TOWARDS SUSTAINABLE MINING
PROGRESS REPORT 2012

The Mining Association of Canada | L'association minière du Canada

TABLE OF CONTENTS

INTRODUCTION

INTRODUCTION

Towards Sustainable Mining (TSM) is an industry-wide, performance-based program that was developed to help mining companies evaluate and manage their environmental and social responsibilities. The program's main objective is to enable mining companies to meet society's needs for minerals, metals and energy products in the most socially, economically and environmentally responsible way. In essence, TSM ensures companies are operating in a way that aligns with evolving societal priorities and expectations as they relate to community engagement, safety and health, energy use and the environment.

Participation in TSM is a condition of membership in MAC. Members commit to a set of guiding principles and annually report their performance against a set of performance indicators. TSM assessments take place at the facility level to ensure that management systems are in place, with results externally verified every three years.

TSM includes ongoing consultation with the Community of Interest (COI) Advisory Panel. This multi-stakeholder group helps our members and communities of interest foster dialogue, improve the industry's performance and shape the program for continual advancement.

MESSAGE FROM THE PRESIDENT & CEO

MAC members are constantly seeking innovative approaches to improve performance and raise the bar in corporate social responsibility. We believe that we have a responsibility to respect and conserve the environment around us, protect the safety and health of our employees and communities, and leave lasting benefits beyond the life of a mine. The way we conduct our business is guided by the priorities and values of Canadians.

With the invaluable advice from the COI Advisory Panel and the commitment from MAC members, TSM continues to evolve to address pressing issues. In 2011 MAC members were introduced to two new performance protocols – biodiversity conservation, and safety and health. Over the last year, MAC worked with members to implement the new performance protocols at operations across the country. The *2013 TSM Progress Report* will include industry results for all six performance areas, including biodiversity conservation, and safety and health.

In addition to introducing new performance protocols, 2011 brought some significant changes to the program, including a renewal of the COI Advisory Panel. This renewal was initiated by the non-industry members of the Panel, with the objective to review the mandate of the Panel and ensure that it remains a place for rich dialogue between the Canadian mining industry and civil society. As a result of this renewal, we welcome several new members to the Panel and say goodbye and express our gratitude to many long-serving members.

We welcome Victor Goodman (Campbell River Economic Development Corporation), Joy Kennedy (The United Church of Canada), Chief Earl Klyne (Seine River First Nation), Nathan Lemphers (Pembina Institute), Dr. Philip Oxhorn (Institute for the Study of International Development, McGill University), and Mark Podasly (Brookmere Management Group) to the COI Advisory Panel.

MAC would also like to take this opportunity to express our sincere gratitude to the following members who announced their retirement from the Panel. Several of these individuals are founding members and have contributed significantly to the success of TSM over the last decade. Outgoing members include Chief Roger Augustine, Richard Briggs, Dr. Ginger Gibson, Larry Haber, Brenda Kelley, Soha Kneen, Christy Marinig and Chief Eric Morris.

I hope you enjoy the *2012 TSM Progress Report*. As always, it takes a detailed look at our members' progress and performance in the past year.

Pierre Gratton
President & CEO, The Mining Association of Canada

MESSAGE FROM THE CHAIR OF THE TSM GOVERNANCE TEAM

The past eight years have been exciting for TSM, and much progress has been made. We are already seeing the fruits of our labour. MAC members continue to improve across the three main components of TSM – communities and people, environment, and energy efficiency. The membership remains focused on minimizing its impact to the environment and biodiversity, while reducing energy consumption. At the same time, much progress has been made to increase meaningful and ongoing engagement with the communities where they operate. This improved engagement has highlighted the important issues, helped reduce uncertainty and built trust by aligning our actions, through dialogue, with the values and priorities of our communities of interest. For industry-wide data, please refer to the *Measuring Industry Performance* section of this report.

This alignment and dialogue is opening up opportunities for collaboration on issues that, until recently, would have seen the industry and its communities of interest acting in isolation. This collaboration has the power to generate many more positive outcomes than could ever be achieved by acting alone. That's something that's in everyone's best interests.

Gordon Ball
Chair, TSM Governance Committee

MESSAGE FROM THE COMMUNITY OF INTEREST ADVISORY PANEL

ABOUT THE COMMUNITY OF INTEREST ADVISORY PANEL

The COI Advisory Panel, formed in 2004, was initiated as an advisory body to MAC for the purpose of providing input on the development of TSM (including protocols, indicators and the approach to reporting). TSM encourages MAC member companies and the overall mining industry to achieve levels of excellence in their performance. This means going above and beyond the "minimum regulatory requirements" that oversee mining in Canada. Participating in TSM is a requirement of MAC membership; however, not all companies with operating mines in Canada are members of MAC.

YEAR IN REVIEW: COI PANEL ACTIVITIES

In 2011-2012, the Panel reviewed the verified TSM results of two companies: Iron Ore Company of Canada and De Beers Canada Inc. In addition to the Panel's ongoing activities of undertaking post-verification reviews of companies and providing feedback on emerging issues in the sector, the Panel also undertook a process this year to revise its Terms of Reference and renew its membership.

We developed a set of renewal guidelines that addressed the Panel's goals, objectives, procedures, member selection and responsibilities. Two key results of the renewal process include:

- Expanding the Panel's focus to address issues more broadly in the mining sector; and
- Changing membership from individual and organizational representation to individual representation only.

The change to individual membership was made to address the essentially advisory nature of the Panel, allowing for expert input and advice without having members formally represent institutional interests. Should the occasion arise where a formal institutional position is sought, a separate process will be engaged. In addition, the Panel developed criteria that will help to ensure that the Panel has representation from a broad spectrum of communities, organizations and experts. Panel members will have a high level of knowledge about the physical, social, environmental, regulatory, and social responsibilities and challenges surrounding mining in Canada.

As part of this renewal process, the Panel welcomes six new members: Victor Goodman, Joy Kennedy, Chief Earl Klyne, Nathan Lemphers, Dr. Philip Oxhorn and Mark Podasly. We also bid farewell and thank the following outgoing members for their leadership and dedication over the years: Chief Roger Augustine, Richard Briggs, Dr. Ginger Gibson, Larry Haber, Brenda Kelley, Soha Kneen, Christy Marinig and Chief Eric Morris.

During the year, the Panel also attended very informative tours of both a closed and operating mine of one of the TSM participating companies to see firsthand how the company implemented the protocols at its mine sites. While there, the Panel had the opportunity to meet with various community stakeholders. This fieldwork provided invaluable insights on TSM implementation and related issues, and we hope to make it a regular feature of our work in the future.

In keeping with its mandate to address emerging issues, the Panel has begun discussing concerns about the dramatic regulatory changes that are intended to 'streamline' the review and permitting process for mining and energy projects in Canada. These changes include creating new criteria for public input, imposing timelines on reviews, altering what is to be included under different levels of review, and introducing fundamental changes to the habitat protection provisions under the *Fisheries Act*.

Our concerns relate to the potential impacts on environmental protection and the requirements for consultation with communities – both of which have made demonstrable progress over the past 20 to 30 years. If the new regulatory changes result in increased negative environmental impacts, or reduce consultation with appropriate communities of interest, they could undermine the positive work and gains attained by the TSM process, MAC and its members since 2004. In this era of 'streamlined' processes, we anticipate that there will be greater scrutiny on MAC and TSM adoptees, with regards to environmental performance and community engagement.

We believe that the leadership standards established under TSM should serve as a valuable guide for both voluntary and regulatory requirements needed to protect our communities and the environments on which we all depend.

In the year ahead, the Panel will maintain a focus on upcoming changes and will advise on how MAC and its members can best serve the spirit and intent of TSM in their operations and in the public policy sphere.

TOWARDS SUSTAINABLE MINING GUIDING PRINCIPLES

As members of MAC, 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. [1]

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[2], 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 TSM 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, and;
- 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, and;
- Provide lasting benefits to local communities through self-sustaining programs to enhance the economic, environmental, social, educational and health care standards they enjoy.

[1] MAC draws on the 1987 Brundtland Commission definition of Sustainable Development: "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

[2] We use the term Communities of Interest to include all of the individuals and groups who have or believe they have an interest in the management of decisions about our operations that may affect them. This includes: employees, contractors, Aboriginal or indigenous peoples, mining community members, suppliers, customers, environmental

HOW TSM WORKS

HOW TSM WORKS

Fundamentally, TSM is based upon transparency, accountability and excellence. It is made up of four main components:

- **TSM Guiding Principles**
- **TSM Performance Elements and Indicators**
- **COI Advisory Panel**
- **External Verification**

COMMITMENTS

TSM is based on a set of Guiding Principles, which represent MAC's commitments to minimize the industry's environmental footprint, improve energy efficiency, and work respectfully with our employees and alongside our communities. To translate these principles into action on the ground, MAC and its members have developed performance indicators for key aspects of mining activity.

WHAT WE MEASURE

The performance elements and management system–based indicators that back the TSM guiding principles show Canadians what the industry's current environmental and social performance is and how it can be improved. The performance elements are intended to demonstrate how the membership is implementing the commitments made under the Guiding Principles. Companies report against the indicators for each facility annually in MAC's *Towards Sustainable Mining Progress Report*.

Each performance element is made up of a set of indicators, which are designed to focus on a different management component of the performance element. For example, the specific indicators within the Aboriginal and community outreach performance element measure a company's ability to identify communities of interest, how it engages and communicates with those communities, how it manages grievances raised by communities and how it publicly reports on engagement. Detailed assessment protocols for each of the six performance elements provide guidance to assist companies in their self-assessments and to facilitate consistent application of TSM within and across companies.

Up to now, MAC members have been reporting their performance in four areas, or elements: tailings management, energy use and greenhouse gas (GHG) emissions management, external outreach, and crisis management planning.

Last year MAC introduced two new performance elements – the first additions since TSM began in 2004 – that will be integrated over the next few years. In 2010 members began assessing their management systems for two new protocols and one revised protocol: biodiversity conservation management, safety and health, and Aboriginal and community outreach (this last element has replaced external outreach). By 2013 all MAC members will publicly report their performance under these new elements.

PERFORMANCE ELEMENTS

ELEMENTS	COMMUNITIES & PEOPLE			ENVIRONMENTAL FOOTPRINT		ENERGY EFFICIENCY
	Aboriginal and Community Outreach	**Crisis Management Planning**	**Safety and Health**	**Tailings Management**	**Biodiversity Conservation Management**	**Energy Use and Greenhouse Gas (GHG) Emissions Management**
INDICATORS	Community of Interest (COI) Identification	Crisis Management Preparedness	Policy, Commitment and Accountability	Tailings Management Policy and Commitment	Corporate Biodiversity Conservation Policy Accountability and Communications	Energy Use and GHG management systems
	Effective COI Engagement and Dialogue	Review	Planning, Implementation and Operation	Tailings Management System	Facility-Level Biodiversity Conservation Planning and Implementation	Energy Use and GHG Emissions Reporting Systems
	COI Response Mechanism	Training	Training, Behavior and Culture	Assigned Accountability and Responsibility for Tailings Management	Biodiversity Conservation Reporting	Energy and GHG Emissions Performance Targets
	Reporting		Monitoring and Reporting	Annual Tailings Management Review		
			Performance	Operation, Maintenance and Surveillance (OMS) Manual		

PERFORMANCE RATING

For each indicator, companies receive one of five scores based on which criteria they meet. The scores are described below:

C — No systems in place; activities tend to be reactive; procedures may exist but they are not integrated into policies and management systems.

B — Procedures exist but are not fully consistent or documented; systems/processes planned and being developed.

A — Systems/processes are developed and implemented.

AA — Integration into management decisions and business functions.

AAA — Excellence and leadership.

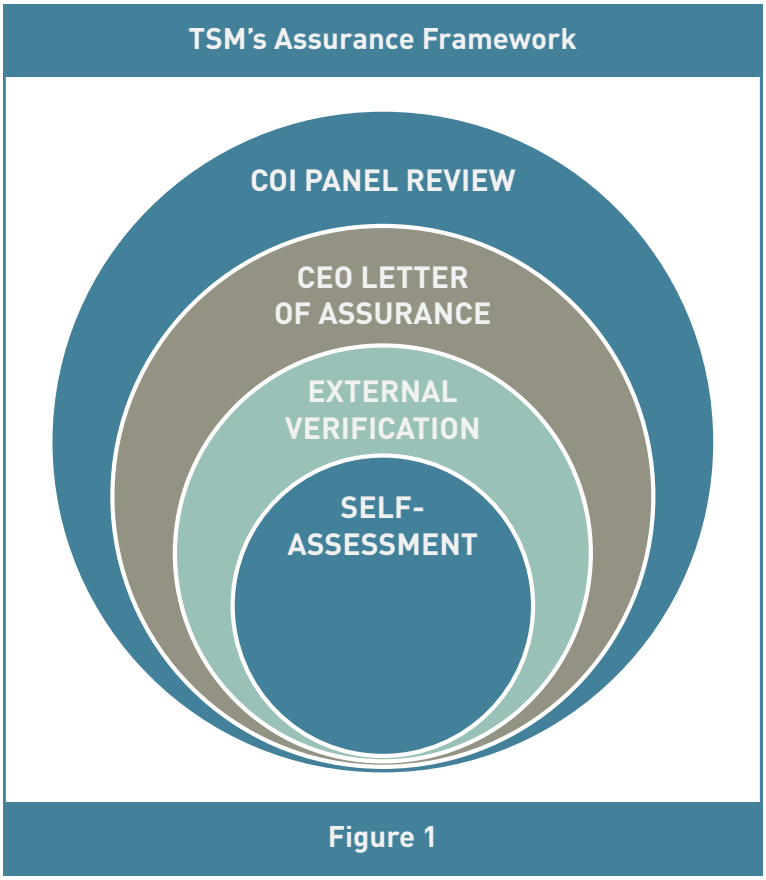
EXTERNAL VERIFICATION

TSM's primary objectives are to drive performance improvement and, through demonstration of this improvement, to build trust with the mining sector's communities of interest. This means that communities need to understand TSM and trust the performance results reported by MAC's members. To build this trust, the program includes a number of checks and balances to ensure that reported results present an accurate picture of each facility's management systems and performance. *Figure 1* identifies the different layers of assurance embedded in TSM.

Self-Assessment – Every year, each facility conducts a detailed and thorough self-assessment against each protocol. Those who conduct the assessments complete online training modules for each protocol they are applying, and they are encouraged to collect and save supporting evidence for each performance rating. In 2011, 59 facilities reported their TSM performance.

External Verification – Every three years, a trained verifier critically reviews a company's self-assessments to determine if there is adequate evidence to support the performance ratings the facility has reported. The verifiers are experienced auditors who are independent of the company being verified. The verifiers rigorously apply the protocols and, where required, can change the ratings to ensure they accurately reflect the facility's management practices and performance.

This report includes externally-verified results for 16 facilities.



CEO Letter of Assurance – In the year of external verification, the company's CEO or most senior executive in Canada, submits a letter to MAC that confirms an external verification has been conducted in accordance with the Terms of Reference for Verification Service Providers. The letter is posted on **www.mining.ca**.

COI Panel Review – Each year, MAC's independent COI Advisory Panel selects two companies to appear before the Panel to present and discuss their TSM results. Through these discussions, the Panel tests to see whether and how facility systems are leading to performance improvement.

In September 2011 representatives from De Beers Canada and the Iron Ore Company of Canada presented their verified results to the COI Advisory Panel. Results of the Panel Post-Verification Review are available at **www.mining.ca**.

COMMUNITY OF INTEREST ADVISORY PANEL

The TSM initiative is monitored by the COI Advisory Panel, a group of external stakeholders from different backgrounds. With its collective knowledge and experience, the Panel functions as an independent mechanism for assessing TSM implementation and progress.

