	Potential Gaps
	<ul style="list-style-type: none"> ▪ <i>A Guide to the Audit and Verification of Tailings Management Facilities (soon to be published)</i> 		
<p>Association offers incentive programs to encourage member participation in sustainability / CSR Programs</p>	<ul style="list-style-type: none"> • Describe any incentive programs and level of member engagement in these programs (e.g., awards, etc.). <ul style="list-style-type: none"> <u>Sustainability Awards System</u> <ul style="list-style-type: none"> ○ <i>Facilities that achieve Level 3 or better for all indicators in a performance area (e.g., energy use and GHG emissions management) or reported “yes” for all indicators under crisis management planning, receive a Sustainability Award. The results must be externally verified for the facility to receive this recognition</i> 	<p style="text-align: center;">●</p> <ul style="list-style-type: none"> • Sustainability awards/ recognition program 	
E. Sustainability / CSR Reporting on Industry-Wide Initiatives			
<p>Association reports publicly on the sustainability/ CSR performance of the sector (including impacts of its sector, initiatives the sector has in place to address those impacts, performance data about products, materials or processes, etc.)</p>	<ul style="list-style-type: none"> • Method for reporting/ disclosing the performance of the Association's sustainability/ CSR programs for its members (distinct from the Association's own organizational performance) <ul style="list-style-type: none"> ○ <i>Annual Towards Sustainable Mining report (2004, 2005, 2006)</i> ○ <i>In separate communication, report on releases by company and substance and company direct and indirect GHG emissions</i> ○ <i>Detailed release data also provided via CD-ROMs at back of annual TSM report and on MAC website</i> • Scope of report (e.g. performance goals and progress in implementing the sustainability/ CSR program) <ul style="list-style-type: none"> ○ <i>Report provides overview of TSM, the work of COI Panel over past year, and presents and analyzes results of members' reporting on TSM performance indicators</i> ○ <i>Does not report on MAC's TSM strategy progress, but on member company performance</i> • Percent of membership represented by report (i.e., how many members contribute data and information to report) <ul style="list-style-type: none"> ○ <i>16 of 19 member companies reported data for 2006; 84% participation rate</i> • Other formats used to communicate sustainability performance to the public <ul style="list-style-type: none"> ○ <i>MAC TSM website</i> ○ <i>Press releases</i> ○ <i>Presentation of TSM Principles and Indicator Protocols at trade shows,</i> 	<p style="text-align: center;">●</p> <ul style="list-style-type: none"> • Industry wide reporting that compiles data in key performance indicator areas • Expanding scope of key performance indicators from 4 to 6 indicators • Member trend reporting on releases • Reporting of performance done at facility level; more transparent than at corporate level (emissions to air, water, land) 	<ul style="list-style-type: none"> • No reporting on MAC's TSM strategy process • Could improve external communications of TSM program (i.e., progress overall industry is making, company case studies, both nationally and internationally, etc.) • Reporting on substantive issues facing MAC members could be expanded • Inclusion of more activities related to materials/product stewardship could be included (e.g. how industry is working with other stakeholders to manage use of mineral and metals in society – some of this is done e.g. MITHE but interest in sustainability)



Sustainability/ CSR Practice	Description	Strengths	Potential Gaps
	<i>conferences etc.</i>		aspects of the application of materials is increasing)
F. Association's Sustainability / CSR Performance – Leading by Example			
Association has identified its own sustainability/ CSR impacts ("House in Order" Program)	<ul style="list-style-type: none"> Impacts identified by Association <ul style="list-style-type: none"> <i>No</i> 	●	<ul style="list-style-type: none"> Lack of house in order programs, although not noted by any member companies as a key priority area of action
Association engages and trains its staff on CSR/Sustainability	<ul style="list-style-type: none"> Programs to train staff on CSR/Sustainability, if any. Include participation rate Internal programs to engage staff on their sustainability behaviours at work and at home <ul style="list-style-type: none"> <i>No</i> 		
Association develops measurable goals, targets and metrics (e.g., indicators) and timelines for specific programs addressing its own sustainability/ CSR impacts	<ul style="list-style-type: none"> List goals, targets, metrics and timelines for specific programs addressing sustainability/CSR impacts <ul style="list-style-type: none"> <i>No</i> 		
Association establishes programs or activities to address its impacts, measures, monitors and reports	<ul style="list-style-type: none"> List programs/activities Describe measurement, monitoring and reporting activity <ul style="list-style-type: none"> <i>No</i> 		
Association regularly reviews progress	<ul style="list-style-type: none"> Frequency of progress review and assessment <ul style="list-style-type: none"> <i>No</i> 		

