

**MAC Community of Interest Advisory Panel  
2008 TSM Post Verification Review  
*Final Report***

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## TABLE OF CONTENTS

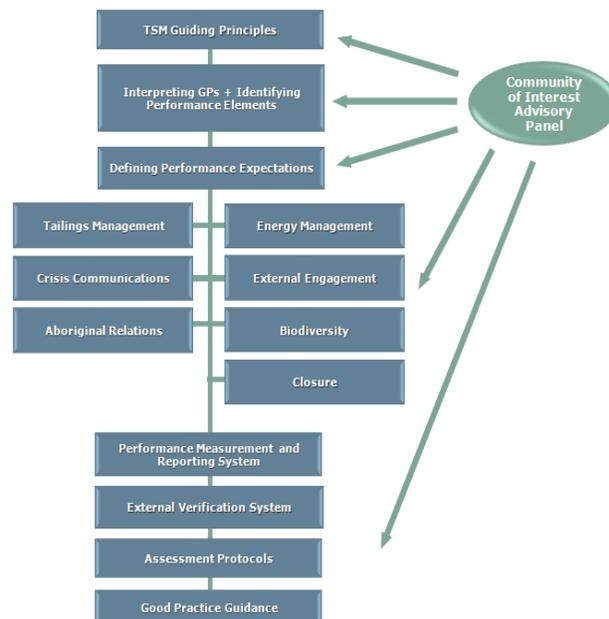
1	INTRODUCTION .....	2
2	ABOUT THE TOWARDS SUSTAINABLE MINING (TSM) INITIATIVE .....	2
2.1	<i>Measurement and Reporting</i> .....	3
2.2	<i>TSM External Verification System</i> .....	3
3	COI PANEL POST-VERIFICATION REVIEW PROCESS.....	4
4	RESULTS OF THE COI PANEL 2008 TSM POST-VERIFICATION REVIEW .....	7
4.1	<i>Barrick Gold Corporation Post Verification Review</i> .....	7
4.2	<i>Xstrata Nickel Post Verification Review</i> .....	12
4.3	<i>Xstrata Zinc Canada Post Verification Review</i> .....	20
5	KEY LEARNINGS FROM THE 2008 POST-VERIFICATION REVIEW.....	27
	ANNEX 1: WEBLINKS .....	28
	ANNEX 2: LIST OF COMPANIES THAT VERIFIED THEIR TSM RESULTS.....	29
	ANNEX 3: ANSWERS TO OUTSTANDING QUESTIONS .....	30

## 1 Introduction

This report presents the results of the MAC Community of Interest Advisory Panel (COI Panel) post-verification review of Barrick Gold Corporation, Xstrata Nickel and Xstrata Zinc Canada. Section 2 of the report provides important background on MAC's TSM initiative, the TSM external verification system, and the COI Panel's role in external verification. Section 3 outlines the post-verification review process and questions agreed to by the COI Panel. Section 4 details the companies' responses to these questions, and the ensuing discussion between the COI Panel and the companies. Section 5 discusses key learnings from the second post-verification review. A list of all referenced web-links is provided in **Annex 1**.

## 2 About the Towards Sustainable Mining (TSM) Initiative

Launched in 2004, the Mining Association of Canada's (MAC) *Towards Sustainable Mining* (TSM) initiative aims to enhance the mining industry's reputation by improving its environmental, social and economic performance. Participation in TSM is a condition of membership in MAC, and requires that members subscribe to a set of guiding principles that are backed by specific performance indicators against which member companies must report. Performance indicators have been developed for tailings management, energy use and greenhouse gas (GHG) emissions management, external outreach and crisis management planning, and additional performance elements addressing Aboriginal relations, biodiversity, and closure are currently under development.



TSM is spearheaded by the TSM Governance Team, a committee led by MAC's Board of Directors. Within each member company, TSM is supported by internal representatives called Initiative Leaders. Committees of MAC members lead the development and refinement of performance indicators and technical guidelines for implementing TSM. Also as part of the TSM initiative, MAC's Board of Directors initiated the Community of Interest Advisory Panel (COI Panel), a multi-stakeholder group whose mandate is 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 help shape TSM goals. The COI Panel meets twice a year, and held its founding meeting in March 2004. The COI Panel terms of reference, a current list of COI Panel members, and meeting agendas and minutes can be found on MAC's website (see **Annex 1**).

## 2.1 Measurement and Reporting

Every year, MAC members self-assess their performance against a series of specific performance indicators in the areas of tailings management, energy use and GHG emissions management, external outreach, and crisis management planning:

TAILINGS MANAGEMENT	ENERGY USE AND GHG EMISSIONS MANAGEMENT	EXTERNAL OUTREACH	CRISIS MANAGEMENT PLANNING
<ol style="list-style-type: none"> <li>1. Tailings management policy and commitment</li> <li>2. Tailings management system</li> <li>3. Assigned accountability and responsibility for tailings management</li> <li>4. Annual tailings management review</li> <li>5. Operation, maintenance and surveillance (OMS) manual</li> </ol>	<ol style="list-style-type: none"> <li>1. Energy use management systems</li> <li>2. Energy use reporting systems</li> <li>3. Energy intensity performance target</li> <li>4. Greenhouse gas emissions management systems</li> <li>5. Greenhouse gas emissions reporting systems</li> <li>6. Greenhouse gas emissions intensity performance target</li> </ol>	<ol style="list-style-type: none"> <li>1. Community of Interest Identification</li> <li>2. Effective COI engagement and dialogue</li> <li>3. COI response mechanism</li> <li>4. Reporting</li> </ol>	<ol style="list-style-type: none"> <li>1. Crisis management preparedness</li> <li>2. Review</li> <li>3. Training</li> </ol>

Detailed assessment protocols in each of these areas provide guidance to assist companies in their self-assessments and to facilitate the consistency of self-assessments within and across companies. These protocols are available on MAC's website (see **Annex 1**).

For tailings management, energy use and GHG emissions management, and external outreach, the detailed protocols identify five levels of performance (from Level 1 to Level 5) for each indicator, and assessments are conducted for each Canadian operating facility. For crisis management planning, the assessor is required to determine whether the criteria of each indicator are met and to provide a yes/no answer, and to assess each indicator for the company's corporate office, as well as for each of the Canadian operating facilities.

MAC released its third TSM Progress Report in September 2008. It is available on their website (see **Annex 1**). The report provides the overall TSM performance results for the four elements outlined above. Detailed company-specific performance results are provided separately on the MAC TSM website (see **Annex 1**).

## 2.2 TSM External Verification System

In the first two years of TSM reporting (2004 and 2005 reports), the results published in the TSM Progress Reports were based on company self-assessments against the four sets of performance indicators. This first step allowed MAC member companies to familiarize themselves with the TSM indicators and the reporting process. Verification of TSM results was added starting with the 2006 report to assure MAC members and their communities of interest that reported results are consistent and accurate. As a result, the TSM initiative includes an external verification system that verifies that MAC members' self-assessments reflect actual company performance, assists

members in developing the capacity to monitor and self-assess TSM implementation, and ensures that MAC members and their communities of interest can rely on the reported results.

The TSM verification system involves a layered approach. Three elements combine to give MAC members and their communities of interest confidence in the integrity of reported company performance:

- Verification of company self-assessments by an external verifier;
- Letter of assurance from a CEO or authorized officer confirming the verified results (to be published on MAC's website); and
- Annual post-verification review of two or three member companies' performance by the COI Panel.

The verification system was implemented for the first time in 2007 with ten MAC members externally verifying their 2006 self-assessment results. In 2008 companies began verifying their self-assessment results on a rotating three-year basis, with one-third of members externally verifying their results each year. New MAC members have three years to fully implement the self-assessment and external verification system.

Of the 19 companies that reported 2007 TSM performance results for the 2008 TSM Progress Report, five underwent external verification for the first time. As well, two companies that had their 2006 results externally verified volunteered to repeat the process with their 2007 results. See **Annex 2** for a list of companies that verified their 2006 and 2007 TSM Results.

More information on the TSM external verification system, including terms of reference for verification service providers, can be found on MAC's website (see **Annex 1**).

### 3 COI Panel Post-Verification Review Process

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Prior to the first post-verification review in 2007, the Panel agreed that the purpose of the review is to:

- Lend public credibility to the TSM results by improving TSM (including the verification process);
- Highlight deficiencies and best practices;
- Bring cohesiveness in the application of the self-assessment and verification;
- Drive continued performance improvements; and
- Determine whether the member companies are finding the verification process useful.

The Panel revisited the process for the first post-verification review and updated it accordingly for the second review.

- **The scope of the process:** The scope of the post-verification review included the verification process (design, etc.), the verified results, and lessons learned and changes needed to improve performance.
- **The approach to the process:** The full Panel was involved in the post-verification review, with companies presenting their results and responding to a list of questions developed by the Panel (see the questions below).

- **Company selection criteria:** The Panel decided on Barrick Gold Corporation (Barrick), Xstrata Nickel and Xstrata Zinc Canada for the COI Panel's second post-verification review. These companies represent different sub-sectors of the industry (gold and base metals, respectively), a range of operations, a good geographical distribution, and a range of experience with community engagement.
- **Who should present the results:** The Panel requested that both the companies' Initiative Leaders and Verification Service Providers (VSP) should be present during the post-verification review. For both Barrick and Xstrata Nickel, the Initiative Leader and VSP were present during the post-verification review

Due to logistical constraints, Xstrata Zinc Canada was unable to attend the Panel's post-verification review in September 2008, so their review was postponed to the March 2009 Panel meeting.