The Panel met twice in 2011, and held teleconferences on specific topics between meetings. Throughout the year the Panel worked with MAC on a range of issues including the development of a protocol to address mine closure, and coordinating the renewal of the Panel.

As part of the fall meeting, members of the COI Panel were invited by Teck Resources to visit the Elkview mine in Sparwood, British Columbia. The Panel was given the opportunity to not only tour the operation, but also meet with leaders from the community and develop an understanding of the relationship between Teck and the community where it operates.

TSM COMMUNITY OF INTEREST (COI) ADVISORY PANEL
2012 MEMBERSHIP LIST

NAME	COI PANEL CATEGORY	ORGANIZATION
Joy Kennedy	Social NGO including faith based groups	The United Church of Canada
Dan Benoit	Aboriginal peoples	Métis National Council
Barrie Ford	Aboriginal peoples	Makivik Corporation
Chief Earl Klyne	Aboriginal peoples	Seine River First Nation
Alan Young	Environmental NGO	Canadian Boreal Initiative
Nathan Lemphers	Environmental NGO	Pembina Institute
Philip Oxhorn	International development	Institute for the Study of International Development, McGill University
Alan Penn	Economic/community development	Cree Regional Authority
Victor Goodman	Economic/community development	Campbell River Economic Development Corporation
Stephen Kibsey	Finance/investment	Caisse de Dépôt et Placement du Québec
Mark Podasly	Expert	Brookmere Management Group
Maya Stano	Environmental NGO (Alternate)	My Sustainable Canada
Luc Zandvliet	International Development (Alternate)	Triple R Alliance Inc.
Anne Marie Toutant	MAC Member	Suncor Energy Inc.
Craig Ford	MAC Member	Inmet Mining Corporation
Louise Grondin	MAC Member	Agnico-Eagle Mines
Ian Pearce	MAC Member	Xstrata Nickel
Pierre Gratton	MAC President & CEO	Mining Association of Canada

The Panel also participated in a guided tour of the town of Kimberley, which provided the Panel with a glimpse into the complex history of the town and the nature of Teck's involvement as the community transitioned from a mining town to a more tourism-based economy. Many Panel members expressed an interest in visiting other operations in conjunction with future meetings. In 2012, members of the Panel will visit Fort McMurray for a tour of Canada's oil sands.

Over the years the Panel has evolved to discuss substantive issues that are not directly part of TSM development, but that relate to communities affected by the mining industry. In recognition of the growth in scope of issues addressed by the Panel, and by the fact that the mandate and composition of the Panel had remained largely unchanged since the program's inception, a renewal process was initiated in 2011. The results of this renewal included a revised Terms of Reference for the Panel and the addition of new core categories, including international development and social non-governmental organizations. The implementation of the revised Terms of Reference will ensure that the Panel continues to serve as a relevant and direct link between MAC, civil society, communities of interest and Aboriginal groups, and enables open dialogue and engagement.

For more information on the work of the COI Advisory Panel, please visit **www.mining.ca**.

INDUSTRY PERFORMANCE

INDUSTRY PERFORMANCE

UNDERSTANDING THE RESULTS

TSM assessments are conducted at the facility level, where they are most meaningful. In 2011, 20 member companies reported their facility-level performance, of which six companies underwent external verification. It is MAC's goal to help members ultimately achieve a Level A performance for all indicators, including tailings management, energy use and GHG emissions management, Aboriginal and community outreach, biodiversity conservation, and safety and health. For crisis management planning, head offices and facilities achieve good performance when they answer "yes" for each indicator.

In 2006 all reporting MAC members went through external verification of their TSM performance. The graphs that follow compare the percentage of facilities achieving a Level A or higher in 2006 to the percentage of facilities achieving good performance in 2010 and 2011. The graph for crisis management planning shows the percentage of companies and facilities that answered "yes" for each indicator.

For detailed facility-level results, please see *Measuring Company Performance* in this report.

COMMUNITIES AND PEOPLE

Building strong relationships with the people whose lives we impact is a fundamental component of TSM. Through dialogue with our communities and employees, we have improved our understanding of the public's interests and priorities, and at the same time, created a safe work environment for our people. The *Communities and People* section of the report highlights the membership's performance in Aboriginal and community outreach, safety and health management, and crisis management planning.

ABORIGINAL AND COMMUNITY OUTREACH

A main objective of TSM is to significantly improve the industry's ability to engage with communities of interest (COI) and respond to their needs and concerns. Four performance indicators measure how well member companies are engaging in dialogue with key groups and individuals outside industry on topics of mutual interest.

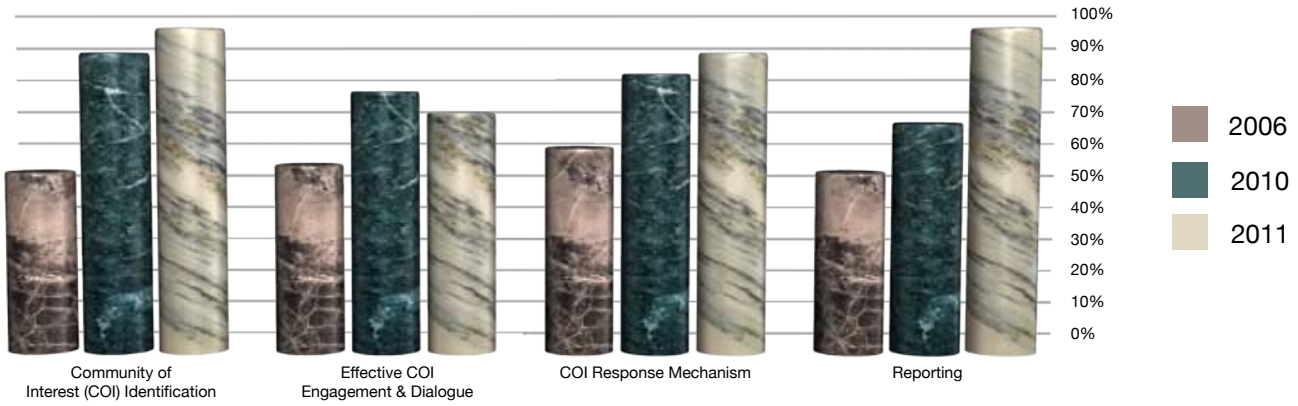
In 2004, when TSM began, many facilities had informal systems for identifying and responding to COI, and others had none at all. Since then, MAC members have become much more engaged as a direct result of TSM participation.

Today, MAC is proud to say that our members have formal, documented systems in place to effectively engage with stakeholders. Many MAC members hold regular meetings with their operations' local communities and consider community input in their decision-making at all stages of the mine life.

Developing positive relationships with Aboriginal people was also identified as a key objective for TSM, and as a result in 2010, the external outreach performance area was replaced with an Aboriginal and community outreach protocol to reflect the industry's strong commitment to Aboriginal relations. The protocol measures the systems in place at each MAC member facility to identify who a company should be talking to and how they will engage with each community of interest, as well as Aboriginal communities affected by their activities. The protocol also offers a method for evaluating the presence of a community of interest response mechanism and the form of public reporting undertaken by each MAC member. For more information on this protocol please, visit **www.mining.ca**.

ABORIGINAL AND COMMUNITY OUTREACH ASSESSMENTS

PERCENTAGE OF FACILITIES AT LEVEL A OR HIGHER



Indicators	Purpose
Community of Interest (COI) Identification	To confirm that efforts have been made to identify COI, including Aboriginal communities and organizations, affected or perceived to be affected by their operations or who have a genuine interest in the performance and activities of a company and/or operation.
Effective COI Engagement & Dialogue	To confirm that processes have been established to communicate with COI, including Aboriginal communities and organizations, to understand their viewpoint, to transparently inform them of company activities and performance, to actively engage them in dialogue and participation on issues of concern to them, and to identify how issues might be addressed through measures such as mitigation, compensation, or other actions.
COI Response Mechanism	To confirm that there are processes to receive complaints and concerns from COI, including Aboriginal communities and organizations, to ensure that they are understood and effectively responded to.
Reporting	To confirm that reporting on COI engagement and dialogue activities (including activities with Aboriginal communities and organizations) is open and transparent.

Since 2006 the membership has demonstrated significant improvements across the four areas covered by the Aboriginal and community outreach protocol. For example, in 2006 only 52% of reporting facilities had a formal system in place to identify key stakeholders. In 2010 the percentage grew to 86% and in 2011, 93% of facilities reported having a formal, documented system for COI identification that is consistent with the criteria established through TSM. The percentage of facilities with a formal response mechanism in place also

increased from 58% in 2006, to 80% in 2010, and 86% in 2011. The most significant increase since 2010 is in the area of reporting, which has increased from 66% to 93%.

We have also seen an improvement in the area of effective COI engagement and dialogue since 2006, however, from 2010 to 2011 the percentage of facilities achieving a Level A or higher decreased from 75% to 69%. MAC conducted an analysis of the industry results for this area and discovered that the decrease in results was a result of changes in membership. In 2011, there were seven facilities reporting TSM results for the first time, of which five facilities were assessed at a Level B for this indicator. There were also two facilities that moved into the closure stage of operations, and achieved a Level A or higher in previous reports. One facility, which achieved a Level AAA in its 2010 reporting, temporarily left the membership in 2011 and thus did not report.

The following case study highlights Barrick`s Helmo operation and its exceptional leadership in translating community commitments into action by providing opportunities for First Nation students in Northern Ontario.

CASE STUDY:
HEMLO MINE PROVIDES OPPORTUNITIES FOR FIRST NATION STUDENTS

Myles Michano was studying to be a nurse in Thunder Bay, Ontario, in late 2009 when his grandmother, who had raised him from infancy, was stricken with cancer. Michano's grandmother, Myra, was 76 years old at the time and lived on the Pic River First Nation reserve about three hours east of Thunder Bay. She raised Michano on the reserve together with his grandfather, Eli, who suffers from Alzheimer's and no longer lives at home. When Michano learned of his grandmother's condition, he left school immediately and returned to Pic River to care for her and help with finances. "She's my everything," he says. "My mum, grandmum, my doctor and my nurse."

Before registering in nursing school, Michano, 29, spent the previous two summers working as a summer student at Barrick's Hemlo operation, which is about 30 minutes from Pic River. Several months after he returned home, Michano received a call from Roger Souckey, Superintendent of Employee Relations at Hemlo. Souckey had gotten to know Michano during his summer stints at Hemlo and was calling to offer him an environmental monitoring job. "Roger told me he couldn't think of anyone better to do it," Michano says. "That made me feel pretty good."

The job was ideal for Michano, as it allowed him to work two days a week with the environmental department at Hemlo and the other three days at Pic River where he could be close to his grandmother. His work at Pic River involved the development of an environmental-monitoring policy for the reserve, while at Hemlo Michano worked in the field, taking water samples, conducting tailings inspections and monitoring pipelines to ensure there were no leaks.

Michano's salary was paid by Hemlo as part of a long-standing labor agreement between the mining operation and First Nation communities near the Hemlo operation. "This was a good opportunity for Myles, who certainly deserved it," Souckey says.

The original labor agreement between Hemlo and local First Nation communities, which was signed in 1992, was updated and broadened in 2009. The current agreement creates new opportunities for First Nation people to develop their skills for present and future mining opportunities, and supports the development of First Nation-led businesses and involvement in environmental stewardship. "The agreement helps build capacity in local First Nation communities to ensure that they benefit from mining," Souckey says, adding that approximately 50 First Nation people work at Hemlo, about 10 percent of the total workforce. "The mine is a benefit to the area."

Indeed, the economic impact of Hemlo, which consists of the Williams and David Bell mines, extends well beyond surrounding communities. In 2010, materials and services procured by Hemlo in Ontario and Canada totaled C$35 million and C$182 million, respectively. Royalties and taxes paid by Hemlo last year totaled nearly C$8 million and the site donated nearly C$650,000 to local communities and various causes.
While those numbers are significant, sometimes the impact of mining is best understood by looking at it its effect on individuals, such as Michano or Hannah Desmoulin. Desmoulin, who grew up on the Pic Mobert Reserve near Hemlo, used to drive a shuttle transporting workers between the mine and the reserve. In July, Souckey offered her an environmental-monitoring position similar to Michano's. "They needed someone right away and Roger told me I had more potential than just driving a shuttle," Desmoulin says.

A mother of two, the 22-year-old Desmoulin jumped at the chance. "Where else can I get an opportunity like this?" she says.

MYLES MICHANO AND HIS GRANDMOTHER, MYRA MICHANO

In September, Desmoulin and Michano both returned to school to earn environmental technician diplomas. Barrick is funding their studies. Desmoulin is taking a correspondence course through Seneca College, which allows her to continue working and caring for her children. Michano is attending Sault College in Sault Ste Marie, Ont., about four hours from Pic River. His grandmother, who is cancer free and being cared for by other family members, fully supports the move.

"I'm so proud of him," she says. "I always told him, 'Don't give up, believe in yourself.' I think that message sank in. He's on the right path."

Source: Barrick Gold, Beyond Borders

CRISIS MANAGEMENT PLANNING

As an industry that puts the health and safety of our employees and communities first, we do everything we can to prevent accidents and incidents from occurring. Despite all the planning and preparation that goes into preventing a crisis, if an incident occurs, MAC members have systems in place to effectively communicate with the public.

The three performance indicators for crisis management planning are intended to help companies leverage best practices and critically assess their business performance. Under this protocol, mining companies are required to have a comprehensive crisis management plan in place, regularly review and update their plan to ensure it remains responsive to the needs of the company and its operations, and that crisis management training take place at corporate and facility levels. Reporting involves answering "yes" or "no" for each indicator. To answer "yes", head offices and facilities must meet all the criteria for the indicator. For more information on the Crisis Management Protocol, please visit **www.mining.ca**.

There has been steady improvement across the three indicators, with significant progress made in the areas of crisis management preparedness and training. The 2011 results show that over 80% of companies and facilities have a crisis management plan in place and a crisis management team has been established.

CRISIS MANAGEMENT PLANNING ASSESSMENTS

PERCENTAGE OF FACILITIES & COMPANIES RESPONDING "YES"

Indicators	Purpose
Crisis Management Preparedness	Member companies must have in place a crisis management plan, which is consistent with the MAC Guidelines for Corporate Crisis Management Planning, March 2007.
Review	Member companies will review and update their crisis management plan to ensure it remains responsive to the needs of the company and its operations, properly reflects risks associated with the company's operations and reflects best practice within the industry.
Training	Crisis management training, including the use of appropriate crisis simulation exercises, will be conducted annually.

In 2012 MAC members will review the crisis management planning protocol and associated guidance document to ensure that the protocol is consistent with current best practices in crisis communications.

There has been steady increase for both head offices and facilities that have satisfied all of the criteria within the crisis management preparedness indicator and the training indicator. One area where there has been slower than expected improvement is in the area of review, which requires a company or facility to test the crisis management plan's notification system at least two times per year and train new members of the crisis management team within two months of joining the team.

In 2012 MAC will review the components of the crisis management planning protocol and its associated guidance document to ensure that the criteria and reference material are relevant and reflect current best practices. MAC will also work with members to understand challenges associated with Review Indicator: Review under this performance element to determine the reasons for slow performance improvement.

SAFETY AND HEALTH

In 2008 MAC's Board of Directors adopted a TSM Framework for Safety and Health. Since then, MAC's Health and Safety Task Force has developed a protocol to measure performance in this area. Next year, member companies will begin publicly reporting against 5 indicators:

1. **Policy, Commitment and Accountability**
   This indicator is designed to confirm that the facility has established clear accountability for safety and health management and performance. It also confirms whether safety and health policy commitments have been established and clearly communicated to employees, contractors and suppliers.