SUMMARY OF INTERVIEW FINDINGS

Areas of strength in MAC's promotion of sustainability among member companies

Areas of strength as noted by member companies in the interview process (circled number following each bullet represents how many member companies mentioned each as a strength):

- TSM has helped to **enhance reputation and image of the industry** among many stakeholder groups – The minimum performance requirements associated with the TSM program have helped to provide some differentiation for the industry among leaders and laggards (those who are not MAC members) and demonstrate transparency and responsible business practices to external stakeholders. ⑦
- **Protocol development process is credible and comprehensive, and protocols are highly relevant** – The indicator protocols provide clear, technical guidance to older and newer member companies, and process of developing these indicators through multi-stakeholder consultation adds credibility. It was also pointed out by a few members that reaching a Level 5 of performance is not an easy check box exercise; some rigour and continual improvement have been built into each set of indicators. Collecting and reporting on indicators in environment and social performance areas drives expectations (i.e., of senior management within each member company) and therefore drives performance improvements. ⑦
- **Provides excellent opportunities for networking and shared learning** among peer member companies – The Annual TSM report allows member companies to benchmark their performance against others and the external verification helps members identify opportunities for performance improvements. ⑥
- **TSM helped put sustainability on radar screen of many members** – The TSM program provides a common framework or roadmap for the industry to move forward, and gives guidance to member companies on what issues are important to their industry which helps prioritize actions. Through TSM, MAC has taken a leadership role and pushed some companies beyond their comfort boundaries. It has forced some members to be more rigorous and thoughtful in how they are addressing sustainability issues. ⑤
- **Continue work in area of biodiversity, mine closure and Aboriginal engagement** – Five members mentioned these three areas as sustainability issues for their companies and were pleased that MAC was working to develop policies (and potentially protocols). ⑤
- MAC has strong ability and **credibility to pull together communities of interest** – Not only is MAC able to bring various stakeholder groups together that an individual mining company might not be able to on its own, but it helps member companies identify and then reach out to their own stakeholders. In some cases partnership opportunities between member companies and external stakeholders have arisen that would not have without MAC's obligations under the Outreach Protocol. Several members pointed out that MAC does an excellent job liaising with Government and other industry associations. ④
- Adding **external verification** to member performance in 2006 was a good step forward – Having member companies externally verify their reporting adds to the credibility of the TSM program and will serve as an additional incentive for member companies to improve their own performance. ③
- **Communities of Interest Panel** is leading practice. ②
- **Board is extremely committed and approachable** on sustainability issues – They see the business relevance of TSM and are willing to continually improve the program over time. ①

Potential gaps in MAC's sustainability programming

Potential gaps as noted by member companies in the interview process (circled number following each bullet represents how many member companies mentioned each as a potential gap or sustainability issue they are currently being faced with where MAC could provide support):

- **Specific sustainability issues MAC should consider addressing now and into the future:**



Environmental Issues

- Water – Access to water, minimizing water withdrawals and enhanced recycling of water will become more significant issues over time for the mining industry and all industry sectors. MAC could begin engaging stakeholders in this area, contribute to scientific understanding of the issue, etc. ③
- Material Stewardship – Process and product stewardship is an emerging issue area and the role and potential impacts mining companies can play in this regard is becoming somewhat clearer. This involves taking a full life cycle approach, and considering opportunities for environmental and social performance improvements by reaching out to all players along the value chain (e.g., processors, fabricators, priority end users, customers, etc.). MAC could either develop, or work with existing best practices in this area (ICMM) to develop, a technical protocol in this area (similar to Mine Tailings protocol). ①
- Specific Working Group on Oil Sands – Similar to the Diamond Group, member companies operating in Alberta's Oil Sands have unique drivers and sustainability issues to address and could benefit from additional support. ①
- Land Use and Reclamation – This issue may be sufficiently addressed through a combination of the Biodiversity and Mine Closure performance areas. ①