This report provides the questions that the Panel put to the companies for their presentation on their verification process and results; summarizes the information provided by the companies; provides the panel discussion on the presented information; and identifies (using underlined text) Panel requests for further information where presenters were not able to answer specific questions. The Initiative Leaders for Barrick and Xstrata Nickel were sent a formal request to address the outstanding questions in February 2009, and their responses are provided in **Annex 3** of this report. The Initiative Leader for Xstrata Zinc Canada was sent a formal request to address the outstanding questions in May 2009, and their responses are also provided in **Annex 3** of this report.

## PANEL POST-VERIFICATION REVIEW QUESTIONS

### CONTEXT QUESTIONS

1. *Can you explain to the Panel members the geographical relationship of the facilities involved in the TSM self assessments to nearby communities of interest, and what the Panel should understand about those communities of interest (demography, history in relationship to the mine, and economic base, notably in relation to the mining industry and the reporting company)?*
2. *What linkages and communication strategies did the company establish with communities of interest? Was there an economic (as well as environmental) basis for those linkages? Was the company able to maintain those linkages? Did the company's documentation make it possible to identify these linkages as part of the self-assessment/verification process?*
3. *Were there any specific problems (such as unresolved aboriginal territorial claims or assertions of adverse environmental impacts, of a current or historical nature) which clearly affected community relationships and the application of the TSM evaluations?*
4. **A.** *What was the company's experience of communication (i.e. in relation to crisis management, closure plans, community outreach on environmental policy and related matters, and tailings management)?*

**CONDUCT OF THE VERIFICATION PROCESS**

4. **B.** *Did you speak with communities of interest to verify the findings?*
5. *How did the response of different communities of interest influence the company's evaluation of its own performance? Are there any particular difficulties which were encountered and merit attention from the Panel? What format did you use to document and record community concerns?*
6. *Can you provide the Panel with how you evaluated crisis management, community outreach and tailings management – what documents were used? How many people were involved in self-assessment?*

**RESULTS AND LESSONS LEARNED**

7. *The Panel is aware of the importance of GHG and energy intensity indicators, but also knows that geographical and geological factors play a major and probably quite specific role in determining energy inputs. Do the records maintained for GHG/energy intensity accounting make it possible to see how these local factors are taken into account and addressed, and is this information available as part of community outreach activities?*
8. *Are there specific geographical and social/cultural circumstances which need to be taken into account in understanding the TSM evaluations for the company's operations? Are there particular initiatives taken by the company which merit identification and discussion? How are communications issues involving tailings management (and effluent quality control) addressed as part of the company's outreach strategy?*
9. *For which indicators did the verifier have a different rating than the company's self assessment and what was the reason for this? What value did the company and the community gain from the conduct of/results of the verification? What has the company learned and what actions will it take to address these?*

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## 4 Results of the COI Panel 2008 TSM Post-Verification Review

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### 4.1 Barrick Gold Corporation Post Verification Review

Bill Ferdinand, Director, Environmental, Health & Safety (Barrick Gold, North America Region), presented Barrick's response to the COI Panel's post-verification review questions. Bill was supported by Vernon Betts of WorleyParsons, who conducted Barrick's external verification of its Hemlo operation.<sup>1</sup> A summary of their presentation and the COI Panel's ensuing discussion is provided below according to the three categories of questions.

#### CONTEXT

Barrick's Hemlo operation is a 50/50 joint venture with Teck Cominco and has been in operation since 1982. The operation consists of an open pit mine and an underground mine.

Communities adjacent to the operation include Marathon, Manitouwadge, White River, the Pic River First Nation, and Pic Moberg First Nation. Mining is the major industry in the area, with some forestry/pulp and paper activities. The Hemlo operation currently employs around 800 people, the majority of which come from Marathon (78%). First Nations employees make up about 2% of the workforce.

The company meets with the Marathon and Manitouwadge town councils as well as both First Nations at least three times a year to discuss activities underway at the operation, prospects going forward, and any issues of concern. A labour agreement currently exists between the operation and the Pic River First Nation, and an MOU is under development with Pic Moberg First Nation regarding training, education, and contracting opportunities. There have been no specific problems that have affected community relationships and the application of the TSM evaluations.

The operation has a mutual aid agreement with Marathon for emergency response. The emergency response system was last tested in November 2007 at the site and within the community of Marathon. The operation has a crisis management plan that lists priority stakeholders to be contacted in the event of an emergency.

#### **Panel Discussion**

A Panel member asked whether the company is working with the nearby communities to mitigate the economic impacts of layoffs and eventual closure, and another Panel member questioned whether the company has developed economic development plans with the communities. Barrick reiterated that the company meets with the Marathon and Manitouwadge town councils as well as the First Nations communities at least three times a year to keep them informed of the company's activities. Barrick also commented that there is a strong linkage between the operation and the communities, and specifically noted that the operation's Development Coordinator also sits on the Marathon town council. Barrick committed to follow up with the site-level staff directly involved in community interactions for a more specific answer to these questions, and to clarify whether the noted meetings are open to the public.

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<sup>1</sup> Barrick verified the TSM performance of its Hemlo operation. Corporate-level performance (relevant to only crisis management) and performance at the Eskay Creek facility were not verified.

A Panel member asked whether there are any existing impact benefit agreements (IBAs) between the company and the neighbouring First Nations. Barrick representatives responded that they are not aware of an IBA being in place but committed to follow up with site-level staff to confirm this answer.

A Panel member asked whether the company has training and transition programs for employees that are laid off. Barrick responded that the company offers severance and training for these employees.

A Panel member asked whether the Hemlo operation shares any infrastructure (e.g. power generation facilities) with the neighbouring communities, and whether any decommissioning activities at the operation would affect these communities. Barrick responded that the operation and the communities are serviced by separate infrastructure, and that infrastructure decommissioning activities at the site would not affect the communities.

A Panel member asked whether the company pays taxes to the town of Marathon. Barrick committed to follow up with site-level staff to get an answer to this question.

A Panel member enquired as to what types of information/materials the company circulates to the surrounding communities. Barrick committed to follow up with site-level staff to get an answer to this question.

### **CONDUCT OF THE VERIFICATION PROCESS**

The verification process for the Hemlo operation was conducted by Vernon Betts (WorleyParsons), who attended the Panel meeting. Performance against the TSM indicators was evaluated through document reviews, and no site visit was conducted (though the verifier had visited the site on other occasions). The verifier reviewed relevant documentation, and developed a list of questions for the company to address that the documents reviewed did not address. These questions were directed to the on-site staff and were answered via telephone interviews and email exchanges.

The verifier did not speak with communities of interest to verify the operation's TSM performance ratings for the External Outreach protocol since the level of the company's performance ratings did not warrant this activity. (Verification Service Providers are advised to consider interviewing community of interest representatives only if the facility is achieving performance levels 4 or 5 for the External Outreach protocol – the Hemlo operation did not score higher than a level 3 for any indicator.)

### **Panel Discussion**

There was debate amongst Panel members around the role of communities and other interests in the site-level verification process. Some Panel members thought that the process allows for communities to be involved in verifying a company's performance, or for the verifier to get input from the community on whether the level of performance in the self assessments is accurate. Others understood that the question of community involvement is a part of the TSM protocols themselves as a requirement for higher levels of performance (e.g. Levels 4 and 5). It was

confirmed that the latter is accurate, and that the verification process does not specifically require the verifier to speak with or get input from communities in conducting the verification.

A Panel member asked whether TSM performance results have been presented to the neighbouring communities. Barrick noted that the TSM program was presented to the two town councils and two First Nations in 2003. A subsequent communications process was put in place that does not explicitly mention TSM but keeps these communities up to date on the activities and performance at the site.

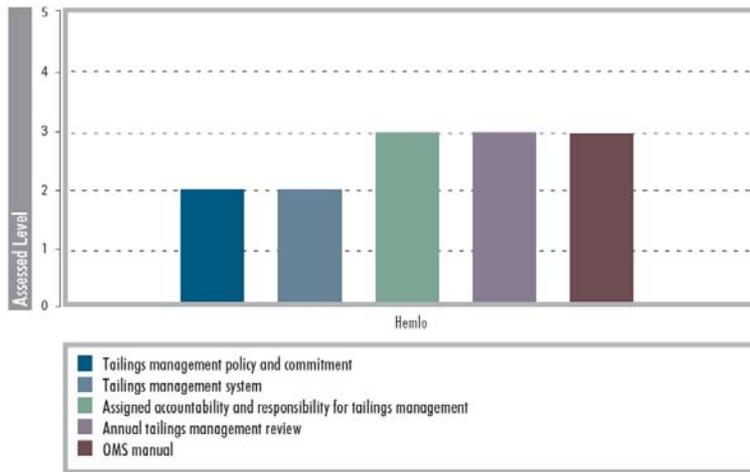
A Panel member asked whether the neighbouring communities have ever expressed an interest in any of the TSM-related issues such as tailings management and energy use/GHG emissions. Barrick responded that little interest has been expressed from the communities of Marathon and Manitouwadge, and speculated that there is likely more interest from the First Nations communities because they are both downstream of another mining operation in the vicinity and would be most affected from potential tailings issues. This Panel member commented that quite often communities are not interested in these issues, so they do not pursue information and are not motivated to get involved. Another Panel member responded that the onus is still on the company to make information publicly available.