2. **Planning, Implementation and Operation**
   This indicator is designed to confirm that processes have been established to effectively plan for and manage safety and health to prevent the occurrence of all incidents, acknowledging safety and health is a shared responsibility, and that hazard identification, risk assessment and workplace inspections are integral to an effective system.

3. **Training, Behaviour and Culture**
   This indicator is designed to confirm that processes have been established to effectively train employees and contractors on safety and health to ensure they are competent in identifying hazards and preventing incidents. Employees must also understand that safety and health is a shared responsibility and that safety behaviour is integral to controlling risk.

4. **Monitoring and Reporting**
   This indicator is designed to confirm that safety and health performance is regularly monitored and reported both internally and externally.

5. **Performance**
   Recognizing that zero harm is the ultimate goal for all facilities, the purpose of this indicator is to confirm that continual improvement targets have been established at each facility to move toward zero harm and that performance relative to targets is regularly assessed.

   If a facility has had a fatality within the reporting year, it is not eligible for Performance Level A or higher.

The protocol requires a facility to have a formal and documented safety and health management system that establishes clear accountability for safety and health management and performance. Facilities must have a training system in place that extends to contractors and visitors of the site. To encourage continual improvement, a facility must internally and externally report its performance and set performance targets. Protecting the health and safety of employees, contractors and communities is a fundamental component of TSM and deeply engrained in the Canadian mining industry's culture. In 2011 MAC members internally reported for the first time their safety and health performance. It was no surprise, for an industry that is well-known for providing its employees with a safe work environment, that the results were outstanding. In fact, in 4 out of the 5 indicators, no facility was assessed at a Level C. Look for the industry's results in the *2013 TSM Progress Report*.

ENVIRONMENTAL FOOTPRINT

A goal of TSM is to minimize our operation's impact on the environment and biodiversity, through all stages of development, from exploration to closure. This section describes ways in which the membership has developed systems to minimize its environmental footprint through best practices in tailings management, biodiversity conservation and mine closure.

TAILINGS MANAGEMENT

TSM began because of a growing concern about how mining facilities managed their key risks in the late 1990s as evidenced by several large scale releases of tailings. Many of these incidents were not due to design issues but, instead, weakness in management systems and operational practices. The tailings management protocol was designed to help ensure that tailings facilities would be operated through strong risk-based management systems. As a testament of the protocol's strength, there have been no large scale tailings failures associated with MAC member facilities since TSM was implemented.

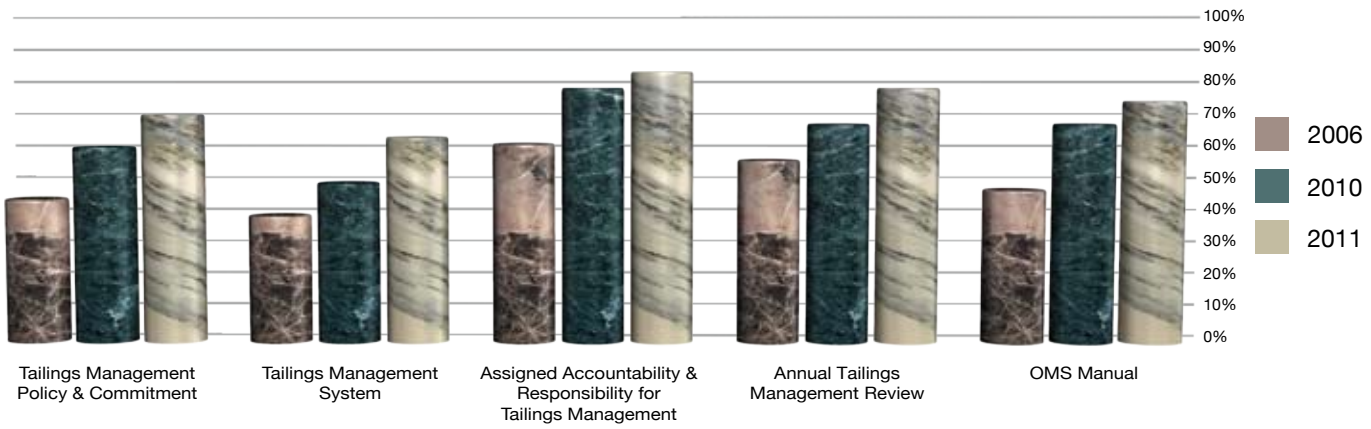
Shortly after the tailings management protocol was developed, MAC initiated a series of workshops to help member companies understand and apply the three guides associated with this protocol (*A Guide to the Management of Tailings Facilities, A Guide to Audit and Assessment of Tailings Facility Management, and Developing an Operation, Maintenance and Surveillance Manual for Tailings and Water Management Facilities*). As a result of these workshops, the overall results in this area have increased significantly over the last eight years. Specifically, the percentage of facilities that conduct annual tailings management reviews has increased from

55% in 2006 to 67% in 2010 and 78% in 2011. The annual tailings management review is an opportunity for a facility to evaluate the performance of its tailings management system, evaluate the continuing adequacy of policies and objectives, and address any need for changes to commitments made to communities of interest. The annual review goes beyond technical performance to address all aspects of the management of the tailings facility.

There has also been an increase, from 61% in 2006 to 83% in 2011, in the percentage of facilities that have assigned accountability and responsibility for tailings management to an executive officer of the company (CEO or COO), who is responsible for putting in place an appropriate management structure and for providing assurance to the corporation and its communities of interest that tailings facilities are managed responsibly. This shows that accountability for what is typically a mining operation's most significant environmental and safety risk rests with the highest management levels.

TAILINGS MANAGEMENT ASSESSMENTS

PERCENTAGE OF FACILITIES AT LEVEL A OR HIGHER



Indicators	Purpose
Tailings Management Policy & Commitment	To confirm that companies have established a policy and commitment that expresses intention, commitments and principles in relation to tailings management.
Tailings Management System	To confirm that companies have a tailings management system in conformance with the tailings management framework in MAC's A Guide to the Management of Tailings Facilities to provide a formal systematic structure for the assessment of risks, setting of goals and objectives, consultation with COI, implementing activities to achieve goals, assignment of responsibilities, and assurance processes to ensure that tailings facilities are managed effectively.
Assigned Accountability & Responsibility for Tailings Management	Executive accountability for tailings management is necessary to signal the importance of tailings facilities to our business and the adverse impacts improper tailings management practices have on the environment and our reputation. This indicator confirms that companies have an executive officer (CEO or COO) who has overall accountability to ensure that an appropriate management structure is in place to provide assurance to the corporation and its COIs that tailings are managed responsibly. It is expected that the executive officer will delegate responsibility for tailings management, budgetary issues and other tailings-related functions to operations and/or corporate personnel, while retaining ultimate accountability for the management of tailings and its outcomes.
Annual Tailings Management Review	To confirm there is an annual corporate review of tailings management that is reported to the accountable executive officer to ensure that the corporation is satisfied that the tailings management structure and systems are effective and continue to meet the needs of the organization.
OMS Manual	To confirm that the facility has developed and implemented a tailings OMS manual in conformance with Developing an Operation, Maintenance and Surveillance Manual for Tailings and Water Management Facilities.

Notably, 25 out of 46 facilities have achieved a Level A or higher for all five of the tailings management indicators, of which four facilities achieved a Level AA or higher. This means their tailings management systems have been subjected to an audit or assessment to evaluate the tailings management system's effectiveness.

Despite the improvements since 2006, there is still work to be done to ensure that all MAC members are consistently applying the criteria in the tailings management protocol. To this end, MAC continues to support the implementation of tailings management systems across the industry through tailings management workshops, which provide guidance on the application of the protocol and guides.

BIODIVERSITY CONSERVATION MANAGEMENT

Biodiversity conservation has become an increasing priority for MAC's membership and the COI Advisory Panel. In 2008 MAC's Board of Directors adopted a TSM Framework for Biodiversity Conservation. Since then, MAC's Biodiversity Task Force has developed specific indicators to address biodiversity in and around the mine site.

The MAC membership recognizes that protecting and conserving biodiversity makes good business sense. Indeed, many MAC members have already demonstrated leadership in addressing the challenges of biodiversity conservation. For example, Vale (formerly Inco) has been involved in the Regreening of Sudbury Program since the late 1970s, which involved the planting of more than 9 million trees and shrubs, and raising more than 3 million seedlings in company-owned greenhouses. The program is responsible for the transformation of thousands of hectares of land affected by air emissions into parkland, bird sanctuaries and wildlife habitat. [3]

Over the past few years, Xstrata has made integrating biodiversity policies and practices into their business operations a top priority. Xstrata's operations have avoided and reduced impacts to local biodiversity by

[3] Canadian Business and Biodiversity Council: Case Study Compendium, Volume 1: 2010
[4] Canadian Business and Biodiversity Council: Case Study Compendium, Volume 1: 2010

selecting previously-disturbed areas for underground access to ore bodies, ensuring that responsible site rehabilitation and closure takes place, and implementing opportunities for biodiversity conservation. One notable example of Xstrata's commitment is the closed Heath Steele Mine owned by Xstrata Zinc in New Brunswick. At this site, the nearby aquatic ecosystems were rehabilitated through the construction of a fish ladder for salmon and the removal of a dam for wetland restoration. [4]

Building on the existing best practice examples provided by several member companies, MAC partnered with the Canadian Business and Biodiversity Council to host a series of lessons learned workshops and training sessions for member representatives. The purpose of these sessions was to help companies integrate biodiversity conservation into their existing environmental management systems, learning from the successes of their peers.

Next year, member companies will begin publicly reporting against three indicators:

1. **Corporate biodiversity conservation policy, accountability and communications**
   This indicator is designed to confirm that corporate policies and accountabilities are in place and communicated to all staff to support the management of biodiversity conservation issues.

2. **Facility-level biodiversity conservation planning and implementation**
   This indicator is designed to confirm that effective plans and management systems are implemented at the facility level in order to manage significant biodiversity aspects.

3. **Biodiversity conservation reporting**
   This indicator is designed to confirm that biodiversity conservation reporting systems are in place to inform decision-making and to communicate performance publicly. Biodiversity conservation reporting includes elements such as policy, monitoring and conservation initiatives.

The goal is for the membership to achieve a Level A or higher across the three biodiversity conservation management indicators. This means that at a minimum, a facility would have a corporate biodiversity policy, a management system that includes specific targets and action plans, and internal and external reporting on biodiversity conservation performance in place.

The following case study provides an overview of Village Forest Program at IAMGOLD's Essakane mine in Burkina Faso. The collaboration between Essakane and the local community to enhance biodiversity in a distressed ecosystem is directly linked to facility-level biodiversity conservation planning and implementation within the biodiversity conservation management protocol.

CASE STUDY:
COMMUNITY BIODIVERSITY PLANNING IN BURKINA FASO

At IAMGOLD's Essakane mine in Burkina Faso, its biodiversity efforts have extended well beyond the mine site in an effort to help local communities reclaim the environment around their villages. The majority of land in the region has been severely degraded by deforestation and other human-related activities, particularly animal grazing. Compounding the issue is the fact that this region of the Sahel receives less than 500 mm of rain per year.

In 2009, IAMGOLD began an ambitious Village Forest Program to improve the quality of silvopastoral areas and to improve local biodiversity. In 2011, we worked with communities to plant 30,000 trees, all of which are native species and many of which have special utilitarian or cultural importance to local populations.

Since its inception, over 100, 000 trees have been planted in protected areas at the outskirts of various local villages. Although the community forests are only a few years old, the participatory and community-driven process has already proven successful in providing direct benefits as a source of food, fodder, natural pharmaceuticals, wildlife habitat and shade. We plan to continue working with communities to expand and improve the project, with a very tangible goal of net positive impact on local biodiversity.

Source: IAMGOLD

MINE CLOSURE

Canadian mining companies support comprehensive engagement with communities of interest (COI) throughout the mining life cycle. When mining is conducted in consultation with COI, the needs and priorities of affected stakeholders can be identified and taken into account. Managing mine closure is an integral part of the commitments made under TSM.

In 2008 the TSM Framework on Mine Closure was adopted by the MAC Board of Directors. The framework includes commitments to work with communities in developing closure plans, strategies to mitigate the socio-economic impacts of mine closure, and plans for long-term economic development.

Since the development of the framework, technical experts from operations across the country have been working together to develop criteria to measure performance in mine closure. Through consultation with the COI Advisory Panel, the membership is drafting a protocol to address this important issue. Once complete, MAC members will report their progress in mine closure planning and implementation against a series of indicators that currently include planning for closure, progressive reclamation, closure and post-closure, and financial assurance.

The following case study provides an overview of the planning and collaboration that went into transforming Kimberley, British Columbia from a mining community to a popular tourist destination.

CASE STUDY:
SUSTAINABLE COMMUNITY DEVELOPMENT AT THE SULLIVAN MINE

At Teck, we want to leave communities better off, even after we have closed operations. The Sullivan Mine in Kimberley, BC is a powerful example of a mine's legacy of social and economic benefits continuing well beyond mine closure.

The Sullivan Mine operated for almost 100 years, and employed nearly 3,500 people at its peak – more than half the town's population. When the mine closed in 2001, many people thought the loss of jobs and tax revenue would mark the end of Kimberley. However, 10 years later, through strong community leadership, collaboration, dialogue and planning, the community is still thriving.

How did it happen? As early as the late 1960s, we began developing plans in partnership with the community to diversify the economy and sustain the area after mine closure. Over time, discussions focused on broadening the city's tax base, diversifying employment and transitioning from mining to a tourism-based economy.

Discussions led to action. Working with the community, we began to use our landholdings in the region to facilitate investment in recreational infrastructure and resort development. This led to the construction of the Northstar Mountain Village ski resort, the Trickle Creek and Bootleg Gap golf courses, and Forest Crowne Estates, a resort community. These developments helped transform Kimberley from a mining town to a resort destination famous for its golf, outdoor activities and skiing.

The transformation of Kimberley and the partnership with Teck continues. In December 2010, the City of Kimberley announced its plan to collaborate with Teck and the EcoSmart Foundation to launch the SunMine project, a solar energy test program. The project, which has been built on the Sullivan Mine site, will make use of Sullivan's roads, substations, security fencing and transmission lines, substantially enhancing the economics of the project by taking advantage of the mine's infrastructure. The project will produce 1.6 gigawatt hours (GWh) of clean electricity, enough to power 160 homes.

"This project is a double win because it provides benefits to both Teck and the community," says David Parker, Vice President of Sustainability. "We'll be able to study solar energy and the role it can play in increasing the use of renewable energy. The community can also use this project to reinforce its reputation as both an ecotourism destination and an emerging player in the clean energy industry."

Through ongoing partnership, Teck and the community are ensuring that the Sullivan Mine continues to build a positive legacy.

ENERGY EFFICIENCY

In 2009 MAC endorsed the International Council on Mining and Metals' (ICMM) policy on climate change, recognizing that comprehensive and sustained global action is required to reduce the scale of human-induced climate change and to adapt to its impact. The energy use and greenhouse gas emissions management protocol is an important tool to assist mining companies in implementing climate change commitments, such as those in ICMM's climate change principles, in a transparent way.