Social Issues

- Labour – Attracting and retaining quality, skilled labour in the mining sector is already, and will continue to be, a major challenge for the long-term competitiveness and sustainability of the industry. The use of immigrant and shorter-term labour is also becoming an issue for Canadian mining companies, especially when there are large construction projects where skilled trades are needed. It might be difficult for MAC to develop specific guidance or an indicator protocol here; may be more of a role in enhancing the profile of the industry to young people. ③
- Human Rights – This area is currently not well defined, could benefit from MAC developing a best practice protocol/ guidance on Human Rights, possibly in collaboration with international stakeholders and industry associations. ②
- Community Development – Many member companies are active in this area but there may be a lack of consistency in application of practices or understanding of what is considered best practice within the industry and by external stakeholders. There could be some value in MAC facilitating discussions around this issue. ②
- Health & Safety – MAC could do more on H&S promotion and performance measurement across the membership. The social well-being of employees and contractors is currently not well addressed by TSM. Perhaps MAC could work closely with the Australian Minerals Council on this. ②

Economic Issues

- Two member companies pointed out that MAC could do a better job communicating the economic benefits of the existing indicator protocols (e.g. economic benefits provided to the community). ②
- ***Lack of international application and focus of TSM*** – Many member companies operate in a global context and would value a united voice like MAC's outside of Canada. Applying a strictly Canadian focus may pose a risk and open member companies up to criticism in other countries of operation as it may appear the companies are applying a higher standard in Canada than elsewhere. ④
 - MAC should continue its efforts to be more proactive in sharing its best practices with other countries (e.g., indicator protocol for mine tailings) as this is raising position of Canada as an industry leader
 - MAC could do more to support/ respond to issues that come up regarding the operation of Canadian mining companies in other countries



- Although excellent at getting involvement from external stakeholders in Canada, MAC could apply this strength for greater **engagement of international stakeholders** – this would help to increase credibility and reputation of industry on a global basis. Specifically a development NGO may be a key stakeholder to engage with on an international level (e.g., Save the Children).

If MAC were to move to broaden TSM's application globally, two member companies cautioned that its efforts should be consistent with that of many other international organizations who are also promoting sustainable business practices for multi-national companies (e.g., IMF, World Bank, ICMM, GRI, etc.).

- Could improve **external communications of benefits and outcomes of TSM program** ④
 - MAC has done a great job building the “infrastructure” of the TSM program; now they need to focus on getting business value out of it for members. The more the value of the program is communicated externally, the more interest media and external stakeholders will have in TSM, which will result in greater member company participation and overall improvement. A recent news release MAC sent out on top performers in the industry was excellent. ③
 - Need for additional case studies demonstrating responsible business practices of Canadian member companies to be developed by an independent third party – these would be beneficial to share among member companies (peer to peer learning) as well as to share globally to enhance reputation of industry (i.e., over internet, web based databank of best practices etc.). Case studies could demonstrate to members how certain companies were able to achieve a Level 5 performance (i.e., what effort did it take, what benefits were realized, etc.). ③
 - MAC could be stronger spokesperson on the business value of sustainability for different levels of staff within each member company, particularly at the Executive level. Some suggested that a MAC representative could come on site and deliver in house training on the benefits of TSM (what TSM is, where it is going, value to the industry, etc.) and sustainability in a broader sense as this would help Initiative Leaders maintain (or initially gain) buy-in for sustainability initiatives across the company. ②
- **Could be more proactive and forward thinking** about where the industry should be in 5, 10 and 20 years (e.g., scenario planning) – Traditionally MAC has been more comfortable responding to and lobbying against government policies. ①
- **Potential gap between Initiative Leaders and the Board of Directors** – The Governance Team has taken more of a passive role of late; may need to revisit their mandate and renew the role of this Committee (as its intended role was much different than that of the Board or Initiative Leaders). The Governance Team could have more of a debate and discussion role, and provide critical feedback to Initiative Leaders as needed. MAC may want to consider formalizing the structure and procedures of the Governance Team (more strategic role), have more clearly defined terms of membership, and allow more time for Governance Team meetings. ①

BENCHMARK ANALYSIS

A review of the foregoing benchmark in which MAC's sustainability programming was assessed against best practice amongst other Canadian industry associations reveals that MAC is a high performer and exceeds best practice in eight areas, including: highly engaged board, integrating sustainability into all staff job descriptions; comprehensive program of mandated performance requirements along with continuous improvement efforts; the TSM program which is well positioned to address key sustainability issues within the domestic mining industry; process to review and update the TSM program and strategy; and an active and transparent stakeholder engagement program.