The Panel also asked questions of the verifier and received responses that confirmed that the verifier had the necessary training and experience to undertake the TSM verification.

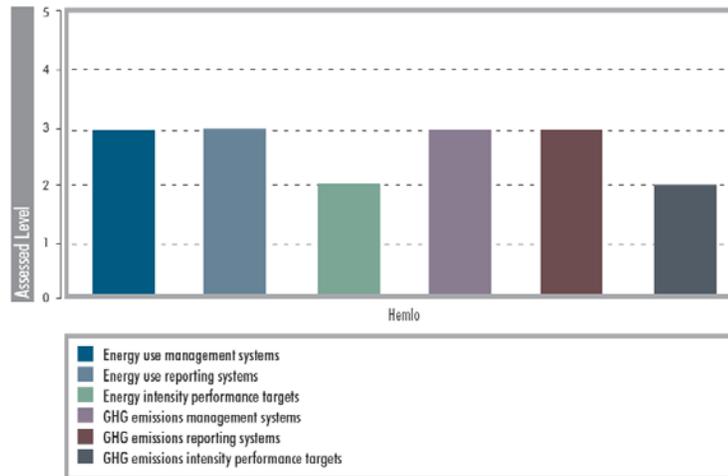
**RESULTS AND LESSONS LEARNED**

Barrick’s verified TSM results for the Hemlo operation are provided below. The indicators for tailings management, energy use and GHG emissions management, and external outreach are assessed on a scale of “Level 1” (lowest) to “Level 5” (highest). Crisis management planning assessments are based on “yes/no” responses.

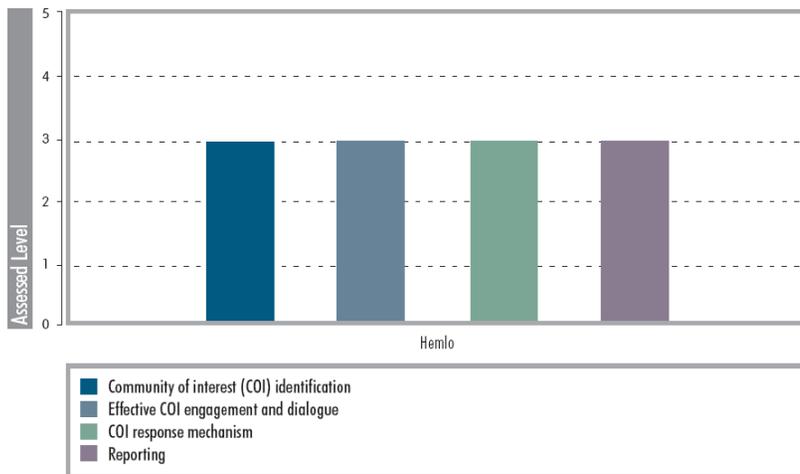
Tailings Management Assessment  
Barrick Gold Corporation



Energy Use and GHG Emissions Management Assessment  
Barrick Gold Corporation



External Outreach Assessment  
Barrick Gold Corporation



Crisis Management Planning Assessment  
Barrick Gold Corporation



Barrick self-assessed the Hemlo operations as being at a Level 3 for all tailings management, energy use and GHG emissions management, and external outreach indicators, and “Yes” for all crisis management planning indicators. The verification results were lower than the company self assessments for four specific indicators, two for tailings management and two for energy/GHG management:

- *Tailings management policy and commitment and tailings management system*: while a good tailings management policy and management system are in place at the Hemlo operation, there has been no local review/comment/outreach activity in relation to the policy and management system, so the scores for these two indicators were changed from Level 3 to Level 2.
- *Energy intensity performance targets and GHG emissions intensity performance targets*: targets were set but not met (missed by a narrow margin), so the scores for these two indicators were changed from Level 3 to Level 2.

Barrick noted that there are no specific geographical or geological factors that play a major role in determining energy inputs since the Hemlo operation is not a remote site and energy inputs are readily available.

### **Panel Discussion**

Barrick confirmed that it is planning to undertake communications activities with communities related to tailings management to improve its performance in the two tailings indicators noted above. Barrick also noted that new goals are being set for energy intensity and GHG emissions intensity.

Barrick was asked to clarify a number of points in relation to the site’s operations and energy use and GHG emissions management:

- The mine started out as an underground operation, but over time the proportion of activities related to open pit mining has increased. This has implications for energy use, since over time open pit mining uses less energy than underground mining.
- Energy use/GHG emissions include onsite fleet as well as the transportation of the gold bars to Toronto.
- There are no open heap leach pads onsite; the cyanide used onsite is used in the milling process only.

A Panel member asked Barrick to indicate the drivers behind improvements in energy use. Barrick noted that economics is the major driver behind the efforts to reduce energy consumption. Every year, operational review teams visit each of Barrick’s operations, including Hemlo, and identify ways to reduce energy and material inputs.

There was discussion on whether Barrick could apply TSM to its international operations. Barrick noted that laws and regulations in other countries may not be compatible with the requirements under TSM, and that it manages all of its operations according to best management practices for each individual site as opposed to a “one size fits all” approach.

In closing out the discussion, the Barrick representatives noted that application of the TSM indicators has been helpful in identifying areas where the Hemlo operations could be improved, and as an instrument to guide and drive that improvement.

## 4.2 Xstrata Nickel Post Verification Review

Claire Vivier, Supervisor, Sustainability (Xstrata Nickel), presented Xstrata Nickel's response to the Panel's post-verification review questions. She was supported by Judy Fedorowick of ERM Canada Corp., who had conducted the external verification. A summary of their presentation and the COI Panel's ensuing discussion is provided below according to the three categories of questions.

### CONTEXT

Xstrata plc is a major global diversified mining group headquartered in Switzerland and listed on the London and Zurich Stock Exchanges. Xstrata plc employs 56,000 people in 18 countries and has a market capitalization of approximately US\$70B. Xstrata plc is listed in the top 20 in the FTSE 100 and on the S&P Europe 350 Index.

Xstrata plc ranks as a leader for sustainability in the basic materials sector on the Dow Jones Sustainability Index (DJSI).

In Canada, Xstrata plc operates four discrete business units – coal, copper, nickel and zinc – that employ 6,900 workers. Xstrata Nickel is the only operating unit with its corporate headquarters in Canada (Toronto). Xstrata Nickel operates in 10 countries and employs over 6,500 people (2,700 in Canada). It is the world's fourth-largest producer of refined nickel with fully integrated operations, with annual managed production of more than 116,000 tonnes of refined nickel, and is also one of the world's largest recyclers and processors of nickel and cobalt bearing materials.

Xstrata Nickel's strategic focus is "value creating growth". In the future, \$455 million will be invested in development projects in Sudbury, and \$412.2 million has been invested to date at Nickel Rim South in Sudbury, with production scheduled to commence in 2009. This project will extend Xstrata Nickel's presence in the Sudbury Basin at least 15 years and will produce 1.25 million tonnes of ore per year.

Xstrata Nickel is committed to "zero harm", which is inherent in Xstrata Nickel's vision and values. Nickel Rim South has celebrated 3.5 million hours and four years without a lost-time injury. Xstrata Nickel has effective health and safety management programs, and five Sudbury Operations facilities have achieved one to two years without a lost-time injury. Sudbury Operations received the 2007 Ontario Mines and Aggregates Safety and Health Association (MASHA) award for safety performance excellence in underground mines and smelters in the Ontario mining industry. The Raglan Mine received the F.J. O'Connell award for eight of the past nine years, which is presented to a Québec mine that has recorded the most improvement in mine safety. Xstrata Nickel also has injury and illness prevention programs; education initiatives that encourage workers to seek early diagnosis and treatment of symptoms; an ergonomics program; physical demands analysis; and industrial hygiene monitoring. The company has also made several investments in community health care.

With regard to environmental management, Xstrata Nickel has site water conservation plans in place and a water management strategy to help the company meet its goal of a 5% reduction of fresh water intensity (per tonne of product) on 2007 performance by 2010. Biodiversity assessments are conducted at all sites, and biodiversity conservation plans are implemented and integrate with closure plans (closure plans contain biodiversity plans as required (by potential impact or by regulation)). Engineering studies for emissions reduction have been conducted/are

being conducted at the Sudbury Smelter to help the company achieve reductions of <25kt/year SO<sub>2</sub> and <250 t/year particulate matter by 2015. At the Sudbury Operations the company has planted 60,000 large trees and rehabilitated approximately 50 hectares of land.

Xstrata Nickel seeks transparency and participation with communities of interest, and spent \$16 million on corporate social involvement in 2007-2008. Key areas of support include community development, health, education, environment, enterprise and job creation, and art and culture. Communications strategies are community-based and each site directs its own communications strategies with communities of interest. There were no specific problems that affected community relationships and the application of the TSM evaluations.

### ***Panel Discussion***

Panel members asked how Xstrata Nickel conducts biodiversity assessments, and what factors these assessments consider. Xstrata Nickel noted that each site conducts its own assessment, starting with a baseline assessment of factors such as flora and fauna, soil composition, stream flow, water and air quality, landscape functions, etc. From the baseline assessment each site would determine its impact and ways to reduce it. Xstrata Nickel agreed to provide the Panel with more information on the list of factors considered in the biodiversity assessments.