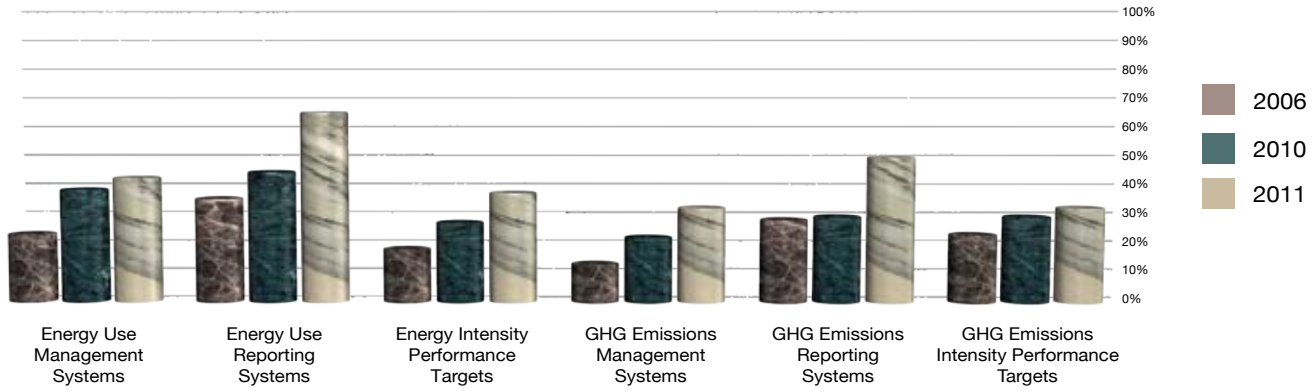
With underground mines developing new production zones at much greater depth and the energy intensity heightening because of the extra energy required for ventilation, pumping, cooling, hoisting and sustaining the infrastructure at depth, the industry must continue to seek opportunities to reduce energy consumption. Through the development of comprehensive management systems, MAC members can more effectively monitor and reduce their energy consumption and greenhouse gas emissions.

ENERGY USE AND GHG EMISSIONS MANAGEMENT

There has been slower improvement than expected amongst member companies in the area of energy use and GHG emissions management; however, the industry demonstrated overall improvement from 2010-2011. For example, the percentage of facilities with a comprehensive energy use reporting system has increased from 44% to 64%. We have also seen a steady improvement in the percentage of facilities that have established energy and GHG intensity performance targets.

ENERGY USE AND GHG EMISSIONS MANAGEMENT ASSESSMENTS

PERCENTAGE OF FACILITIES AT LEVEL A OR HIGHER



Indicators	Purpose
Energy Use Management Systems	To confirm that systems are in place to manage energy use.
Energy Use Reporting Systems	To confirm that energy use tracking and reporting systems are in place for internal use and for public reporting.
Energy Intensity Performance Targets	To confirm that energy intensity performance targets have been established at each facility.
GHG Emissions Management Systems	To confirm that systems are in place to manage greenhouse gas emissions.
GHG Emissions Reporting Systems	To confirm that greenhouse gas emissions tracking and reporting systems are in place for internal use and for public reporting.
GHG Emissions Intensity Performance Targets	To confirm that greenhouse gas emissions intensity performance targets have been established at each facility.

In 2011 MAC's Energy Task Force reviewed the energy use and GHG emissions management performance indicators to ensure that the protocol remains relevant and reflects the current state of climate change mitigation policy and practice. The review's results suggested that the criteria for this performance area should be updated. As such, the Energy Task Force initiated a revision of the protocol. MAC members will begin reporting against a revised set of indicators in 2013.

Throughout 2012 and 2013, MAC will focus its attention on updating guidance material and provide training to member companies and verification service providers on the newly revised protocol and guidance document. The TSM Governance Team has made performance improvement for energy use and greenhouse gas emissions management a top priority for 2012.

AWARD WINNERS

AWARD WINNERS

MAC recognizes facility-level achievements in environmental and social responsibility at the annual Towards Sustainable Mining Awards Ceremony. This year four members will be presented awards in the following categories:

- Communities and People
- Environmental Footprint
- Energy Efficiency

THE 2012 AWARD RECIPIENTS

= AAA =AA = A

COMMUNITIES AND PEOPLE

Aboriginal and Community Outreach

BHP Billiton, EKATI Diamond Mine
IAMGOLD, Niobec
IAMGOLD, Rosebel Gold Mines N.V.
Inmet Mining, Çayeli Mine
Inmet Mining, Cobre Las Cruces
Inmet Mining, Cobre Panama
Inmet Mining, Copper Range Company
Inmet Mining, Norbec
Inmet Mining, Samatosum
Inmet Mining, Sturgeon Lake
Inmet Mining, Troilus
Inmet Mining, Winston Lake
Suncor Energy, Oil Sands Facility

COMMUNITIES AND PEOPLE

Crisis Management Planning

IAMGOLD, Essakane
IAMGOLD, Mouska
IAMGOLD, Niobec
IAMGOLD, Rosebel Gold Mines N.V.
IAMGOLD, Westwood Project
Inmet Mining, Çayeli Mine
Inmet Mining, Cobre Las Cruces
Inmet Mining, Cobre Panama
Inmet Mining, Copper Range Company
Inmet Mining, Corporate
Inmet Mining, Norbec
Inmet Mining, Pyhäsalmi Mine
Inmet Mining, Samatosum
Inmet Mining, Sturgeon Lake
Inmet Mining,Troilus
Inmet Mining,Winston Lake

ENVIRONMENTAL FOOTPRINT

Tailings Management

BHP Billiton, EKATI Diamond Mine
IAMGOLD, Westwood Project
Inmet Mining, Copper Range Company
Inmet Mining, Norbec
Inmet Mining, Samatosum
Inmet Mining, Sturgeon Lake
Inmet Mining, Troilus
Inmet Mining, Winston Lake
Suncor Energy, Oil Sands Facility

ENERGY EFFICIENCY

Energy Use and GHG Emissions Management

Suncor Energy, Oil Sands Facility

INTERNATIONAL INITIATIVES

INTERNATIONAL INITIATIVES

Participation in TSM is mandatory for MAC members' Canadian operations. Recently, however, a growing number of members including Inmet, IAMGOLD, Teck Resources, HudBay Minerals and Agnico-Eagle Mines, have proactively applied, or have committed to applying TSM at their overseas operations. Applying TSM internationally is a good way for companies to demonstrate that they operate their international mines to the same standard as their Canadian facilities.

Besides TSM, Canadian mining companies follow many voluntary standards and frameworks as part of their international corporate social responsibility. The table on the next page summarizes the implementation of these standards by our members with foreign operations.

MAC MEMBER COMPANY APPLICATION OF INTERNATIONAL STANDARDS AND PROGRAMS

	Industry Sustainability Initiatives			Management System Standards		International Voluntary Initiatives				Reporting, Disclosure and Transparency Standards				Financing Standards	Listed on Socially Responsible Investing Indices		Commodity Specific Standards		
	MAC Towards Sustainable Mining*	ICMM Sustainable Development Framework	PDAC e3 Plus	ISO 14001: EMS Standard	OHSAS 18001	UN Global Compact	Extractive Industries Transparency Initiative	Voluntary Principles on Security and Human Rights	OECD Guidelines for Multinational Enterprises	AA 1000	Global Reporting Initiative	Carbon Disclosure Project	Water Disclosure Project	IFC Social and Enviornmental Performance Standards	Dow Jones Sustainability Index	Jantzi Social Index	Responsible Jewellery	International Cyanide Code	Kimberley Process
COMPANIES/BUSINESS UNITS HEADQUARTERED IN CANADA WITH INTERNATIONAL OPERATIONS																			
Agnico-Eagle Mines	X		X								X	X			X		X	X	NA
Barrick Gold Corporation		X	X	X		X	X	X	X		X	X	X	X	X			X	NA
IAMGOLD Corporation	X		X	X			X		X		X	X		X		X		X	NA
Kinross Gold Corporation						X	X	X			X	X			X	X		X	
HudBay Minerals Inc.	X			X	X			X			X	X	X	X			NA	NA	NA
INMET Mining Corporation	X	X	X	X	X	X	X	X	X		X	X		X		X	NA	NA	NA
Teck Resources Limited		X	X	X		X	X	X	X		X	X	X	X	X	X	NA	NA	NA
Xstrata Canada		X		X	X	X	X	X		X	X	X	X		X		NA	NA	NA
Vale (Base Metals)		X				X	X				X	X	X				NA	NA	NA
COMPANIES HEADQUARTERED OUTSIDE OF CANADA WITH CANADIAN OPERATIONS																			
ArcelorMittal Mines Canada				X	X														
De Beers			X	X	X	X	X	X		X	X			X			X	NA	X
Newmont	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	NA	X	NA
BHP Billiton - Ekati		X				X	X	X	X		X	X	X					NA	X

* Applied at international operating facilities.

INTERNATIONAL SOCIAL RESPONSIBILITY COMMITTEE

In 2011 MAC, the Prospectors and Developers Association of Canada, Publish What You Pay-Canada, and the Revenue Watch Institute, committed to developing a Memorandum of Understanding (MoU) on transparency. The MoU will establish a Working Group comprising the four organizations that will jointly develop a framework for the mandatory disclosure of payments to governments. Through this Working Group, all members will promote greater transparency in the extractive industries in Canada and abroad.

Over the last year, the committee has commissioned four research projects:

1. Review of the recommendations from the 2007 Advisory Group Report of the National Roundtables on CSR and the Canadian Extractive Industry in Developing Countries;
2. Examination of existing accountability mechanisms to determine weaknesses and gaps;
3. Review the increasingly complex set of rules, initiatives and disclosure practices to increase transparency of Canadian extractive companies with overseas operations; and
4. Review to understand the position of the extractive industry, government and non-government organizations regarding Free, Prior and Informed Consent (FPIC).

TRANSPARENCY INITIATIVE

This year MAC, the Prospectors and Developers Association of Canada, Publish What You Pay-Canada, and the Revenue Watch Institute, committed to developing a Memorandum of Understanding (MoU) on transparency. The MoU will establish a Working Group comprising of the four organizations that will jointly develop a framework for mandatory disclosure of payments to governments. Through this Working Group all members will promote greater transparency in the extractive industries in Canada and abroad.

The ISR Committee will continue ongoing dialogue to identify and discuss issues relevant to the international corporate social responsibility performance of MAC members. It will also seek to identify further initiatives and work with civil society to help raise awareness and performance standards.

Inmet Mining Corporation was one of the first MAC members to apply TSM at its international operations. The following case study demonstrates Inmet's application of the Aboriginal and community outreach protocol to its Cobre Panama project.

Inmet Mining Corporation is developing Cobre Panama, an open pit copper and gold development project located 120 kilometres from Panama City, the capital of Panama. Cobre Panama is one of the largest undeveloped copper deposits in the world. It is also highly significant to the people of Panama. The project represents the largest private sector investment in Panama's history and, once operational, would be the country's largest exporter. Development and operation of Cobre Panama will provide a strong stimulus to the regional and national economy directly through job creation and indirectly through procurement, taxation and support for community development.

When it became clear through the Social Impact Assessment that the development of Cobre Panama would involve the displacement of a number of people, including Indigenous Peoples, we established a resettlement process that adhered to the highest international standards of fairness and transparency. As part of that, over the past three years we conducted in-depth consultations and negotiations with those affected under the leadership of experienced third-party experts. We also monitor emerging COIs to ensure we are effectively engaging all appropriate stakeholders as specified under the TSM Aboriginal and Community Outreach protocol.

Although our project layout is designed to minimize the size of our footprint, some 500 people in six areas will undergo resettlement at Cobre Panama. Four of these areas are made up of farmers. The remaining areas are primarily inhabited by Ngöbe-Buglé people, who immigrated to the area in recent years. The affected people formed six Resettlement Negotiation Committees with representatives appointed by the people themselves to make decisions on behalf of the broader group.

In partnership with these committees, we developed a multiyear and multifaceted Resettlement Action Plan that sets out our commitments, principles, procedures, organizational arrangements, provisions for monitoring and evaluation, framework for participation and mechanisms for addressing grievances. All of the affected groups have now signed the plan and we are working to fulfill commitments involving construction, education, health programs and land ownership. The Resettlement Action Plan stems from Cobre Panama's Social Management System which outlines policies, plans and procedures for formal stakeholder engagement and response mechanisms.

MEASURING COMPANY PERFORMANCE

ArcelorMittal Mines Canada is a main Canadian supplier of iron ore, producing nearly 30% of Canada's iron ore for the world's steel market. Active in both the mining and transformation sectors, ArcelorMittal operates large facilities in Quebec. Its mining and milling facilities, in Mont-Wright near Fermont, are linked by a 420-kilometre railway to the Port-Cartier industrial complex, which includes the pellet plant, private port, railway workshops and the company's corporate office.

As a MAC member, ArcelorMittal Mines Canada strives to improve the sustainability of its processes and uphold its commitment to TSM by continually strengthening its protocols' application. As well, the company's environmental and quality management systems continue to be certified to ISO 14001:2004 and ISO 9001:2008 standards.

Since 2008 ArcelorMittal has made the health and safety of employees a business priority. In June 2011 the company's health and safety management system was registered under the OHSAS 18001:2007 standard. In light of this achievement, ArcelorMittal pushed forward its Courageous Leadership initiative. The objective of the initiative is to positively modify all employees' attitudes towards health and safety and to reflect the rigour the company applies to all its management processes.

The Port-Cartier pellet plant, already an industry leader in energy consumption per tonne of production, is pursuing efforts to improve its overall energy efficiency. The aim is to be responsive to future regulations for reducing GHG emissions, while at the same time lowering production costs.

In 2011 the establishment of an energy-efficiency team resulted in the reduction of the company's costs and GHG emissions. In the medium term, ArcelorMittal Mines Canada's research and development efforts are focused on finding new sources of energy for improving energy efficiency and continuing to reduce GHGs.

ArcelorMittal Mines Canada has been heavily invested in its sector for over 50 years and continues to be involved with communities of interest in several ways. Over and above its numerous donations and sponsorships, the company also contributed $800,000 to the construction of the Pavillon de Technologie Minérale at the Cégep de Sept-Îles.

ArcelorMittal Mines Canada's COI Advisory Panel, in addition to fostering an open and constructive dialogue between communities, has also directly supported the launch of numerous projects within Fermont and Port-Cartier. The communities were each granted an annual amount of $50,000 through the company's Environmental and Community Fund.

ArcelorMittal Mines Canada has also signed an Impact and Benefit Agreement with the Innu Takuaikan Uashat Mak Mani-Utenam. The agreement outlines the environmental impacts and mutual benefits of the company's projects.

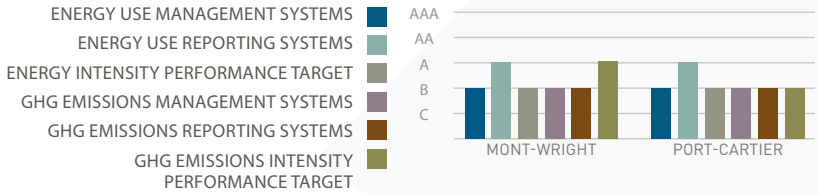
ArcelorMittal Mines Canada remains firmly convinced of the relevance and necessity of pursuing continuous improvement through the TSM initiative. For more information, please visit the ArcelorMittal Mines Canada website: www.arcelormittal.com/minescanada.

MEASURING COMPANY PERFORMANCE

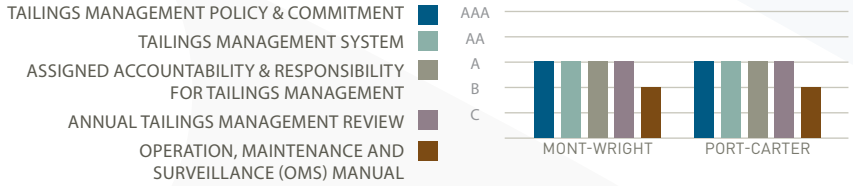
CRISIS MANAGEMENT PLANNING ASSESSMENT

	PREPAREDNESS	REVIEW	TRAINING
CORPORATE	N	N	N
MONT-WRIGHT	N	N	N
PORT-CARTIER	N	N	N

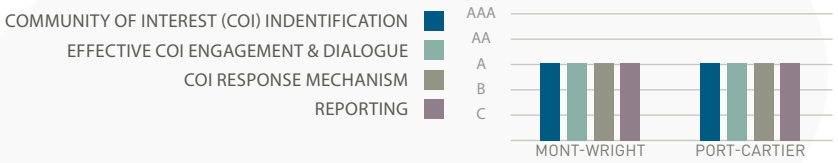
ENERGY USE & GHG EMMISSIONS MANAGEMENT ASSESSMENT



TAILINGS MANAGEMENT ASSESSMENT



ABORIGINAL & COMMUNITY OUTREACH ASSESSMENT



Barrick Gold Corporation is the world's leading gold company, operating 26 mines on four continents, with seven advanced exploration and development projects in North America, South America, Africa, Australia-Pacific and Asia. The company's headquarters are in Toronto, Ontario.