There are six areas where MAC's sustainability programming is consistent with best practices of other industry associations, including: its vision and objectives; strategic partnerships; training; how-to and award programs; and public reporting on industry performance.

There are three areas where MAC's programming is consistent with industry practice, however, the eight Canadian associations we have studied to date are possibly underperforming their potential in



these aspects, including: a formal process for issue identification; industry goals and targets; and “house in order” programs.

GENERAL STRENGTHS

MAC's comprehensive sustainability approach, including its strong commitment to sustainability, a highly engaged board of directors, indicator protocols, third party verification, stakeholder engagement and transparent reporting, is the strongest sustainability approach compared to the 2007 benchmark study of 7 Canadian industry associations, and as reported in the 7 member interviews. According to the interviews, this programming has substantively:

- Improved reputation and image of the domestic mining industry
- Fostered commitment to sustainability amongst member firms
- Enhanced stakeholder trust and engagement

From this analysis, it is clear that MAC's efforts to work with the industry in advancing its sustainability performance and accountability are paying off in significant best practice. To remain among – or ahead of – the leaders in this area, however, MAC may need to consider some areas for improvement, as recommended below.

RECOMMENDATIONS FOR ADVANCING MAC'S SUSTAINABILITY PROGRAMMING

A number of opportunities for advancing the promotion of sustainability by MAC among its members companies emerged from this study. It is recommended that the following be considered by MAC's Board of Directors, the Governance Team, Initiative Leaders, COI Panel and its members after initial discussion at the upcoming June Strategy Session.

These suggestions need to fit within a broader strategic context (goals of TSM in order to maintain a leadership role over next 2-5 years and into the longer-term future), while meeting the needs and expectations of member companies.

Recommendations for enhancing MAC's existing sustainability programming:

- ***Improve external communications of the benefits and outcomes of TSM program*** – MAC has done a great job building the “infrastructure” of the TSM program and now could improve how well, and how often, it communicates the benefits and outcomes of the TSM program. The value of involvement in the TSM program increases for members with greater media and stakeholder awareness and understanding. Ideas for improving this communication ranged from publishing more case studies (including third-party produced/validated case studies) on the good things its members are doing (generating internal peer-to-peer learning benefits as well as external reputation enhancement benefits) to increasing the profile of TSM within member companies themselves (beyond the Initiative Leaders to educate and build internal support for TSM engagement, especially among executives and boards, e.g. on-site awareness programs). May also consider explicitly communicating MAC's Board of Director's commitment to advancing the sustainability progress of the industry.
- ***Facilitate a discussion around the potential risks and opportunities of broadening the focus of TSM beyond national to international*** – This could take many forms (as noted above); could be limited to sharing best practices and good stories outside of Canada, could include broader engagement of international stakeholders such as development stakeholders, or could involve the extension of the TSM reporting protocols for operations of member companies in all countries. Whatever course MAC chooses, it should look to align with existing efforts of many other international organizations who are also promoting sustainable business practices for multi-national mining companies (e.g., IMF, World Bank, ICMM, GRI, etc.).
- ***Consider surveying member companies, international, national and regional stakeholders on emerging sustainability issues in the sector, and in the process, validate whether MAC should take some initial actions to address the issues below:***