A Panel member asked about the company's relationship with the Makivik Corporation, and questioned whether there may be a conflict of interest with the company engaging with community members who are involved with the corporation and who might be more likely to support the company's projects than other community members. Xstrata Nickel noted that the company has a formal legal agreement with the Makivik Corporation through the Raglan Agreement<sup>2</sup>, which includes specific clauses on how individuals are chosen for the Raglan Committee, including mechanisms for grievances. Perceived conflict of interest is addressed. The primary component of the agenda for the Raglan Committee is environmental issues.

Another Panel member asked whether the expansion at Raglan gave the Makivik Corporation the opportunity to renegotiate the Raglan Agreement with Xstrata Nickel. Xstrata Nickel indicated that negotiations are continuing on phase 2 of the Raglan Agreement. A Panel member questioned whether anything is holding up the completion of phase 2 of the agreement, and whether it will address the issue of reducing Aboriginal employee turnover. Xstrata Nickel agreed to follow up on these questions.

### **CONDUCT OF THE VERIFICATION PROCESS**

The verification process was conducted by a three-person team from ERM Canada Corp. with a range of qualifications – considerations included issue-area expertise, auditing experience, and cultural/language sensitivities. Though ERM supports Xstrata Nickel's HSEC (health, safety,

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<sup>2</sup> The Raglan Agreement was signed in 1995 between the Makivik Corporation, Raglan mine, Salluit and Kangiqsujuaq. This socio-economic agreement addresses environmental protection and mitigation, dispute resolution, procurement priority given to competitive Inuit businesses and employment. The profit-sharing arrangement includes a commitment to provide 4.5% of operating profit to the community partners in the agreement once the mine has recouped its initial capital investment. The Raglan Agreement is governed by the six-member Raglan Committee, comprising Salluit, Kangiqsujuaq and the Makivik Corporation representatives, and three Xstrata Nickel representatives. ([www.xstrata.com/sustainability/case\\_studies\\_2006/xstrata\\_nickel/02/](http://www.xstrata.com/sustainability/case_studies_2006/xstrata_nickel/02/))

environment and community) program, it was determined that the verifiers are sufficiently removed from TSM-related activities within Xstrata Nickel to maintain independence.

Two of the four sites were selected for site visits: Sudbury Mines/Mills and Sudbury Smelter. The verification of each protocol was handled by a designated site contact. The verification at Montcalm was conducted by interview mainly with a single point of contact, with the exception of the Mine Manager who was interviewed regarding specific areas where management accountabilities are stipulated. An appropriate interviewee was not available at Raglan, so the verification relied solely on available documentation.

Specific activities related to the verification of the four protocols are summarized below:

#### *Crisis Management*

- Verification conducted through document review and interview at Corporate Headquarters.
- Site verification focused on quality of crisis plan.
- Implementation evaluated through records – review of test results, training records, etc.
- Inspection of crisis rooms conducted for onsite reviews.

#### *External Outreach*

- Assessed documentation to ensure a system was developed to identify and revise COI List (criteria, breadth, review).
- Tested the system implementation through interviews (appropriate engagement, cultural sensitivities, involvement, interaction, feedback).
- Validated the outcome based on applicable records (publications, meetings, faxes, responses, participation records).
- Communities of interest were not contacted due to time constraints. The validation level achieved based on the evidence in the information provided.

#### *Tailings Management*

- Tailings management was not applicable at the Sudbury Smelter, which has no tailings. Remaining sites with both active and closed tailings management areas were included.
- Policy, commitment and accountabilities – assessed through the site's strategic planning process.

#### *Energy Use and GHG Emissions Management*

- Management system level procedures reviewed and verified through interviews. Structure, objectives and targets were assessed.
- Real-time data monitoring for energy consumption reviewed during site visits. Plant control systems assessed through control room reviews. Higher level of verification achieved.
- Sampling conducted to review energy and GHG monitoring data.
- GHG inputs and definitions variable among sites and reflect regulatory changes and varying reporting requirements.
- Management System – sites are ISO 14001 certified and tailings management included within system level procedures, continuous improvement plans, goals, objective and budgeting processes.
- Implementation – onsite inspection, interviews, document review, and records assessments of audits, restoration plans, compared to MAC's Guide.

The verification process indicated that knowledge transfer among staff and sites is key to successful implementation of TSM and the verification process.

***Panel Discussion***

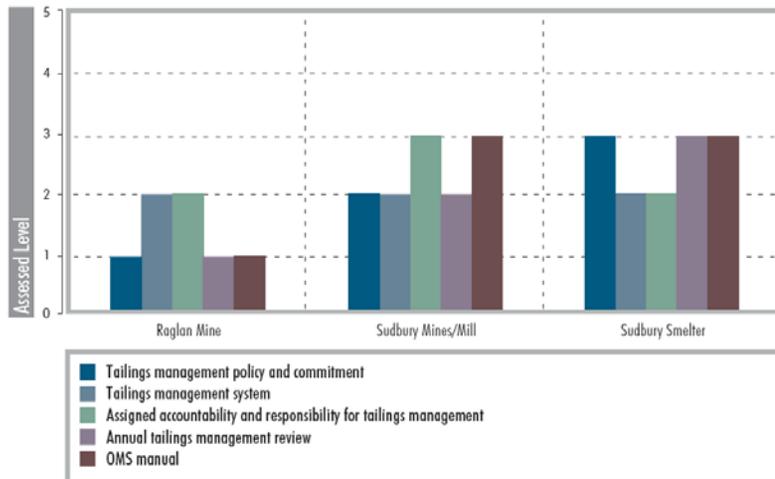
A Panel member asked the basis for the decision to conduct site visits at Sudbury Mines/Mill and Sudbury Smelter. Xstrata Nickel indicated that the verifier made the decision on the basis of logistics. The verifier noted that there was value in the site visit as it resulted in the identification of gaps such as an unequipped crisis management room.

The Panel members commented on the thoroughness of the presentation including the specifics on how the verification was undertaken for each TSM indicator and the information which was used.

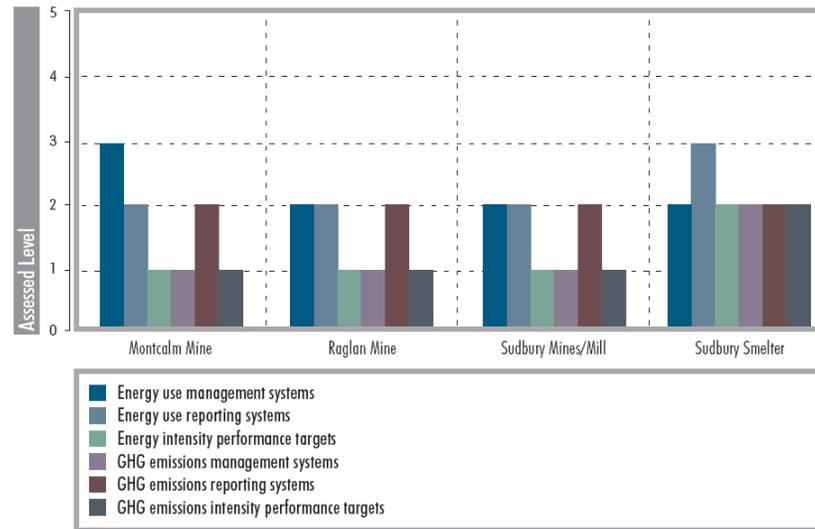
**RESULTS AND LESSONS LEARNED**

Xstrata Nickel’s verified TSM results are provided below. The indicators for tailings management, energy use and GHG emissions management, and external outreach are assessed on a scale of “Level 1” (lowest) to “Level 5” (highest). Crisis management planning assessments are based on “yes/no” responses.

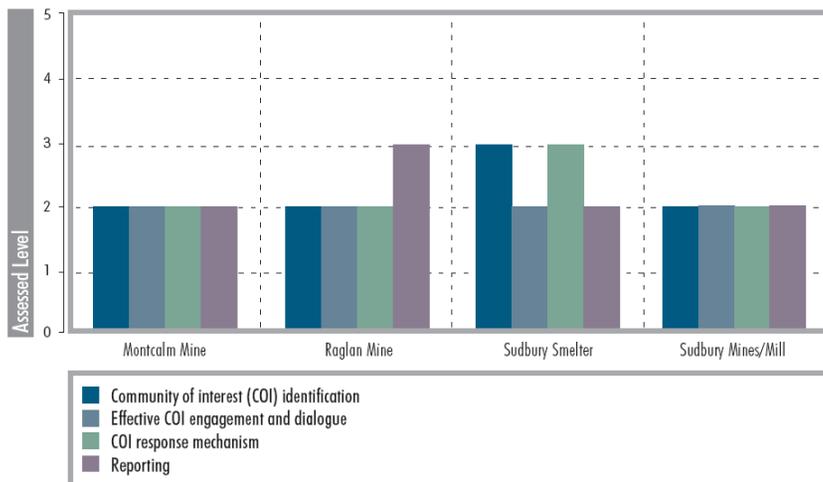
Tailings Management Assessment  
Xstrata Nickel