Barrick's Hemlo operation, approximately 46 kilometres east of Marathon, Ontario, has produced gold continuously since 1985. The operation includes the David Bell underground mine, and Williams, an underground and open-pit mine. Both mines share a processing facility.

The Hemlo operation was a 50-50 joint venture until Barrick acquired full ownership in 2010. Although Hemlo was prepared to begin a staged closure in 2010, the operation has entered a new phase of its productive life. With rising gold prices and the purchase of adjacent lands increasing the site's mineable reserves, Hemlo's operational mine life has been extended until 2018 at Williams mine, with the possibility of additional expansions. The David Bell mine is expected to cease production in 2014.

Before these developments, Hemlo's TSM goal, given the expected closure of the Hemlo site, was to achieve and maintain a minimum of Level A within each element. Now the operation's extended mine life provides new opportunities to enhance Hemlo's practices and operating standards. The operation is seeking higher rankings by continuing to be diligent and by applying TSM and other international practices and standards.

Hemlo's commitment to improving its performance is illustrated by the site's certification under the International Cyanide Management Institute's independent third-party audit. This certification acknowledges that Hemlo meets all performance requirements of the Cyanide Code. Barrick's commitment to the environment and continued sustainability is further demonstrated by the certification of Hemlo's environmental management system to the ISO 14001 standard.

The Hemlo operation continues to expand its external outreach and partnerships. The site is the first in Canada to participate in the Mining Essentials and Environmental Monitoring Training Program for Aboriginal peoples. This program enabled 10 members of the Pic River First Nation and Pic Mobert First Nation to receive training. Barrick is working on several initiatives with these First Nations and other communities of interest.

Hemlo continues to focus on TSM improvement. In November 2011, for only the second time since the TSM program began, Hemlo received a leadership award recognizing its performance excellence. Hemlo has also received two other TSM awards: one for external outreach and one for crisis management.

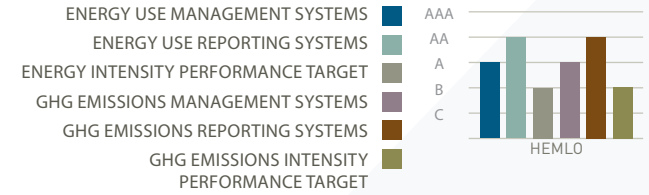
Hemlo is committed to continuous improvement in all aspects of its operation, including its engagement of all stakeholders and interested parties. For more information, please visit the Barrick website: www.barrick.com

MEASURING COMPANY PERFORMANCE

CRISIS MANAGEMENT PLANNING ASSESSMENT

	PREPAREDNESS	REVIEW	TRAINING
CORPORATE	Y	Y	Y
HEMLO	Y	Y	Y

ENERGY USE & GHG EMMISSIONS MANAGEMENT ASSESSMENT



TAILINGS MANAGEMENT ASSESSMENT

ABORIGINAL & COMMUNITY OUTREACH ASSESSMENT

BHP Billiton Canada Inc. operates the EKATI diamond mine, a joint venture between BHP Billiton (80%) and founding geologists Charles Fipke and Stewart Blusson (10% each). Located 310 kilometers northeast of Yellowknife, the mine operates in an area of continuous permafrost.

At EKATI, performance means delivering sustainable growth by investing in the future. That involves supporting excellence in leadership and, most of all, delivering on the commitment of zero harm: to the company's own people, through consistent and risk-based work practices; to its host communities, through communication and the inclusion of their opinions and concerns in mine plans; and to the environment, through innovative adaptive management and intensive monitoring of the mine's impact.

EKATI will consider itself successful when it achieves zero harm, when it is valued by its host communities and when it provides lasting social, environmental and economic benefits to society.

BHP Billiton uses TSM reporting as part of a suite of tools that drive continuous improvement across the company's operations. There is extensive internal and external monitoring and auditing of all sustainable development practices at EKATI, and the TSM initiative draws many of these processes into a forum for wider reporting across Canada. The extra level of self-regulation adds value because processes are reviewed from a different reporting perspective than would be the case under other HSEC (health, safety, environment and community) and ISO audits.

TSM results for EKATI in 2011 were generally acceptable, reflecting BHP Billiton's continuing commitment to health, safety and sustainable development, and highlighting areas that still need improvement.

EKATI mine continued to excel in external outreach, with outstanding results achieved in 2011. BHP Billiton meets regularly with stakeholders to share information about EKATI's operations and to hear from them on decisions that may affect them. Management encourages outreach to the mine's stakeholders and communities of interest, including engagement in and dialogue on sustainable community partnerships. In 2011, based on this dialogue, the EKATI mine created community development plans that placed a sharp focus on where its efforts will make the most difference in communities.

In 2011 EKATI made considerable efforts in environmental stewardship, and its TSM results verify that those efforts are on track. In particular, EKATI made progress in understanding and conserving biodiversity, and in effectively disposing of processed kimberlite and managing associated water quality.

EKATI continues to promote its Safety Guarantee, with increasing numbers of employees remaining injury free and committed to caring for themselves and each other.

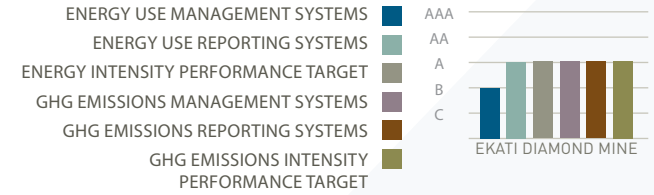
For more information, please visit the BHP Billiton website: www.bhpbilliton.com

MEASURING COMPANY PERFORMANCE

CRISIS MANAGEMENT PLANNING ASSESSMENT

	PREPAREDNESS	REVIEW	TRAINING
CORPORATE	N	N	N
EKATI DIAMOND MINE	N	N	Y

ENERGY USE & GHG EMMISSIONS MANAGEMENT ASSESSMENT



TAILINGS MANAGEMENT ASSESSMENT

ABORIGINAL & COMMUNITY OUTREACH ASSESSMENT

De Beers Canada's Snap Lake mine, the country's only fully underground diamond mine, is located approximately 220 kilometres northeast of Yellowknife. The company's Victor mine, Ontario's first and only diamond mine, is located 90 kilometres west of the Attawapiskat First Nation in northeastern Ontario. The company is also the majority partner in the Gahcho Kué project in the Northwest Territories, which may become De Beers Canada's third operation in the future.

De Beers Canada's operations are committed to sustainable development in their communities, and both the Snap Lake mine and the Victor mine have signed impact benefit agreements with eight First Nation communities. Both mines maintain safety, health and environmental management systems that have obtained OHSAS 18001 registration and have been certified to the ISO 14001 standard.

De Beers Canada is a member of the Canadian Diamond Code of Conduct and Jewellers Vigilance Canada. As part of the larger De Beers family of companies, De Beers Canada is also a supporter, participant or signatory of the Global Reporting Initiative, the Responsible Jewellery Council standards, the United Nations Global Compact and the Extractive Industries Transparency Initiative.

The following is a summary of De Beers Canada's TSM results for 2011.

CRISIS MANAGEMENT PLANNING

Crisis management plans for the corporate office and both mines conform to all TSM performance requirements. The company's 2011 priorities were to improve the preparedness and training aspects of the crisis management system at Snap Lake by expanding crisis risk assessment and conducting more plan testing.

ENERGY USE AND GHG EMISSIONS MANAGEMENT

Both mines expanded their basic management systems. Improvements focused on implementing energy and GHG emission intensity indicators and energy information management systems. These improvements lay the foundation for ongoing performance measurement and improvement.

TAILINGS MANAGEMENT

De Beers Canada's commitment to sustainable, responsible management of mineral waste is embodied in its sustainable development policy and in a letter of commitment endorsed by the chief executive. Both documents are posted on the company's website (see below).

In 2011 Snap Lake expanded its OMS manual to include all aspects of the MAC guidelines. The company completed an internal audit at both mines, which covered the tailings management system, including maintenance and surveillance systems.

ABORIGINAL AND COMMUNITY OUTREACH

Improvements in 2011 focused on identifying communities of interest (COI) that have issues-based or indirect interest. Other areas of improvement included applying the COI response mechanisms used at Snap Lake to the Victor mine, and having senior management review the effectiveness of COI engagement processes each year.

BIODIVERSITY CONSERVATION MANAGEMENT

In developing their biodiversity action plans, the Snap Lake and Victor mines are building on the baseline work from their respective environmental assessments, which were completed before the mines' construction in 2005. The current focus is on understanding how to integrate the performance requirements into the existing, comprehensive, environmental management systems in place at both mines.

HEALTH AND SAFETY

The safety and health management systems at both mines have obtained OHSAS 18001 registration, and were self-assessed at Level AA for all TSM performance indicators with one exception. At Snap Lake the safety training needs analysis was identified as out of date and was updated. The focus for 2012 will be on integrating risk management into the safety and health systems.

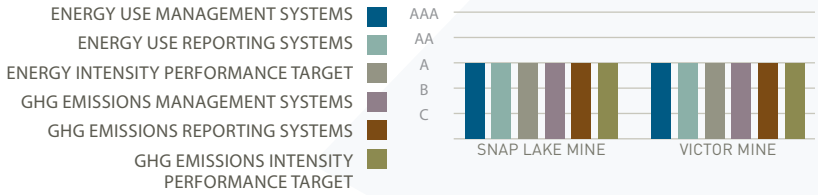
For more on De Beers Canada and its commitment to sustainable development, including the annual *Report to Society*, please visit the De Beers Canada website:
www.debeerscanada.com

MEASURING COMPANY PERFORMANCE

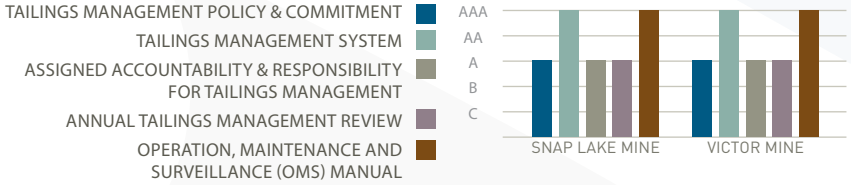
CRISIS MANAGEMENT PLANNING ASSESSMENT

	PREPAREDNESS	REVIEW	TRAINING
CORPORATE	Y	Y	Y
SNAP LAKE MINE	Y	Y	Y
VICTOR MINE	Y	Y	Y

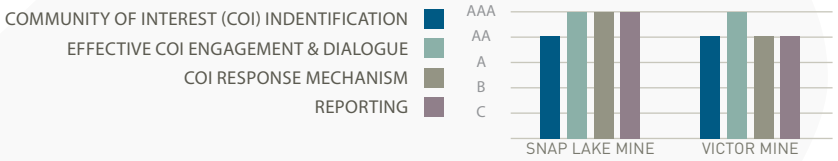
ENERGY USE & GHG EMMISSIONS MANAGEMENT ASSESSMENT



TAILINGS MANAGEMENT ASSESSMENT



ABORIGINAL & COMMUNITY OUTREACH ASSESSMENT



Hudbay Minerals is an exploration, mining and processing company with current operating facilities in Flin Flon and Snow Lake, Manitoba.

In 2011 Hudbay's safety and health performance was the best the company had ever recorded in its 85-year history. Hudbay credits its employees and contractors for making this achievement possible.

Hudbay realized a high level of safety performance during a period of significant change at its operation. The company introduced a new portal and ramp into the existing 777 mine, a project that was initiated in the shadow of the closed smelter. The fast-tracked construction of Lalor mine (an advanced exploration project in Snow Lake) progressed as scheduled, and the decommissioning of the old South Main mine site was essentially completed. Hudbay also saw the first full year of successful operation of a new copper concentrate-handling system, and initiated plans for both a new concentrator at the Lalor Mine and another new mine – the Reed Project.

In 2011 the company completed phasing out the use of heavy fuel and shifted to electricity as the energy source for steam generation. Although Hudbay's Manitoba Business Unit did not achieve its energy use target for the year, partly because of its changing production profile, the company did achieve its GHG emissions target. Hudbay plans to use 2011 as the new baseline year for future targets and comparisons.

Hudbay has committed to implementing TSM protocols in operations outside Canada once they are operational. TSM protocols have already been introduced to personnel in Peru, who are currently designing management systems to meet the requirements of the protocols. The company intends to start reporting on its performance at those locations once construction is complete and operations begin.

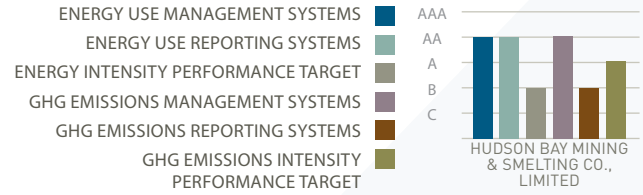
For more information on Hudbay, including annual sustainability reports and details on environmental and social performance, please visit the Hudbay Minerals website: www.hudbayminerals.com

MEASURING COMPANY PERFORMANCE

CRISIS MANAGEMENT PLANNING ASSESSMENT

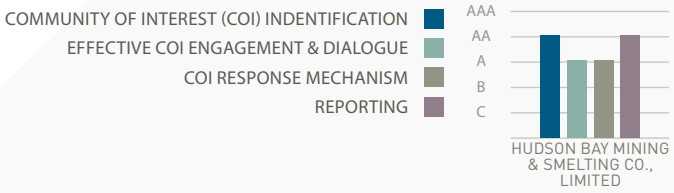
	PREPAREDNESS	REVIEW	TRAINING
CORPORATE	Y	Y	Y
HUDSON BAY MINING & SMELTING CO., LIMITED	Y	Y	Y

ENERGY USE & GHG EMMISSIONS MANAGEMENT ASSESSMENT



TAILINGS MANAGEMENT ASSESSMENT

ABORIGINAL & COMMUNITY OUTREACH ASSESSMENT



IAMGOLD is a leading mid-tier Canadian gold mining company that produces about one million ounces a year from five gold mines on three continents (including current joint ventures). In Quebec the company operates the Niobec mine, which produces more than 4.5 million kilograms of niobium annually, and is a resource for a rare earth element.

Thanks to a strong financial position and extensive management and operational expertise, IAMGOLD is positioned to grow. It has a pipeline of development and exploration projects and continually assesses acquisition opportunities. The company's growth plans are focused on West Africa, select countries in South America and regions of Canada.

The Westwood mine, which is still under development, is located 35 kilometres east of Rouyn-Noranda, next to the former Doyon gold mine. When the Westwood mine enters production in 2013, it will use some of the Doyon mine's infrastructure, such as the former open pit for tailings storage. Avoiding the use of undisturbed land for this purpose means Westwood will minimize its environmental footprint.

"Zero harm" expresses IAMGOLD's commitment to several goals: striving for the highest standards in human health, minimizing the company's impact on the environment and working cooperatively with host communities. TSM reporting is part of a suite of tools that the company uses to improve its operations.