- Water – Should MAC begin engaging stakeholders, and possibly developing an indicator protocol, around future access to water, minimizing water withdrawals, enhancing recycling of water activities, etc.?
 - Labour – Can MAC play a role in enhancing the profile of the mining industry in order to attract and retain quality, skilled labour in the mining sector? What are the issues and opportunities in recruiting an immigrant, itinerant workforce?
 - Human Rights – Should MAC begin engaging with stakeholders, and possibly develop a best practice protocol or guidance on Human Rights for member companies?
 - Community Development – Should MAC facilitate discussions and build some consensus within the industry and among external stakeholders around what is considered best practice for community development?
 - Health & Safety – Could MAC do more on H&S promotion and performance measurement across its membership or is this being adequately addressed by other organizations?
 - Economic and Integrated Benefits – Could MAC do a better job communicating the economic as well as environmental or social benefits of the existing indicator protocols? Are there opportunities for developing integrated metrics, incorporating ratios and other means?
 - Supply Chain and Material Stewardship – Many associations are tackling supply chain and product stewardship issues as an industry. Are there priority supply chain / value chain issues that could be tackled collectively? What are the opportunities of repurposing metals and minerals? Specifically, consider initiating efforts to better understand life cycle risks and benefits of minerals and metals, and engaging with various actors in the value chain to mitigate or eliminate risks and capitalize on opportunities.
- ***Consider broadening stakeholder engagement activities and development of strategic partnerships with national and international organizations on social issues in mining industry (e.g., H&S, human rights, community development, etc.).*** – It appears traditional focus of engagement and partnerships have been on environmental performance when many of the emerging issues for the sector (especially on international basis) seem to relate to social performance.
 - ***Develop and formalize a strategic planning process for MAC's sustainability programming for improved results, credibility and transparency:***
 - Strategic planning and goal setting process regarding sustainability generally and TSM specifically, e.g. ongoing renewal of 3-year plans, etc.
 - Process for members to provide input to TSM strategy development,
 - Process for issue identification - is there need for periodic (e.g. every 3 or 5 years) comprehensive review of industry sustainability issues and challenges, including trends analysis, stakeholder consultation beyond member companies, etc.
 - Annual performance reporting on the degree to which MAC is achieving results consistent with its 3-year sustainability strategy, etc..
 - Formal process for regular (annual?) evaluation/review of MAC's sustainability programs/strategy, including member and stakeholder feedback.
 - ***Consider developing and reporting on a combination of process and outcome-based performance metrics and goals for MAC specifically and the sector generally,*** for example:
 - Conduct best practice assessment of approaches other industry associations are taking with respect to outcome-based performance metrics and targets,
 - Establish goals, targets and metrics for MAC's sustainability strategy.
 - ***Evaluate and develop updated governance framework for MAC's sustainability programs:***
 - Review, clarify, update and post mandate of all governance, accountability and implementation bodies associated with MAC's sustainability programs, confirm committee representation and reporting relationships, including the link between Initiative Leaders and the Governance Team and the role of the GT with respect to MAC's sustainability programming and the relationship to the Board of Directors.



- ***Assess and improve accountability and transparency framework***, for example:
 - Develop and post a policy that stipulates the process by which COI panel selects companies to review in external verification,
 - Develop and post a policy/process by which member companies can have their membership revoked for non-compliance,
 - Report annually on stakeholder feedback received and how input was used in decision-making,
 - Formalize the approach to stakeholder identification and renewal; post approach on website.

- ***Consider implementing a few key “house in order” programs to demonstrate leadership and commitment to sustainability amongst MAC staff***, e.g. in the areas of reduced energy consumption, transportation alternatives, video-conferencing, recycling, etc.

APPENDIX 1: TOWARDS SUSTAINABLE MINING: GUIDING PRINCIPLES

Towards Sustainable Mining Guiding Principles December 2004

As members of the Mining Association of Canada, our role is to responsibly meet society's needs for minerals, metals and energy products. To achieve this we engage in the exploration, discovery, development, production, distribution and recycling of these products. We believe that our opportunities to contribute to and thrive in the economies in which we operate must be earned through a demonstrated commitment to sustainable development.*

Accordingly, our actions must demonstrate a responsible approach to social, economic and environmental performance that is aligned with the evolving priorities of our communities of interest.** Our actions must reflect a broad spectrum of values that we share with our employees and communities of interest, including honesty, transparency and integrity. And they must underscore our ongoing efforts to protect our employees, communities, customers and the natural environment.