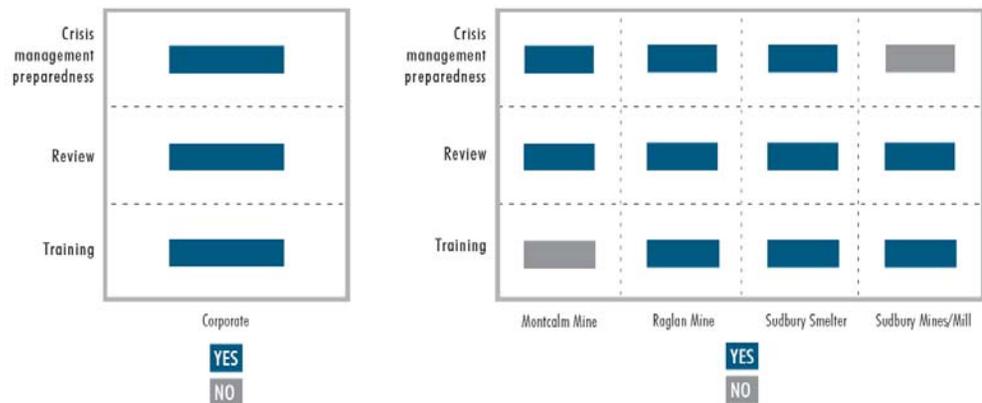
Energy Use and GHG Emissions Management Assessment  
Xstrata Nickel



External Outreach Assessment  
Xstrata Nickel



Crisis Management Planning Assessment  
Xstrata Nickel



Areas where the self-assessment score was verified as representative of TSM performance and where the verifier's score was different than the self-assessment score are presented below:

	Crisis Management	External Outreach	Tailings Management	Energy Use and GHG Management
Montcalm			NA	
Sudbury Mines/Mill				
Sudbury Smelter				
Raglan				

 Self Assessment score verified as representative of TSM  
 Verifier's Score was different than Site's self assessments

The variation between self-assessment results and verified results were primarily due to the maturing working knowledge of the MAC TSM protocols but most significantly the self-assessment process. The 2008 MAC TSM verification process was the first external verification undertaken at the Xstrata Nickel sites. It is also worth noting that a number of the site contacts that were completing the self-assessments were fairly new to Xstrata Nickel and TSM. Following the verification process the MAC TSM protocols and indicators were compared and contrasted to the Xstrata 17 Sustainable Development Standards, which set the performance expectations in the areas of environment, health and safety, community, strategy and planning etc. All Xstrata Nickel sites participate in a rigorous third-party external audit, on an annual basis, against the Xstrata 17 Sustainable Development Standards. Xstrata Nickel's focus is to integrate the TSM requirements with the Xstrata 17 Sustainable Development Standards as the performance expectations and outcomes are aligned.

In terms of local factors affecting the TSM evaluations for the company's operations, Xstrata Nickel identified the following:

- Environmental factors: All energy and GHG sources are accounted for, and local factors are addressed in a full inventory of sources; energy consumption and intensity are expected to rise as deeper ore is sought.
- Geographical and social factors: Raglan expansion; greater transparency across communities of interest; outreach and partnerships; Participation Agreement with Wahnipitae First Nations in Sudbury.

Xstrata Nickel identified some important lessons learned from the verification process:

- To gain the full benefits of TSM it must be fully integrated into Xstrata Nickel's existing management elements (e.g. Xstrata Sustainable Development Framework; ISO-14001 requirements; continuous improvement plans; etc.).

- The TSM process and results should be aligned with internal sustainability risk assessment and performance reporting schedule and activities.
- MAC TSM knowledge must be retained and transferred as needed when people changes positions or leave the company at the site and corporate levels.
- MAC should articulate a process for completing self-assessments.
- TSM training should be included in company-wide Sustainability Awareness Training.
- MAC should define corporate versus site-specific responsibilities.
- MAC needs to educate stakeholders on TSM.
- Energy management and GHG management are intricately linked.

Going forward, Xstrata Nickel is committed to improve its TSM performance. Most notably, the company is setting targets for reducing carbon intensity and energy intensity. Specific activities include:

- Energy and GHG management: An increase in mining investment will correlate to an increase in energy consumption and carbon emissions. To meet this challenge, Xstrata Nickel is committed to finding solutions. Xstrata Nickel is preparing a long-term energy management and carbon footprint management strategy that will achieve:
  - 5% reduction in carbon intensity over 2004 by 2010
  - 1% reduction in energy intensity over 2007 by 2012
  - Sudbury Smelter to achieve 1% energy intensity improvement on five year rolling average
- Tailings management:
  - At Raglan, the company will continue with research on permafrost with climate experts; will work with external experts to update open pits reclamation/closure plan; will update tailings pond long-term design; and will continue to assess/monitor impacts on biodiversity.
- External dialogue:
  - Implement locally-relevant corporate social involvement plans at site level.
  - Implement stakeholder and community-based engagement plans at site level.
  - Carry out stakeholder surveys in principal jurisdictions.
  - Carry out employee satisfaction surveys.
  - Publish site-specific community newsletters.
  - Continue to implement the Partnership Program and Community Volunteerism Program.
  - Sudbury Operations will be holding an open house with Strathcona community in fourth quarter of 2008; Falconbridge Citizens' Committee introduced to continuous improvement plans

### **Panel Discussion**

A Panel member asked whether marine transportation is included in the company's energy use and GHG emissions. Xstrata Nickel clarified that the company's energy use and GHG emissions inventory includes fuel used within the boundaries of the operations, fuel used to transport products between operations, and jet fuel consumed to transport employees to sites, but does not include fuel consumed through marine transportation.

A Panel member expressed surprise at the low assessments for external outreach, particularly at Raglan where the company has a good record of community engagement.

The facilitator asked whether the assessment process and verification led to targets being developed. Xstrata Nickel indicated that while targets have not been developed yet, the company is putting in place energy management and carbon strategies, and each site will have their own targets related to these two strategies.

### 4.3 Xstrata Zinc Canada Post Verification Review

Paul Deveau, Director, Environment, Health and Safety (Xstrata Zinc Canada) presented Xstrata Zinc Canada's post-verification review. Dianne Rubinoff of Rubinoff Environmental, who conducted Xstrata Zinc Canada's external verification, was also in attendance. A summary of their presentation and the COI Panel's ensuing discussion is provided below according to the three categories of questions.

#### CONTEXT

The Xstrata Zinc's head office is located in Madrid, Spain. Xstrata Zinc Canada consists of four operations – Brunswick Mine, Brunswick Smelter, CEZinc and the Perseverance Project.

#### Brunswick Mine

Brunswick is an underground mine located 20 km from Bathurst, New Brunswick. The mine employs 800 people, and has an annual production capacity of 3.6 million tonnes of ore containing zinc, lead, copper and silver. Zinc, bulk lead and copper concentrates are shipped by rail or by boat through the company operated bulk-handling facility near Belledune, New Brunswick, located 50 km from the mine. The sulphide ore body was discovered in 1953 and put in production in 1964. Since then, the operation has produced more than 120 million tonnes of ore and counts among the largest underground zinc mines in the world. With the current life-of-mine plan, the mine is expected to be depleted in 2010-2011.

#### Brunswick Smelter

Brunswick Smelter employs 430 people, and has an annual production capacity of 110,000 tonnes of refined lead and 450 tonnes of silver doré. The smelter also produces 100,000 tonnes of sulphuric acid per year. Brunswick Smelter employs traditional sinter and blast furnace technology to process lead-silver concentrates and a wide range of recycled materials. The facility also operates a lead-acid battery recycle plant and the bulk-handling port terminal for importing and exporting concentrates and other materials. The smelter first opened in 1966 as a lead and zinc facility and was later modified to a lead-only facility with capability to treat lead-silver concentrates and a range of recycled materials. The bulk-handling and battery breaker facilities were commissioned in 1996. The growth in custom smelting prompted the addition of a new blast furnace in 1999 and a silver refinery in 2000.

#### CEZinc

CEZinc is an electrolytic zinc production facility that employs 650 people and has an annual production capacity of 260,000 tonnes. The facility is well located for receiving zinc concentrates by rail or by boat and benefits from its proximity to its North American zinc consumers. CEZinc commenced operations in 1963 with a capacity of 65,000 tonnes/year. The Noranda Income Fund, created in 2002 to acquire the assets of CEZinc, operates as an income trust. Xstrata holds 25% of the units of the Fund and provides management services and concentrate supply for the operations.

#### Perseverance Project

The Perseverance deposits are located close to Xstrata's existing mill infrastructure in Matagami, Québec. Construction was completed ahead of schedule and commercial production commenced in the third quarter of 2008. At expected production rates, the mine will have a life of 5.5 years. At the design mining/milling rate of 2,600 tonnes/day, the mine is expected to produce

approximately 115,000 tonnes of zinc and 9,000 tonnes of copper in concentrates. Xstrata holds 100% interest in the Perseverance deposits. The Perseverance mine will be the eleventh mine to be developed in the Matagami mining camp since 1964. Perseverance was not included in the TSM verification as it was not operating in 2007.

### **Xstrata's Commitment to Sustainable Development**

Xstrata's commitment to sustainable development is actioned through the company's Sustainable Development Framework, which includes the company's four business principles, a new Sustainable Development Policy, and 17 Sustainable Development Standards, several of which closely relate to the current TSM issues as well as issues that are under development (e.g. biodiversity, health and safety). Xstrata's independent Sustainable Development Assurance Programme is the key mechanism through which the Xstrata Board and management gain assurance that the Group's policies and standards are being met or exceeded by each operation, project and commodity business.