Since 2010 various organizations have recognized IAMGOLD's increased transparency and reporting on health, safety and sustainability. In 2011 the company received the CIM (Canadian Institute of Mining, Metallurgy and Petroleum) Syncrude Award for Excellence in Sustainable Development, ranked first in the mining industry as one of Corporate Knight's Best 50 Corporate Citizens in Canada, and was included on the Maclean's/Jantzi-Sustainalytics list of Canada's 50 Most Responsible Corporations.

In 2011 IAMGOLD's performance improved overall as a result of the increased use of TSM processes at its sites. By formally incorporating TSM guiding principles into their management systems, these sites now use TSM in their day-to-day operations, rather than as a year-end auditing tool. Globally, as a result of this intensive effort, IAMGOLD's sites achieved an overall Level A rating.

ABORIGINAL AND COMMUNITY OUTREACH

In 2011 IAMGOLD's most notable accomplishment was a Level AAA rating for engagement and community development at the Rosebel mine in Suriname. The Rosebel mine is the first international site in the history of TSM to achieve this rating.

CRISIS MANAGEMENT PLANNING

For this performance element, in 2011, all of the company's operation sites and the Westwood project scored "yes" for all indicators. IAMGOLD regularly conducts emergency response exercises,

including desktop and site-wide simulations, to make sure all personnel are properly trained and tested.

ENERGY USE AND GHG EMISSIONS MANAGEMENT

This element showed the weakest performance overall, and is an area for future focus. IAMGOLD continued to take part in the Carbon Disclosure Project in 2011 and expects to see improvements in 2012.

For more information on IAMGOLD's sustainability and engagement programs and progress, including an expanded list of sustainability awards and the 2011 *Health Safety and Sustainability Report*, please visit the IAMGOLD website: www.IAMGOLD.com

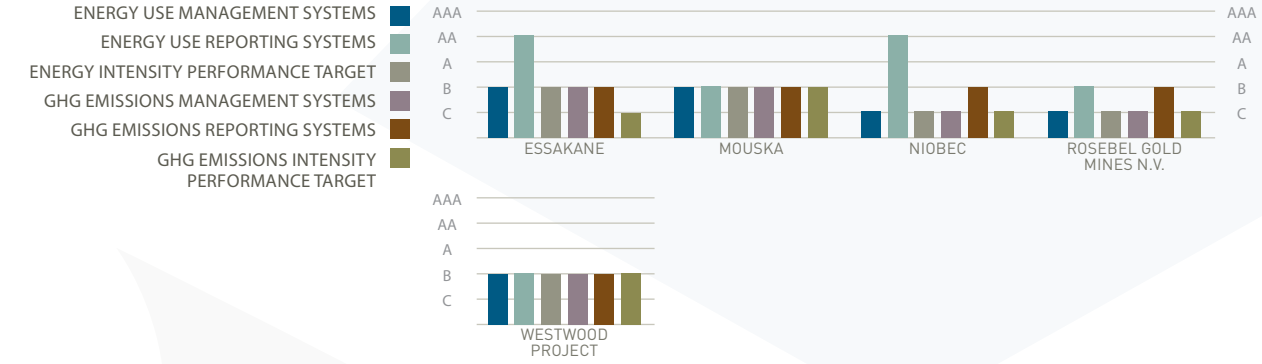
MEASURING COMPANY PERFORMANCE

Towards Sustainable Mining
Vers le développement minier durable

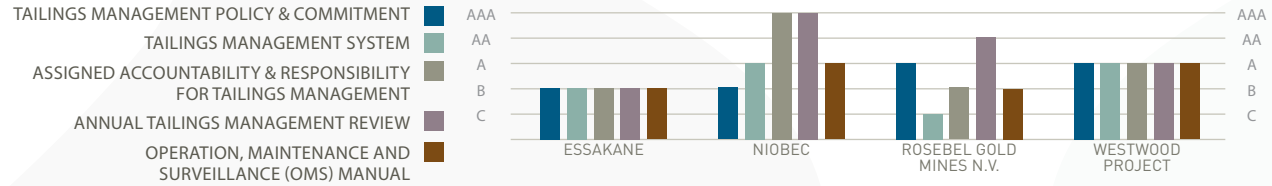
CRISIS MANAGEMENT PLANNING ASSESSMENT

	PREPAREDNESS	REVIEW	TRAINING
CORPORATE	N	N	Y
ESSAKANE	Y	Y	Y
MOUSKA	Y	Y	Y
NIOBEC	Y	Y	Y
ROSEBEL GOLD MINES N.V.	Y	Y	Y
WESTWOOD PROJECT	Y	Y	Y

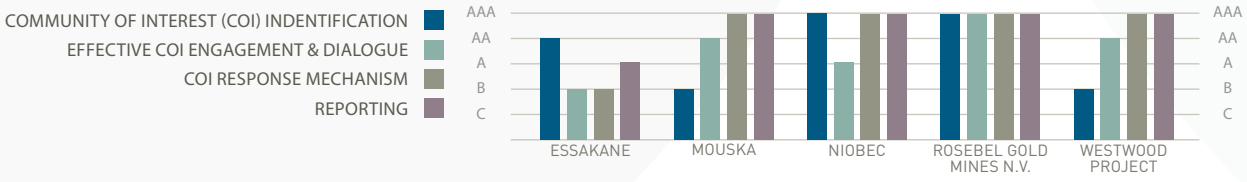
ENERGY USE & GHG EMMISSIONS MANAGEMENT ASSESSMENT



TAILINGS MANAGEMENT ASSESSMENT



ABORIGINAL & COMMUNITY OUTREACH ASSESSMENT



Inmet's commitment to corporate responsibility focuses on managing risks prudently and being good stewards. The company recognizes that the social and environmental challenges of development are greater than it can address alone. By working with customers and suppliers, and in cooperation with industry peers, NGOs, governments and communities, Inmet aims to make a positive difference through its operations.

TSM is one of the tools Inmet uses to manage risk. The company's six closed sites and active operations in Finland, Spain and Turkey continue to complete yearly TSM self-assessments. Inmet's evolving development property, Cobre Panama, also completes TSM self-assessment in order to identify gaps and improve risk management.

In 2011 Inmet again scored well on crisis and tailings management and on Aboriginal and community outreach. Inmet's scores for safety and health and biodiversity conservation also showed improvement.

TAILINGS MANAGEMENT

Tailing facility impacts can be severe if not properly managed, so Inmet strives to manage tailings in a safe and environmentally responsible manner. In 2011 Inmet's operation in Spain completed its OMS (operation, maintenance and surveillance) manual. The company's operation in Turkey plans to finalize its OMS manual in 2012, which would meet Inmet's objective of having manuals for all operating and closed properties, both in Canada and abroad. In 2011 Inmet made improvements in tailings management by formalizing accountability and completing management reviews at several of its facilities.

CRISIS MANAGEMENT PLANNING

In 2011 Inmet completed crisis simulation exercises at all of its majority-owned sites and closed properties, and at its corporate office. Inmet's operations also reviewed and updated their crisis management plans to ensure that they are responsive to risks and reflect best practices.

ABORIGINAL AND COMMUNITY OUTREACH

At each of its sites Inmet is committed to:

- Constructive engagement on environmental, social and economic impacts and on opportunities associated with its business
- Transparent disclosure of information allowing for effective dialogue and resolution of potential concerns
- A community feedback mechanism designed to address stakeholders' concerns and grievances

- Sustainable community development where the community is integrally involved in the design, implementation and management of its own development

In 2011 Inmet's operations in Turkey and Panama again scored well under all TSM elements, and operations in Spain showed significant improvement.

ENERGY USE AND GHG MANAGEMENT

Mining is an energy-intensive activity, so monitoring and managing energy use is both an environmental responsibility and a sound business practice. Inmet's operations in Finland and Turkey are leading the company in energy conservation. Energy intensity in Spain is also significantly improving because of better production. Although Inmet's sites are finding opportunities to reduce consumption, they have not generally implemented formal energy and GHG emissions management systems. Having systems in place is an objective Inmet will achieve over the next three years as its sites roll out the company's new carbon reduction management system. Inmet continues to participate in the Carbon Disclosure Project.

SAFETY AND HEALTH

Making sure its people return home to their families each night is Inmet's top priority. Operations in Turkey and Spain made significant improvements in monitoring, reporting and performance. Inmet is succeeding in changing behaviour and improving the safety culture across its company, and its sites generally scored well for both components of this element.

BIODIVERSITY CONSERVATION MANAGEMENT

In 2011 several of Inmet's operating sites completed their site-specific plans for mitigating biodiversity impacts and improving public reporting of these activities. For Inmet, 2011 also represents a milestone in the development of the Cobre Panama project: Minera Panama obtained approval for its Environmental and Social Impact Assessment and finalized its Biodiversity Action Plan (BAP). Implementing the BAP will involve supporting landscape-scale conservation, conservation management of species of concern and reforestation that promotes a net-positive impact on biodiversity. Development of the plan involved building alliances with nationally and internationally relevant organizations in biodiversity and conservation. It also received independent internal and external review and verification.

For more information about corporate responsibility at Inmet, please visit the Inmet Mining website: www.inmetmining.com

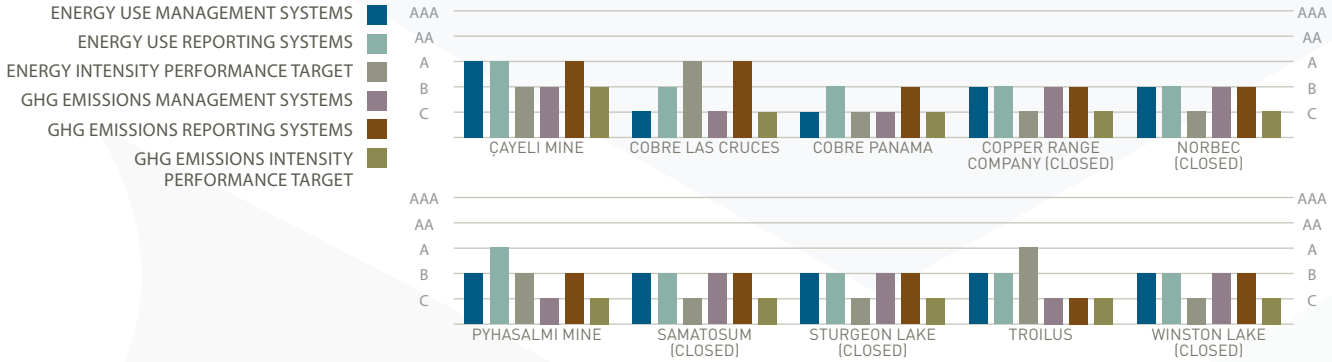
Or see the UN Global Compact's 2011 Communication on Progress: www.unglobalcompact.org

MEASURING COMPANY PERFORMANCE

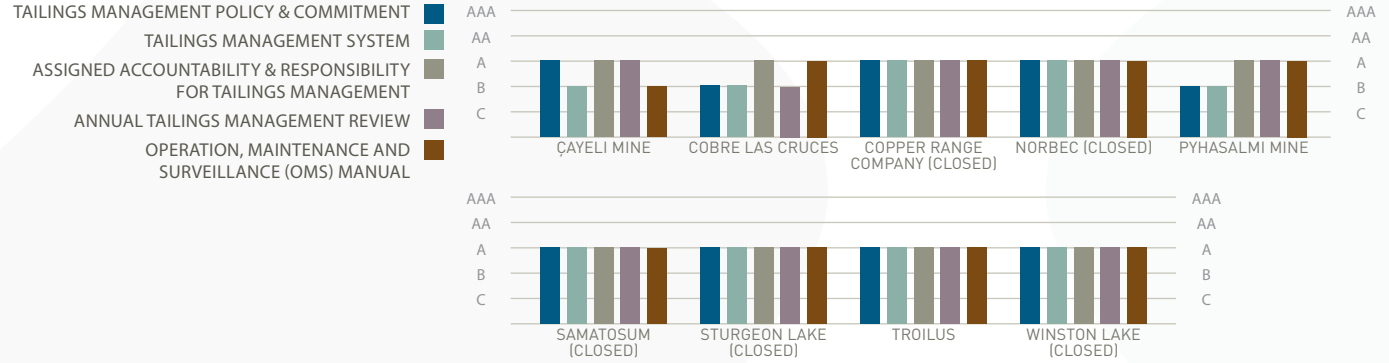
CRISIS MANAGEMENT PLANNING ASSESSMENT

	PREPAREDNESS	REVIEW	TRAINING
ÇAYELI MINE	Y	Y	Y
COBRE LAS CRUCES	Y	Y	Y
COBRE PANAMA	Y	Y	Y
COPPER RANGE COMPANY (CLOSED)	Y	Y	Y
CORPORATE	Y	Y	Y
NORBEC (CLOSED)	Y	Y	Y
PYHASALMI MINE	Y	Y	Y
SAMATOSUM (CLOSED)	Y	Y	Y
STURGEON LAKE (CLOSED)	Y	Y	Y
TROILUS	Y	Y	Y
WINSTON LAKE (CLOSED)	Y	Y	Y

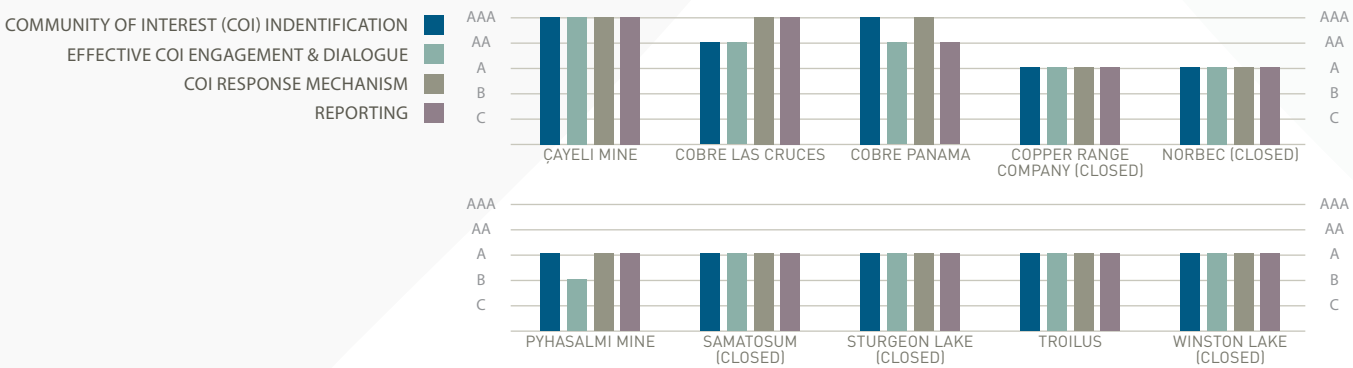
ENERGY USE & GHG EMMISSIONS MANAGEMENT ASSESSMENT



TAILINGS MANAGEMENT ASSESSMENT



ABORIGINAL & COMMUNITY OUTREACH ASSESSMENT



IOC is the largest producer of iron ore pellets in Canada and one of the leading producers of iron ore pellets and concentrate in the world. The company employs approximately 2,500 people across four sites in Quebec and Newfoundland and Labrador. It operates a mine, concentrator and pelletizing facility in Labrador City, as well as port facilities in Sept-Îles. Iron Ore Company of Canada (IOC) also owns and operates a 418-kilometre railway that links the mine to the port.

IOC's head office is in Montreal, and the company recently opened an office in St. John's, Newfoundland and Labrador.

MAC's TSM principles are aligned with IOC's sustainable development principles and the standards and policies of Rio Tinto, IOC's major shareholder and operator.

In 2011 IOC performed an internal audit to evaluate the company's TSM performance. The company continued to show improvements for tailings management indicators and is conducting ongoing work in the area of surveillance. IOC also made improvements in crisis management planning and in energy use and GHG management. The company is currently developing an action plan to ensure that its results for the new TSM performance indicators are at an acceptable level.