We will demonstrate leadership worldwide by:

- Involving communities of interest in the design and implementation of our Towards Sustainable Mining initiative;
- Proactively seeking, engaging and supporting dialogue regarding our operations;
- Fostering leadership throughout our companies to achieve sustainable resource stewardship wherever we operate;
- Conducting all facets of our business with excellence, transparency and accountability;
- Protecting the health and safety of our employees, contractors and communities;
- Contributing to global initiatives to promote the production, use and recycling of metals and minerals in a safe and environmentally responsible manner;
- Seeking to minimize the impact of our operations on the environment and biodiversity, through all stages of development, from exploration to closure;
- Working with our communities of interest to address legacy issues, such as orphaned and abandoned mines;
- Practicing continuous improvement through the application of new technology, innovation and best practices in all facets of our operations.

In all aspects of our business and operations, we will:

- Respect human rights and treat those with whom we deal fairly and with dignity.
- Respect the cultures, customs and values of people with whom our operations interact.
- Recognize and respect the unique role, contribution and concerns of Aboriginal peoples (First Nations, Inuit and Métis) and indigenous peoples worldwide.
- Obtain and maintain business through ethical conduct.
- Comply with all laws and regulations in each country where we operate and apply the standards reflecting our adherence to these Guiding Principles and our adherence to best international practices.
- Support the capability of communities to participate in opportunities provided by new mining projects and existing operations.
- Be responsive to community priorities, needs and interests through all stages of mining exploration, development, operations and closure.
- Provide lasting benefits to local communities through self-sustaining programs to enhance the economic, environmental, social, educational and health care standards they enjoy.

APPENDIX 2: MEMBER COMPANY INTERVIEWEES AND QUESTIONS

MEMBER COMPANY INTERVIEWEES

The following seven member company representatives participated in a member perspective interview on MAC's sustainability programming.

NAME	TITLE	COMPANY
Robert Carreau	Vice President, Environment	Breakwater Resources Ltd.
Celina Doyle	Manager, External Affairs	Albian Sands Energy Inc.
Craig Ford	V-P., Safety, Environmental & Community Affairs	Inmet Mining Corporation
Ross Gallinger	Senior Vice President, Health, Safety & Sustainability	IAMGOLD Corporation
Douglas Horswill	Senior Vice President, Environment & Corporate Affairs	Teck Cominco Limited
Barbara Shumsky	Manager, Government & Community Affairs	Syncrude Canada Ltd.
Claire Vivier	Supervisor, Sustainability	Xstrata Nickel Canada

INTERVIEW GUIDE

Context:

The Mining Association of Canada (MAC) is conducting an analysis of its sustainability programming to gain a better understanding of where it is strong and where there may be potential gaps, and to ensure it is meeting the needs of its members.

Five Winds International and Strandberg Consulting have been engaged to conduct the analysis on behalf of MAC and invite your participation in an interview to gain a member perspective. Findings from our interview will be kept confidential and will be used to supplement our recommendations for continuing to build on the strengths and closing the potential gaps as MAC moves forward with its sustainability programming. This analysis will inform an upcoming strategy session MAC is holding in June 2008.

We would like to schedule an occasion to speak with you, or an alternate company representative. Interviews are expected to last approximately 30-40 minutes, will be conducted by telephone, and will follow the questions outlined below.

Interview Questions:

1. How are you involved with MAC (i.e., what roles do you play in the Association) and for how many years have you been involved?
2. What do you think MAC does well in the promotion of sustainability among member companies?
3. What has MAC not done very well in the past in the promotion of sustainability among member companies? In which areas could MAC improve in order to help member companies move forward with sustainability implementation?
4. How has MAC's sustainability programming benefited your firm specifically? How has MAC's sustainability programming benefited your industry overall?
5. Which key sustainability issues does your company currently face that could be further supported by MAC (e.g., what are the key competitiveness issues addressed by sustainability/ CSR that the industry association could assist with)?



6. What are some possible emerging sustainability issues that you and/ or the broader industry might face in the future?
 7. What kind of additional information, support, etc. might MAC provide to further assist your company in its sustainability efforts?
 8. What future sustainability issues/programs do you hope MAC might pursue/ take on? Why and how?
 9. What could MAC do to encourage more uptake of its sustainability programming among members?
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*Thank you for participating in this exercise.
Your perspectives are greatly appreciated!*