<b>Xstrata's Sustainable Development Framework</b>	
<b>Business Principles</b>	<ul style="list-style-type: none"> <li>• We work ethically</li> <li>• We work responsibly</li> <li>• We work openly</li> <li>• We work together and with others</li> </ul>
<b>Sustainable Development Policy</b>	Introduced in early 2008, the policy aggregates the previous Health, Safety, Environment and Community (HSEC) and Corporate Social Involvement (CSI) Policies and includes the company's commitments to employees. The revised Policy introduces more specific and challenging environmental, health and safety commitments and further integrates the company's commitment to communities and the broader societies within which it operates.
<b>Sustainable Development Standards</b>	<ul style="list-style-type: none"> <li>• Leadership, Strategy and Accountability</li> <li>• Planning and Resources</li> <li>• Behaviour, Awareness and Competency</li> <li>• Communication and Engagement</li> <li>• Risk and Change Management</li> <li>• Catastrophic Hazards</li> <li>• Legal Compliance and Document Control</li> <li>• Operational Integrity</li> <li>• Health and Occupational Hygiene</li> <li>• Environment, Biodiversity and Landscape Functions</li> <li>• Contractors, Suppliers and Partners</li> <li>• Social and Community Engagement</li> <li>• Life Cycle Management – Projects and Operations</li> <li>• Product Stewardship</li> <li>• Incident Management</li> <li>• Monitoring and Review</li> <li>• Emergencies, Crises and Business Continuity</li> </ul>

Xstrata is committed to the goal of sustainable development, and balances social, environmental and economic considerations in how the business is managed. Xstrata believes that operating to leading standards of health, safety and environmental management, contributing to the development of sustainable communities, and engaging with stakeholders in two-way, open dialogue, regardless of our location, enhances their corporate reputation and is a source of competitive advantage that enables them to gain access to new resources, maintain a licence to

operate, attract and retain the best people, access diverse and low-cost sources of capital, identify and act upon business opportunities, and optimise management of risks.

In 2007 Xstrata was assessed as the mining & metals sector leader in the Dow Jones Sustainability Index (DJSI). In 2008 Xstrata was assessed as the mining & metals sector leader by the UK Business in the Community (BiTC), which also gave them the number 1 rating in the 2008 Australian Corporate Responsibility Index.

### **Panel Discussion**

A Panel member asked for more information about the communities around Xstrata Zinc Canada's operations. Xstrata Zinc Canada noted that Brunswick Mine and Smelter are near Bathurst, New Brunswick, which has a population of approximately 15,000 people. The mine is 20km southwest of Bathurst, and the smelter is 30km northwest of Bathurst in the town of Belledune, which has a population of 1,500. Brunswick Smelter has set up a Community Advisory Panel as a follow-up to the federal government's pollution prevention (P2) plans. CEZinc is in Valleyfield, Québec and also has a Community Advisory Panel. Brunswick Mine and Smelter are the largest employers in the Bathurst area, and have been working closely with the local communities and federal, provincial and municipal governments regarding the impending closure of Bathurst Mine.

Xstrata Zinc Canada noted that the company has a corporate commitment to donate 1% of pre-tax profit to community development, and that the company provides standing donations as well as donations that can be applied for every year. The Panel requested further information on the company's community development and investment approach at Bathurst, and whether donations are applied/awarded strategically in response to community-identified needs.

Another Panel member asked more specifically about the company's relationships and engagement with local Aboriginal groups. Xstrata Zinc Canada indicated that there is a small Aboriginal community in the suburbs of Bathurst that is one of the company's key stakeholders. Xstrata Zinc Canada does not have any formal agreements with Aboriginal communities. The Panel requested further information on the Aboriginal communities around Xstrata Zinc Canada's operations and what the company has done to reach out to them.

A Panel member asked whether there is still a trade school in Bathurst, and whether Xstrata Zinc Canada is actively involved in any way. Xstrata Zinc Canada confirmed that the trade school (NBCC) is still open, and that the company is in regular contact with the school and has over a long period of time had different courses provided to its workforce. The Company has also provided expertise in the establishment of different trades courses at the school. A Panel member pointed out that it is estimated that by 2012 the mining industry is going to be short 10,000 skilled trades people, and that mining companies and trade schools have an important role to play in addressing this coming challenge.

A Panel member suggested that the local communities surrounding Xstrata Zinc Canada's operations would benefit from a presentation from Xstrata Zinc Canada, specifically related to their TSM performance as well as the closure and perpetual care of the Brunswick Mine. This would give the company an opportunity to share information as well as receive local community feedback.

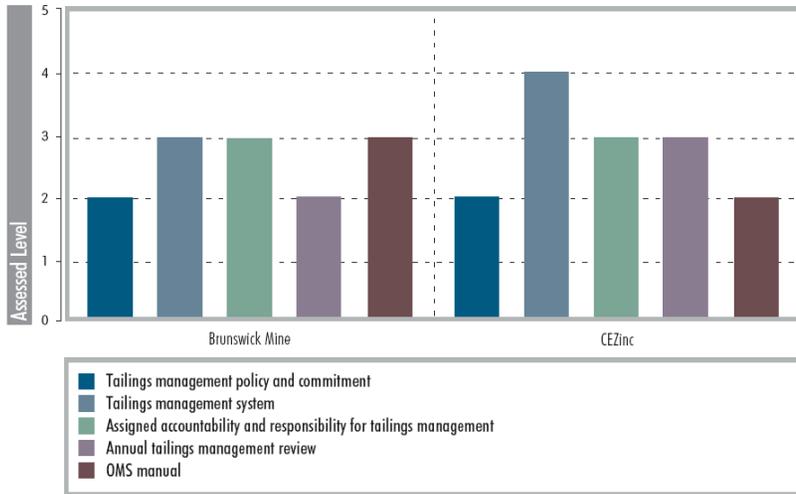
## **CONDUCT OF THE VERIFICATION PROCESS**

Xstrata Zinc Canada did not report on the conduct of the verification process. The verifier (Dianne Rubinoff) was in the room to answer any questions that the Panel raised regarding verification, but none were asked.

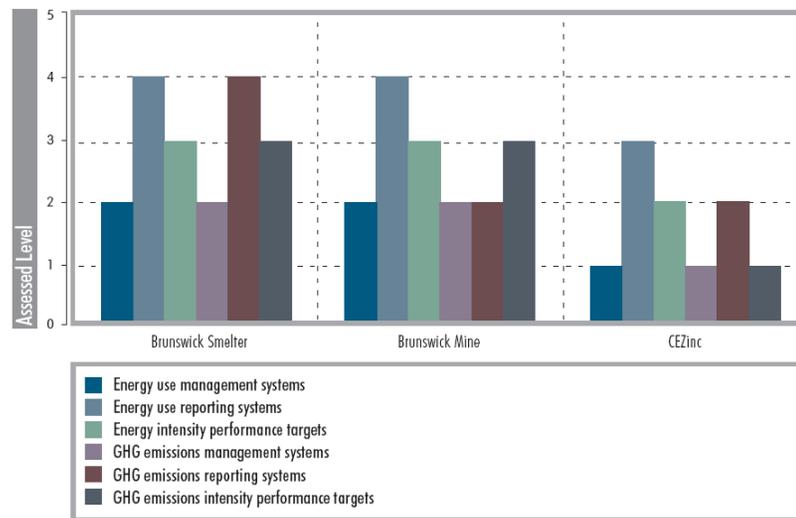
**RESULTS AND LESSONS LEARNED**

Xstrata Zinc Canada’s verified TSM results are provided below. The indicators for tailings management, energy use and GHG emissions management, and external outreach are assessed on a scale of “Level 1” (lowest) to “Level 5” (highest). Crisis management planning assessments are based on “yes/no” responses.

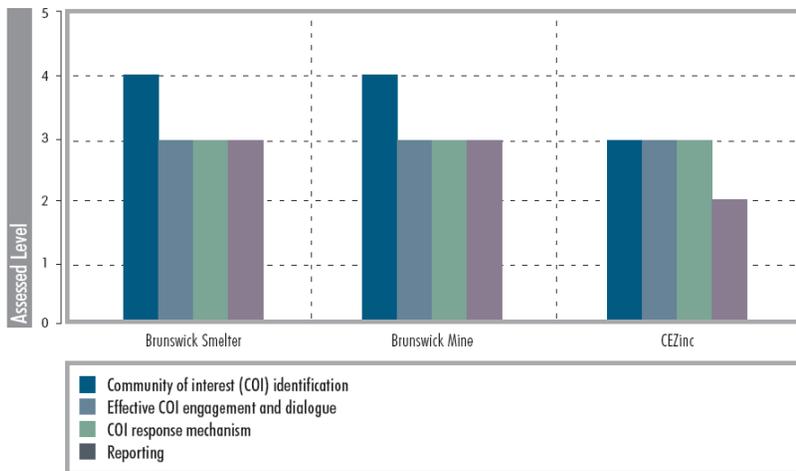
Tailings Management Assessment  
Xstrata Zinc Canada