ABORIGINAL AND COMMUNITY OUTREACH

Community engagement is an integral part of IOC's culture. The company has been partnering with communities in Labrador West and Sept-Îles for more than five decades, and hopes to continue for many more. IOC's new office in St John's is focused on maintaining mutually beneficial relationships with communities and provincial stakeholder groups, particularly those in the Newfoundland and Labrador government.

Accompanied by her team of senior executives, Zoë Yujnovich, IOC President and Chief Executive Officer, toured all operations and offices to open one-on-one and group dialogues with employees. The aim of these dialogues is to enable employees to discuss operations, the potential benefits to and impacts of the expansion projects on communities, and to listen to concerns.

In 2011 IOC set up a new regional task force on community growth in Labrador City to complement the Community Advisory Panel (CAP) initiated in 2006. The task force is made up of senior executives from IOC and other mining companies in the area, the mayors of Labrador City, Wabush and Fermont, as well as officials from the departments of Municipal Affairs and Natural Resources, the Intergovernmental and Aboriginal Affairs Secretariat and the Labrador Affairs Office. This multi-sector group of senior representatives will work collaboratively to anticipate and address the rapid growth of the Labrador West communities. The task force will identify the pressure points so that appropriate actions can be taken.

The CAP met in Labrador West on six occasions in 2011 and was co-chaired by IOC and Cliffs Natural Resources. The following areas continue to be top priorities:

- **Housing affordability and availability**: Increased activity at the mine has led to an influx of residents and put pressure on available housing in Labrador West. To address this urgent need for affordable housing, the Labrador West Housing and Homelessness Coalition was created. IOC is an active partner in the coalition and has constructed 52 housing units next to the College of the North Atlantic residence. In 2012 the company plans to build a second apartment building with 107 units. IOC also partnered with Habitat for Humanity to build two new homes, contributing land, $100,000 and human resources for their construction. IOC will continue to partner with Habitat for Humanity in 2012.

- **Healthcare service adequacy**: Labrador-Grenfell Health conducted a medical services review in Labrador West. The review group met with CAP participants, as well as with representatives from IOC's health and safety department. The soon-to-be-published report will include recommendations for addressing the growing healthcare needs of the community.

  In 2010 IOC partnered with Labrador-Grenfell Health and the provincial government to bring a computed tomography (CT) scanner to the communities of Labrador West. The equipment was unveiled in Labrador City in August 2011. Currently housed in a temporary structure next to the hospital, the scanner will be moved into Labrador City's new hospital, which is expected to open in 2014. IOC contributed $600,000 to the building of the scanner's temporary structure.

- **Childcare availability**: Labrador West's Daycare Steering Committee took on the challenge of opening a 60-space daycare for the community's residents. A location was identified in 2011 and renovations are due to be completed for a spring 2012 inauguration. As well as participating in the project's planning, IOC contributed $100,000 for the creation of an outdoor greenspace. IOC is independently undertaking a second daycare project that will result in 60 new childcare spaces for IOC employees by the end of 2012.

The CAP in Sept-Îles has evolved to become the new Sustainable Development Committee for the town. Led by the mayor, the committee includes more stakeholders and discusses topics in addition to IOC's operations, matters of common concern, and issues and opportunities in each community. IOC looks forward to participating in 2012.

IOC is a strong believer in developing and maintaining good relationships with local Aboriginal groups. Over the past year, the company has been in active discussions with various groups to conclude agreements on training and employment, business opportunities, social involvement and other benefits.

CRISIS MANAGEMENT PLANNING

IOC's business resilience and recovery plan meets the intent of the TSM crisis management planning performance indicator, and is implemented at the company's three sites: corporate (Montreal), Labrador City and Sept-Îles. In the Montreal office, the 2009 disaster management and recovery plan is well maintained and its implementation showed continued progress in 2011. Both the Labrador City and Sept-Îles sites continue to have strong crisis management plans in place.

IOC will also be evaluating the crisis management planning needed in its new site office in St. John's. At the Labrador City site, the company made improvements to the training requirements identified in the 2010 internal review.

TAILINGS MANAGEMENT

Improvements in tailings management indicators continued throughout 2011, and there is ongoing work in 2012 on the development and implementation of an OMS manual, which should make the scores of this indicator more robust. IOC's adoption of the "Guiding Principles for Tailings Management" in 2010 has helped strengthen the company's commitment to tailings management.

A tailings committee made up of operational, maintenance, technical and environmental personnel meets regularly to evaluate performance and implement improvements. An outcome of the two-day workshop on tailings management in 2010 was the development of a priority action plan. In 2011 this plan was well underway and significant progress has been made to date.

ENERGY USE AND GHG MANAGEMENT

IOC met energy and GHG performance targets for Labrador City and Sept-Îles and continued to improve its performance overall in 2011. Although there was slippage in the resources supporting this important initiative, IOC received external verification of the program, indicating that it is still on track.

NEW PERFORMANCE INDICATORS

IOC is developing an action plan to ensure its results for the new TSM performance indicators are at an acceptable level when the company submits its TSM report for 2012.

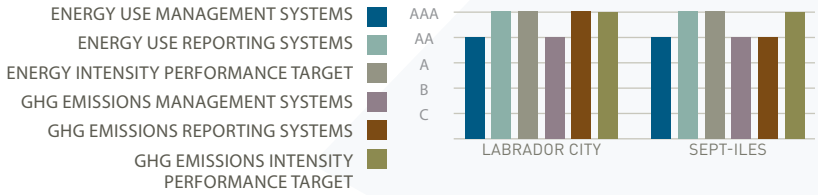
For more information on IOC's sustainable development activities, please visit the company's website: www.ironore.ca

MEASURING COMPANY PERFORMANCE

CRISIS MANAGEMENT PLANNING ASSESSMENT

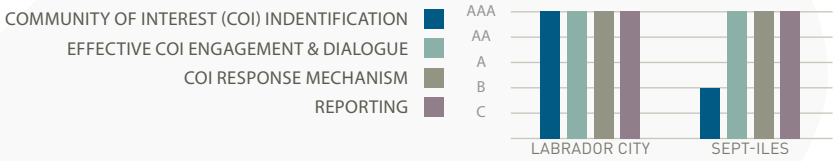
	PREPAREDNESS	REVIEW	TRAINING
CORPORATE	Y	Y	Y
LABRADOR CITY	Y	Y	Y
SEPT-ILES	Y	Y	Y

ENERGY USE & GHG EMMISSIONS MANAGEMENT ASSESSMENT



TAILINGS MANAGEMENT ASSESSMENT

ABORIGINAL & COMMUNITY OUTREACH ASSESSMENT



Nyrstar is an integrated mining and metals business, with market leading positions in zinc and lead, and with growing positions in other base and precious metals. Its worldwide mining and smelting operations include two mines located in Canada: Myra Falls in British Columbia and Langlois in Quebec. The company's corporate office is located in Zurich, Switzerland.

Nyrstar views sustainability as a key driver of success and is committed to working with stakeholders to achieve continual improvement in safety, health, environment and community (SHEC) performance. The company's Group SHEC Management Framework sets the direction for its on-site SHEC activities and establishes a common approach to managing risks at all sites. The framework is fully aligned with ISO 14001 and OHSAS 18001 and all operations are required to implement integrated SHEC management systems that are certified to these standards.

For its Canadian operations, the TSM performance requirements help Nyrstar to address safety, health and environmental risks by providing key inputs into its SHEC management systems.

The Myra Falls and Langlois operations joined Nyrstar in 2011 as part of the acquisition of Breakwater Resources. Nyrstar Myra Falls is an underground base metal mine located on Vancouver Island, 90 km southwest of Campbell River in British Columbia. The mine's location inside the Strathcona Provincial Park provides unique challenges that heighten the importance of robust environmental and community management programs. The Langlois mine is located in northwest Quebec near the town of Lebel-Sur-Quévillone. The mine, which was restarted in 2011 following a period of care and maintenance, resumed production in the first half of 2012. Based on its ramp-up schedule, Langlois is planning to conduct its first TSM self-assessments in 2013 with reporting of results in 2014.

Nyrstar Myra Falls has been reporting under MAC's TSM initiative since 2006. The TSM assessment protocols have enhanced the operation's commitment to the environment in particular and to environmental performance in general. Nyrstar Myra Falls is focused on operational excellence in all aspects of its business, including its engagement with stakeholders. Nyrstar Myra Falls has been a key supporter in the development of the Underground Mining program that has recently been established at North Island College, Campbell River.

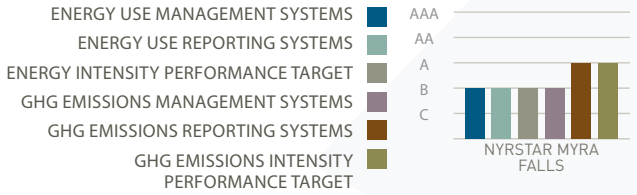
It is Nyrstar's expectation that TSM scores for all applicable protocols will improve as the Nyrstar SHEC Management Framework is implemented across its operations. For more information visit the Nyrstar website: www.nyrstar.com

MEASURING COMPANY PERFORMANCE

CRISIS MANAGEMENT PLANNING ASSESSMENT

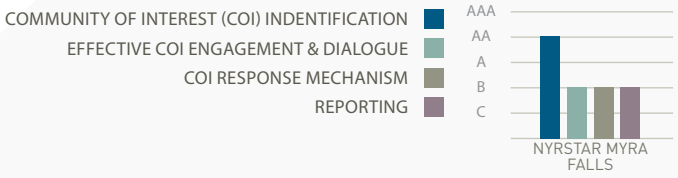
	PREPAREDNESS	REVIEW	TRAINING
CORPORATE	Y	Y	Y
NYRSTAR MYRA FALLS	Y	Y	Y

ENERGY USE & GHG EMMISSIONS MANAGEMENT ASSESSMENT



TAILINGS MANAGEMENT ASSESSMENT

ABORIGINAL & COMMUNITY OUTREACH ASSESSMENT



Shell Canada Energy (Shell) operates the Muskeg River mine and the Jackpine mine—known together as Shell Albian Sands—75 kilometres north of Fort McMurray, Alberta, on behalf of the owners of the Athabasca Oil Sands Project: Shell Canada Limited (60%), Chevron Canada Limited (20%) and Marathon Oil Sands LP (20%).

Shell's commitment to sustainability is embedded in the company's general business principles. Meeting this commitment requires:

- Balancing short- and long-term interests
- Integrating economic, environmental and social considerations into business decisions
- Regularly engaging with the company's many stakeholders

In practice, Shell aims to reduce impacts and deliver benefits through its portfolio and products, and through the way it operates. Shell is committed to building projects, running facilities and managing supply chains safely. Shell is also committed to operating in ways that reduce negative environmental and social impacts and create positive benefits.

ECONOMIC SUSTAINABILITY

Shell endeavours to create lasting social benefits by employing local people and using local contractors and suppliers, and by setting a good example through its business practices and ethics.

On June 24, 2011 Shell celebrated a significant milestone when it officially opened its 100,000 barrel-per-day Athabasca Oil Sands Project expansion, which included the new Jackpine mine and Scotford upgrader expansion. Total combined production of Shell Albian Sands is 255,000 barrels per day with the incorporation of the Jackpine mine.

In 2011 Shell spent about $925 million with companies in the Regional Municipality of Wood Buffalo, and nearly $159 million on business with Aboriginal suppliers, many from the nearby Aboriginal community of Fort McKay. In June 2011 Shell announced it had reached a milestone of $1 billion in contracts with Aboriginal companies over the previous six years, much of which was related to oil sands mining.

The company's offices in Fort McKay and Fort McMurray, and its liaison for Fort Chipewyan, allow Shell people to keep in contact with the community and to engage with stakeholders on an ongoing basis. Most of the 2,200 employees at Shell Albian Sands live in the Regional Municipality of Wood Buffalo. In November 2011 Shell announced a fly in/fly out program for Fort Chipewyan, making it possible for current and future employees and their families to continue living in their community, while participating in the economic growth on their traditional land.

ENVIRONMENTAL SUSTAINABILITY

Shell takes a "best in class" approach to environmental management. In 2004 the Muskeg River mine was certified to the ISO 14001:1996 standard. This achievement made the mine the first oil

sands operation in the world to attain this international standard. The facility has since renewed its three-year certificate under the ISO 14001:2004 standard twice, most recently in 2010. This ISO standard, though voluntary, is externally audited and recognized as the top international standard for EMS (environmental management systems). Shell is currently working towards bringing the new Jackpine mine facility into its current certification.

Proven management systems allow Shell to meet its environmental goals even as the company grows. Shell pursues responsible mining by maximizing its use of wastewater, managing the cumulative effects of oil sands development and applying new technology.

Ongoing, meaningful involvement with multi-stakeholder groups is an important part of Shell's environmental management strategy. The company is an active member of the Cumulative Environmental Management Association, the Wood Buffalo Environmental Association and the Regional Aquatics Monitoring Program.

Tailings are one of the oil sands industry's most critical issues. To respond to this issue, the seven oil sands mining companies created the Oil Sands Tailings Consortium. Shell was central to the formation of the consortium and to a landmark agreement among its members. Oil sands mining companies have agreed to remove all monetary and intellectual property barriers and to collaborate on future tailings research and solutions to accelerate tailings reclamation and reduce freshwater usages.

To meet environmental challenges, Shell uses technology in innovative ways. One example is a planned carbon capture and storage project at the company's Scotford upgrader in Fort Saskatchewan. If approved, this project would capture and store more than one million tonnes of carbon dioxide annually.

SOCIAL SUSTAINABILITY

Shell operates in a rapidly growing region and helps manage the impacts of that growth. For example, in late 2010 Shell announced a three-year, $2 million funding agreement with Keyano College. The funds support eight programs, including the Environmental Technology Program and the Aboriginal Entrepreneurship Certificate Program.

In March 2011 Shell donated $1.2 million to improve the health of homeless people in Fort McMurray. This donation helps fill a gap in how the needs of an often-overlooked segment of the community are met. The funds support a Northern Lights Health Foundation initiative on homelessness, in collaboration with Alberta Health Services and representatives of Fort McMurray's homeless population.

Since 2003 Albian has donated more than $15 million to 170 organizations throughout the region.

TSM ANNUAL FACILITY REVIEW

Shell continues to maintain high standards in the TSM performance elements of crisis management planning and external outreach, with management programs in place that are reviewed, tested and documented. The company is working extensively on community of interest engagement and dialogue, including consulting within the communities and hosting community

members at the facility. Shell informs communities about its environmental performance through an annual environment report.

Shell's tailings management initiatives continued in 2011 with the company focusing on extending its understanding of pilot scale technologies to determine if they can be operated on a commercial scale.

GHG management and reporting are getting better as Shell adopts more automatic systems to improve its data reporting in order to meet regulatory requirements. Energy management programs continue to be embedded within the company and are captured in the EMS. Shell implemented several projects in 2011 to reduce energy use within the operation.

In December 2011 Shell started up a high temperature froth unit at the Muskeg River mine to support the company's new Jackpine mine. Shell continues to focus on safety, people, environment and social performance as it helps develop Canada's oil sands resources.