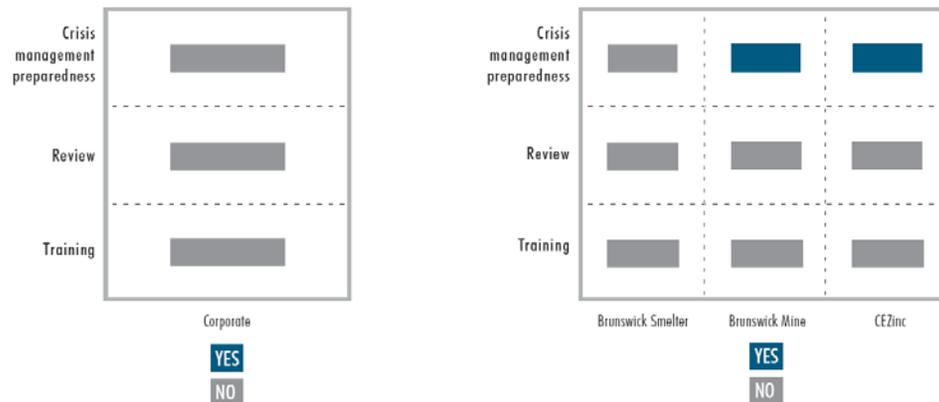
Energy Use and GHG Emissions Management Assessment  
Xstrata Zinc Canada



External Outreach Assessment  
Xstrata Zinc Canada



Crisis Management Planning Assessment  
Xstrata Zinc Canada



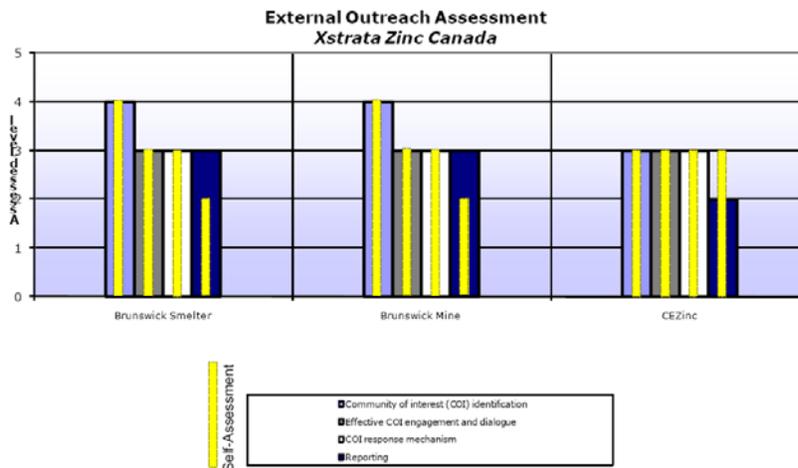
Xstrata Zinc Canada presented and discussed their self-assessment and verified TSM results.

**Crisis Management Planning**

The lower performance on crisis management planning was in part due to the transition from Falconbridge to Xstrata systems. Some work has been done on crisis management planning at the facilities and these scores are expected to improve.

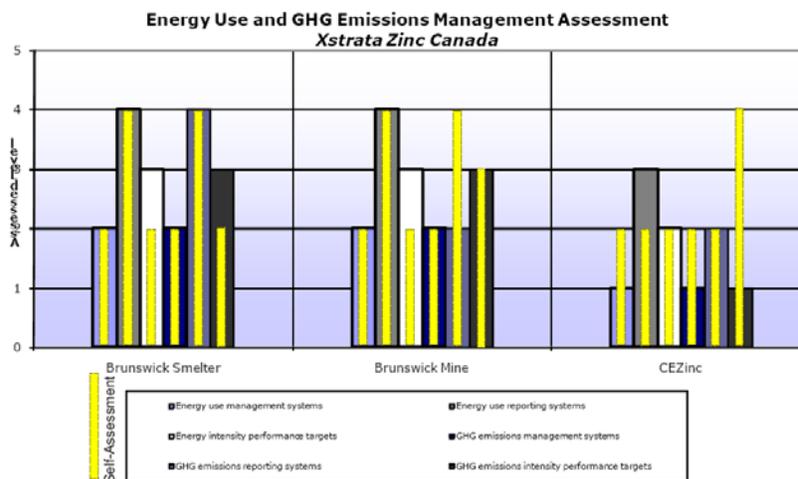
**External Outreach**

Strong progress will be made on external outreach in 2008 due to new programs put in place under Xstrata’s Sustainable Development Framework.



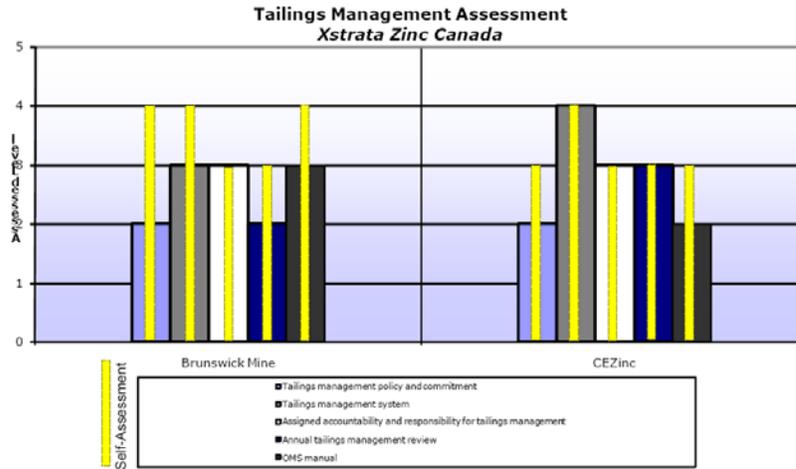
**Energy Use and GHG Emissions Management**

While CEZinc has low scores on energy use and GHG emissions management due to lack of a comprehensive management system, they are strong performers on energy efficiency and have very low GHG emissions. Credit for early action is an issue for Xstrata Zinc Canada. The company made significant improvements in energy efficiency well in advance of 2006, which the government has established as the base year against which future energy efficiency improvements will be measured. With little opportunity remaining for improvements to energy efficiency, Xstrata Zinc Canada’s facilities may not be able to meet the targets set against the 2006 baseline.



## Tailings Management

At CEZinc the “tailings” is iron residue from the zinc smelting process, mixed with cement and solidified. These tailings do not pose the same level of risk as “liquid” tailings, and there was debate as to whether CEZinc should be assessed for tailings management. CEZinc could not score higher than a Level 2 for tailings management policy and commitment, since tailings was not explicitly referenced in their policy.



## Panel Discussion

A Panel member asked what sort of difficulties the facilities faced in developing (and therefore scoring higher on) management and reporting systems for energy use and GHG emissions. The verifier noted that for Bathurst Mine there was no evidence that energy and GHG management and reporting was integrated into business planning.

Xstrata Zinc Canada also noted that Bathurst Mine faces challenges in achieving its targets as it reaches end of life, since more energy is required to operate the mine (e.g. have to dig deeper, bring up more ore to get the same amount of minerals, extract the minerals from lower quality ore, etc.). The smelter is facing diminishing returns on energy efficiency since so much has already been done, and is now using *Six Sigma* to look for new opportunities.

A Panel member noted that it is important for companies to provide context on their TSM results to help readers properly interpret the results or help them understand the reasons for specific performance, such as acknowledging early adoption and why further improvements will be difficult.

The Panel discussed whether CEZinc’s “tailings” should be considered as such, and noted that tailings is a very site-specific thing that is dependent on the nature of the ore body being mined.

## 5 Key Learnings from the 2008 Post-Verification Review

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***It may be time for the COI Panel to review the protocols and whether they are achieving the intended results:*** For example, a Panel member noted that one MAC member participating in TSM (Diavik) had a tailings breach this year and questioned whether the crisis response and tailings management met all the TSM requirements.

Industry members of the Panel commented that the tailings management protocol may be too prescriptive and that the TSM indicator assessment and verification results may not reflect actual performance of the company.

Panel members stated that the Panel may wish to revisit the crisis management planning and tailings management protocols to ensure they achieve the intended results. The same could be done for the other protocols.

***More work needs to be done to properly prepare the companies, verifiers, and COI Panel for the post-verification review process:*** It would be helpful to give companies and verifiers more notice that they have been selected for the COI Panel's post-verification review. Companies and verifiers would also benefit from clear direction on presentation requirements (e.g. whether a PowerPoint presentation is required). The COI Panel would benefit from receiving brief background information on the company and the facilities to be verified prior to the post-verification review. This would permit the Panel to formulate more specific questions for the company to address, and with sufficient lead time would permit the companies to better prepare for the post verification review. Other materials may also be helpful for the COI Panel (e.g. TSM results, etc.), and should be provided well in advance of the review.

***Involving Site People:*** There is value in having the company representatives who present the verification results bring along key staff members from the facility/mine who are responsible for applying the TSM protocols.

***Demonstrate how TSM is making you a better company:*** TSM is based on improving performance. Companies need to demonstrate to the COI Panel how participating in TSM is helping them improve their performance.

***Reporting and verifying duplication and burden on the companies needs to be investigated:*** There was some concern that the TSM reporting and verification processes are adding to a company's already long list of reporting and auditing requirements, and may also be duplicative. There may be efficiencies to be achieved. The Panel requested that companies provide information on costs and time schedules of their various reporting and verification/auditing requirements.

## **Annex 1: Weblinks**

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COI Panel Information:

[www.mining.ca/www/Towards\\_Sustaining\\_Mining/Community\\_of\\_Interest\\_Panel/Community\\_of\\_Interest\\_Panel.php](http://www.mining.ca/www/Towards_Sustaining_Mining/Community_of_Interest_Panel/Community_of_Interest_Panel.php)

Detailed Assessment Protocols:

[www.mining.ca/www/Towards\\_Sustaining\\_Mining/Performance\\_Indicators/index.php](http://www.mining.ca/www/Towards_Sustaining_Mining/Performance_Indicators/index.php)

2007 TSM Progress Report:

[www.mining.ca/www/Towards\\_Sustaining\\_Mining/index.php](http://www.mining.ca/www/Towards_Sustaining_Mining/index.php)

TSM Performance Indicator Results by Company and Facility:

[www.mining.ca/www/media\\_lib/TSM\\_Publications/TSM\\_2007\\_Eng/8\\_results\\_company.pdf](http://www.mining.ca/www/media_lib/TSM_Publications/TSM_2007_Eng/8_results_company.pdf)

TSM External Verification System Information:

[www.mining.ca/www/Towards\\_Sustaining\\_Mining/External\\_Verification/Introduction.php](http://www.mining.ca/www/Towards_Sustaining_Mining/External_Verification/Introduction.php)

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## **Annex 2: List of Companies That Verified Their TSM Results**

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### **2006**

Albian Sands Energy Inc.  
BHP Billiton Diamonds Inc.  
Breakwater Resources Ltd.  
CVRD Inco Limited<sup>1</sup>  
Diavik Diamond Mines Inc.  
HudBay Minerals Inc.  
Inmet Mining Corporation  
Iron Ore Company of Canada  
Suncor Energy Inc.  
Syncrude Canada Ltd.  
Teck Cominco Limited

<sup>1</sup> *Verified results do not include Voisey's Bay Nickel, a new reporter within CVRD Inco*

### **2007**

ArcelorMittal Mines Canada  
Barrick Gold Corporation (partial)  
Syncrude Canada Ltd.  
Teck Cominco Limited (partial)  
Xstrata Copper Canada  
Xstrata Nickel  
Xstrata Zinc Canada

*Note: Barrick Gold and Teck Cominco had a sample of their facilities verified.*

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## Annex 3: Answers to Outstanding Questions

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### BARRICK

1. A Panel member asked whether the company is working with the nearby communities to mitigate the economic impacts of layoffs and eventual closure, and another Panel member questioned whether the company has developed economic development plans with the communities. Barrick reiterated that the company meets with the Marathon and Manitouwadge town councils as well as the First Nations communities at least three times a year to keep them informed of the company's activities. Barrick also commented that there is a strong linkage between the operation and the communities, and specifically noted that the operation's Development Coordinator also sits on the Marathon town council. **Barrick committed to follow up with the site-level staff directly involved in community interactions for a more specific answer to these questions, and to clarify whether the noted meetings are open to the public.**

*The Hemlo operation meets at least three (3) times a year with all COI's and have dialogue with respect to facility status, including economic conditions (including downsizing), labour and other such issues. Both facility sites at Hemlo (David Bell mine and Williams mine) have Labour Adjustment Committees in place that the operation's Development Coordinator chairs to discuss economic development issues with the COI's. The meetings are advertised as closed meetings of Council and not open to the public.*

2. A Panel member asked whether there are any existing impact benefit agreements (IBAs) between the company and the neighbouring First Nations. **Barrick representatives responded that they are not aware of an IBA being in place but committed to follow up with site-level staff to confirm this answer.**

*Hemlo has an Economic Benefit Agreement in place with Pic Mobert First Nation. With respect to the Pic River First Nation, Hemlo has a labour agreement in place.*

3. A Panel member asked whether the company pays taxes to the town of Marathon. **Barrick committed to follow up with site-level staff to get an answer to this question.**

*The Mine does pay tax to the Town of Marathon.*

4. A Panel member enquired as to what types of information/materials the company circulates to the surrounding communities. **Barrick committed to follow up with site-level staff to get an answer to this question.**

*Presented to the communities are quarterly site presentations on Hemlo activities along with Sustainability Reports.*

## XSTRATA NICKEL

1. Panel members asked how Xstrata Nickel conducts biodiversity assessments, and what factors these assessments consider. Xstrata Nickel noted that each site conducts its own assessment, starting with a baseline assessment of factors such as flora and fauna, soil composition, stream flow, water and air quality, landscape functions, etc. From the baseline assessment each site would determine its impact and ways to reduce it. **Xstrata Nickel agreed to provide the Panel with more information on the list of factors considered in the biodiversity assessments.**

*Biodiversity conservation assessments included detailed inventories of vegetation on and around our sites, as well as those of birds, fish and other wildlife communities. Studies identified critical watershed and aquatic species. The terrestrial ecosystem was assessed for significant habitats, protected lands and terrestrial species including populations with conservation concern. Biodiversity conservation plans have been developed and are in progress. These include strategies and actions to avoid, minimize or mitigate impacts or risks on biodiversity, including those associated with mine closures. Biodiversity conservation targets will be set in the areas of air/noise, energy management, waste management, water use, aquatic ecosystems, terrestrial ecosystems, wildlife and habitat, and cultural/social.*

2. Another Panel member asked whether the expansion at Raglan gave the Makivik Corporation the opportunity to renegotiate the Raglan Agreement with Xstrata Nickel. Xstrata Nickel indicated that negotiations are continuing on phase 2 of the Raglan Agreement. A Panel member questioned whether anything is holding up the completion of phase 2 of the agreement, and whether it will address the issue of reducing Aboriginal employee turnover. **Xstrata Nickel agreed to follow up on these questions.**

*1) Phase 2 Negotiation of the Agreement is required in the event of an application for Raglan Mine expansion. Xstrata Nickel has deferred indefinitely its expansion plans and stopped all related work, including the associated ESIA and permitting-related activities, therefore Phase 2 negotiations were not pursued.*

*2) Aboriginal recruitment, training and retention continue to be a priority for Raglan Mine. Raglan and its Nunavik partners (Kativik Regional Government and Kativik School Board) have jointly created the Tamatumani Project. The project includes:*

- *Defined entry level positions within Raglan Mine and its contractors for new Aboriginal employees;*
- *Essential Skills training;*
- *Position specific apprenticeship / technical training;*
- *Worksite transition and family support programming;*
- *Personalized career plans;*
- *Individual progression plans for existing employees; and*
- *Project resources: training & programming staff, facilities, and funding.*

## XSTRATA ZINC CANADA

1. Xstrata Zinc Canada noted that the company commits 1% of pre-tax profit to community development, and that the company provides standing donations as well as donations that can be applied for every year. **The Panel requested further information on the company's community development and investment approach at Bathurst, and whether donations are applied/awarded strategically in response to community-identified needs.**

*The Manager, Public Affairs meets regularly with stakeholders to establish the determined needs. The areas considered are Health, Environment, Community projects, Arts, Culture and Education. Some examples of 2008 donations made as a consequence of this process include:*

- Chaleur Regional hospital Foundation \$40K
- Theatre Populaire d'Acadie \$7500
- University of New Brunswick \$12K
- Universite de Moncton \$12K
- Chaleur French and English Schools \$160K (buses)
- Nepisiguit Salmon Association \$10K

2. Another Panel member asked more specifically about the company's relationships and engagement with local Aboriginal groups. Xstrata Zinc Canada indicated that there is a small Aboriginal community in the suburbs of Bathurst that is one of the company's key stakeholders. Xstrata Zinc Canada does not have any formal agreements with Aboriginal communities. **The Panel requested further information on the Aboriginal communities around Xstrata Zinc Canada's operations and what the company has done to reach out to them.**

*In Bathurst, New Brunswick: The First Nations Band has a youth and POW WOW person with whom we are in regular contact. The programs that have been supported in 2008 are those that have been recommended by the band council member. In addition, the Nepisiguit Salmon Association project, which we sponsor, includes the operation of a salmon counting fence which is staffed by band members.*

*In Matagami, Québec: The facility has also been involved in initiatives to promote training of Aboriginal individuals in hard rock mining techniques. Xstrata has been working with the Commission scolaire de la Baie James and with the Cree School Board for this purpose. As part of a larger initiative aimed at facilitating the recruitment of individuals from the forest products sector (following mill closure) into mining, a Cree cohort from the community of Waswanipi took part in such a programme. Further work is needed to develop, in aboriginal communities, the interest and skills involved in underground mining, but a start has been made, and the initiative will continue.*

3. A third Panel member who was not able to attend the presentation by Xstrata Zinc, due to a flight delay, identified additional questions for the company later in the Panel meeting and submitted them to the facilitator following the meeting for transmission to Xstrata Zinc, as follows:
- 1) Who have you identified as the “affected parties” from your operations at the Belledune Smelter and Brunswick Mine sites?
  - 2) What are the impacts of concern on these affected parties?
  - 3) What types of consultations have been done with the affected parties and in what years?
  - 4) How have you addressed the concerns of the affected parties?
  - 5) Is the closure plan for the Brunswick Mine completed and what stakeholders has it been presented to?
  - 6) What formal guarantee for long term tailings management and waste water treatment has been arranged at the Brunswick Mine site?
  - 7) What groups and communities have you included in your closure plan public process?
  - 8) Will you share a copy of your biodiversity indicators with us?

*Xstrata Zinc would be happy to address these questions with Panel members in one-on-one conversations.*