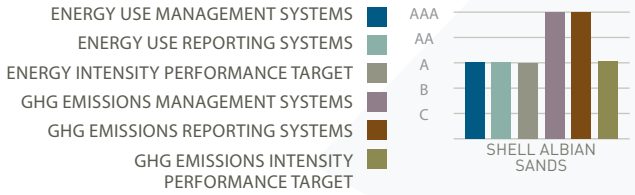
For more information, please visit the Shell Canada Energy website: www.shell.ca/oilsands

MEASURING COMPANY PERFORMANCE

CRISIS MANAGEMENT PLANNING ASSESSMENT

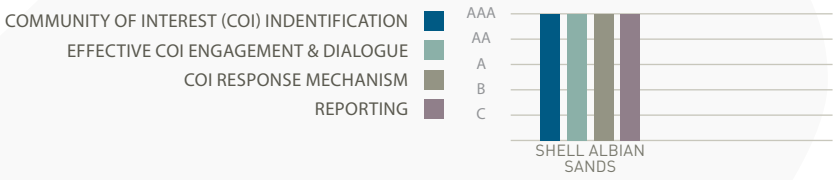
	PREPAREDNESS	REVIEW	TRAINING
CORPORATE	Y	N	Y
SHELL ALBIAN SANDS	Y	N	Y

ENERGY USE & GHG EMMISSIONS MANAGEMENT ASSESSMENT



TAILINGS MANAGEMENT ASSESSMENT

ABORIGINAL & COMMUNITY OUTREACH ASSESSMENT



Suncor Energy recovers bitumen from oil sands near Fort McMurray, Alberta, and upgrades it to refinery-ready feedstock and diesel fuel. With production capacity of about 300,000 barrels per day and enough reserves to sustain production for the next 50 years, Suncor remains a leader in oil sands development.

In 2009 Suncor merged with Petro-Canada to become Canada's largest energy company. The merger will result in a second oil sands mining operation for Suncor in the region in the coming years.

Suncor's 2011 TSM results were externally verified. The results showed some improvement over the previous year's results, particularly in the area of tailings management and energy use and GHG emissions management.

CRISIS MANAGEMENT PLANNING

Although Suncor met two of the three indicators, a lack of formal documentation resulted in a 'No' for the third. Suncor will be working to improve internal processes to ensure it meets all indicator requirements going forward.

ENERGY USE AND GHG EMISSIONS MANAGEMENT

Last year represented Suncor's best result in the energy use and GHG emissions management Protocol. All performance indicators received an externally verified level 'A' as a minimum. Suncor's internal goal of 10% improvement in energy use is helping to drive change in this area.

TAILINGS MANAGEMENT

Oil sands tailings ponds have come under increased public scrutiny in the past few years. Suncor has worked hard in this area to ensure compliance with all performance indicators. For the first time, Suncor has achieved a level 'A' in all tailings management performance indicators. Work continues in this area to ensure a high level of compliance can be maintained and improved going forward.

ABORIGINAL AND COMMUNITY ENGAGEMENT

Suncor has consistently performed well in this area as external outreach has always been a key part of maintaining its social licence to operate. Suncor regularly reviews its communities of interest (including several Aboriginal communities) and its interaction with them. Communities of interest have an important say in how the company conducts business. Moreover Suncor's success depends on earning the trust and consent of residents in the communities where it operates.

Suncor has a stakeholder relations policy that outlines the company's commitment to collaboration, transparency and respect for all views. The policy guides Suncor as it develops long-

term relationships with those affected by its business, including employees, community members, shareholders, customers, organizations and governments.

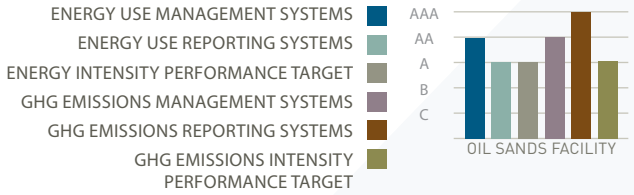
For more information, please visit the Suncor website: : www.suncor.com

MEASURING COMPANY PERFORMANCE

CRISIS MANAGEMENT PLANNING ASSESSMENT

	PREPAREDNESS	REVIEW	TRAINING
OIL SANDS FACILITY	Y	N	Y

ENERGY USE & GHG EMMISSIONS MANAGEMENT ASSESSMENT



TAILINGS MANAGEMENT ASSESSMENT

ABORIGINAL & COMMUNITY OUTREACH ASSESSMENT

Syncrude is a leader in Canada's oil sands industry, producing 15% of the nation's crude oil requirements. It operates technologically advanced oil sands mines, extraction and upgrading facilities, and utilities plants at its two sites north of Fort McMurray, Alberta. Syncrude's current production capacity is 350,000 barrels of crude oil per day.

Syncrude's commitment to superior environmental, health and safety performance, as well as excellence in community relations, has been strengthened by participating in TSM. In fact, Syncrude was the first ever to receive a TSM award for meeting performance standards in all categories.

Syncrude's performance stayed consistently strong in 2011. It internally verified two new assessment protocols and demonstrated a strong commitment to both areas.

- Syncrude's biodiversity management system demonstrates its commitment to continuous improvements in evaluation and reporting programs, in the avoidance or mitigation of significant adverse biodiversity effects, and in improved communications about efforts to reclaim disturbed land.
- Syncrude's Level AAA score in four out of five safety categories demonstrates its commitment to protecting and promoting the safety and well-being of employees, contractors, communities and the environment.

Syncrude maintained Level A scores in all areas of tailings management. The current focus is to regularly update the OMS manuals for all tailings facilities. Syncrude regularly monitors all on-site dams, undergoes external technical reviews and has emergency plans in place to respond to any incidents involving these facilities. The tailings business unit also made significant improvements in transitioning to the tailings management framework in MAC's *A Guide to the Management of Tailings Facilities*.

Syncrude did not meet its energy intensity target in 2011. The resulting Level B score was due to lower than anticipated production, which affected Syncrude's overall performance. Syncrude sets aggressive performance targets each year and will concentrate on improving this performance and reducing energy and GHG impacts in 2012.

Syncrude continued its strong corporate performance in the management system areas of energy and GHG usage, scoring Level AAA in these areas.

Syncrude has consistently achieved Level AAA for external outreach. An Aboriginal employee advisory committee supports the work of the Aboriginal Steering Committee, a management-level group that oversees Syncrude's strategic plan for Aboriginal engagement.

Syncrude works extensively with regional stakeholders to manage the social and environmental effects of oil sands development. It is involved in numerous multi-party organizations and industry associations that deal with socio-economic impacts and policy issues at the local level.

In the crisis management planning area, Syncrude scored "yes" for all indicators. Syncrude regularly conducts emergency response exercises, including desktop and site-wide simulations, to ensure that all personnel are properly trained and tested. Pre-plans exist for all medium- and high-level risks, and approved company spokespeople are identified and trained.

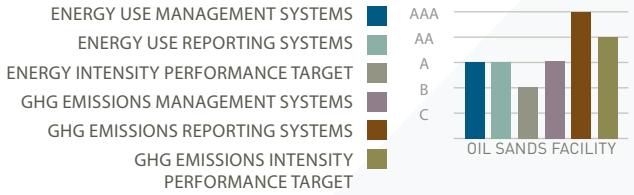
For more information, please visit the Syncrude website : www.syncrude.com

MEASURING COMPANY PERFORMANCE

CRISIS MANAGEMENT PLANNING ASSESSMENT

	PREPAREDNESS	REVIEW	TRAINING
SYNCRUDE CANADA LTD	Y	Y	Y

ENERGY USE & GHG EMMISSIONS MANAGEMENT ASSESSMENT



TAILINGS MANAGEMENT ASSESSMENT

ABORIGINAL & COMMUNITY OUTREACH ASSESSMENT

Teck Resources Limited (Teck) is a diversified natural resource company committed to responsible mining and mineral development. Through the company's interests in mining and processing operations in Canada, the United States and South America, Teck's expertise spans the full range of mining activities. The company is managed along commodity lines, focused on copper, steelmaking coal, zinc and energy. Teck is the world's second-largest exporter of seaborne high-quality steelmaking coal, an important producer of copper and one of the world's largest zinc producers.

TSM RESULTS

All 13 of Teck's operations participate in TSM. Its Canadian operations have participated since 2008 or earlier and its U.S. and Chilean operations began participating in 2011.

All of Teck's Canadian operations publicly report their TSM results. These include Duck Pond Operations, Highland Valley Copper Operations, Trail Operations and six steelmaking coal operations: Cardinal River, Coal Mountain, Elkview, Fording River, Greenhills and Line Creek.

Teck's Two U.S. operations, Pend Oreille and Red Dog, as well as its two Chilean operations, Carmen de Andacollo and Quebrada Blanca, began applying the TSM protocols in 2011.

During 2011, Line Creek Operations and Teck'scorporate crisis management system underwent third party verification. The assessments identified successes and gaps that will allow for improvements in future performance. Teck is pleased to note that Line Creek's results improved over 2011 in all applicable protocols.

TSM IMPROVEMENT PLAN

Teck has set a target for all sites: to achieve Level A in crisis management planning, external outreach, tailings management and energy and GHG management. To help achieve this, in January 2011, Teck launched a TSM Improvement Plan. The plan, based on findings and recommendations from the company's 2009 verification, is designed to support Teck operations as they move forward with TSM implementation.

The plan is built around four approaches to drive improvement:
- Develop knowledge and capacity
- Assign accountability
- Set the commitment
- Drive implementation

Teck's 2011 TSM results show significant improvements in performance scores over 2010. The company expects continued improvement in future years as it continues to implement its TSM Improvement Plan.

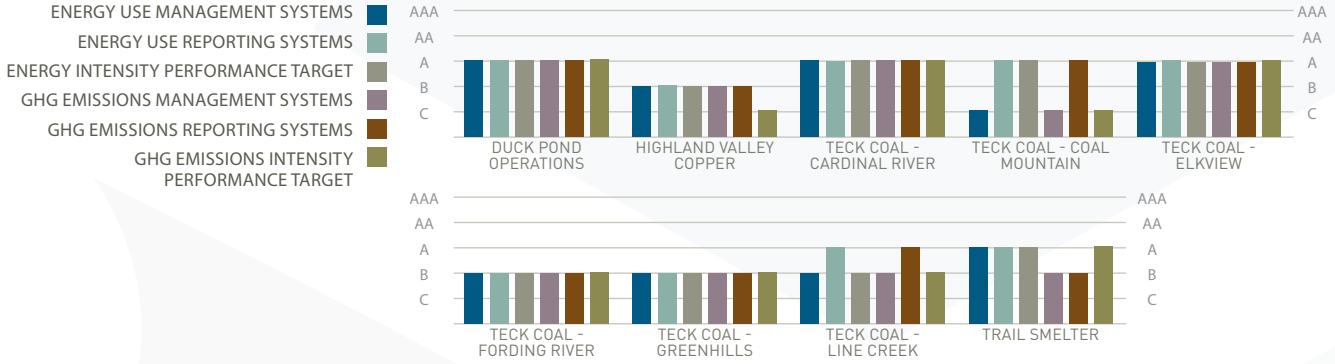
For more information, please visit the Teck website: www.teck.com

MEASURING COMPANY PERFORMANCE

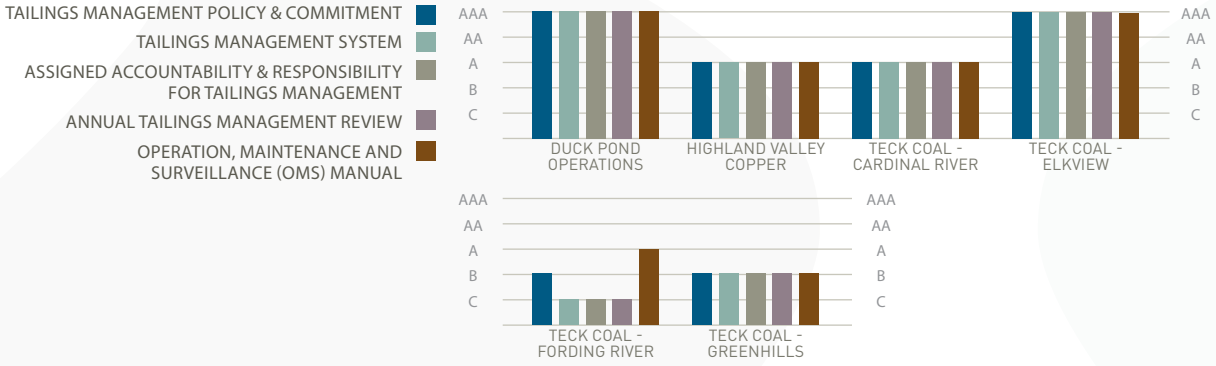
CRISIS MANAGEMENT PLANNING ASSESSMENT

	PREPAREDNESS	REVIEW	TRAINING
DUCK POND OPERATIONS	Y	Y	Y
HIGHLAND VALLEY COPPER	Y	Y	Y
TECK COAL - CARDINAL RIVER OPERATIONS	Y	Y	Y
TECK COAL - COAL MOUNTAIN OPERATIONS	Y	Y	Y
TECK COAL - ELKVIEW OPERATIONS	Y	Y	Y
TECK COAL - FORDING RIVER OPERATIONS	N	N	N
TECK COAL - GREENHILLS OPERATIONS	N	Y	Y
TECK COAL - LINE CREEK OPERATIONS	N	N	Y
TRAIL SMELTER	Y	Y	Y
VANCOUVER CORPORATE	Y	N	Y

ENERGY USE & GHG EMMISSIONS MANAGEMENT ASSESSMENT



TAILINGS MANAGEMENT ASSESSMENT



ABORIGINAL & COMMUNITY OUTREACH ASSESSMENT

Vale is a global mining company that embraces its mission of transforming natural resources into prosperity and sustainable development. The company's vision is to become the top global resource company in creating long-term value through excellence and a passion for people and the planet.

Vale believes in "zero harm" — to its people, to its workplaces, to the communities in which it operates and to the natural environment. Vale demonstrates its commitment to zero harm by integrating sound risk management practices into all aspects of its business, by continually improving these practices, and by fully merging safety, health and environmental concepts with its economic and production goals. At all times the company strives to leave a positive social, economic and environmental legacy in the areas where it operates.

Vale, the world's largest producer of iron ore and second largest producer of nickel, operates its base-metals business from Toronto. Much of Vale's nickel production is derived from its Canadian operations, as is the company's production of copper, cobalt, platinum group metals, gold and silver. In Sudbury, Ontario, and Thompson, Manitoba, Vale runs mine, mill, smelter and refinery operations. In Voisey's Bay, Newfoundland and Labrador, Vale's assets include mine and mill operations. Vale directly employs more than 6,600 people in Canada and several thousand contractors.

Vale has a number of development projects underway, including the Long Harbour nickel processing plant in Newfoundland and Labrador, scheduled to start up in 2013, the Totten mine in Sudbury, Ontario, scheduled to begin production in late 2013, and the Kronau Project in Saskatchewan, expected to start up in late 2016 or early 2017, and produce 2.9 million metric tonnes of potash per year.

Vale's TSM report includes information on each of its operating Canadian sites. In 2011, despite a turbulent global economy, the company began implementation of its substantial five-year investment plan for Canada announced in November 2010. More than $10 billion is expected to be spent on projects, including the reduction of emissions in Sudbury, upgrading of production facilities in Sudbury, completion of the Long Harbour processing plant in Newfoundland and Labrador, exploration in Manitoba, and potash development in Saskatchewan. All of these projects will bring considerable benefits to Vale's communities and Canada.

Vale's Atmospheric Emissions Reduction project — the Clean AER project — is a historic investment in sustainability. At an estimated cost of $2 billion, this environmental project is designed to reduce emissions of sulphur dioxide more than 70% over current levels. In 2011 multi-stakeholder work began to diversify the economy in Thompson, Manitoba, and sustainably transition the integrated mining and processing facility to a mining and milling operation by 2015.

ABORIGINAL AND COMMUNITY OUTREACH

In May 2011 the Thompson Economic Diversification Working Group was launched in Thompson, Manitoba, to develop a plan for the economic diversification of the city and region. This multi-stakeholder working group hosted two open houses on June 22 and November 15 to provide information on the planning process. Priorities set for action plans include education and training, housing, alternative justice, health and wellness, regional infrastructure and local and regional identity. In 2011 Vale proudly achieved a new three-year collective bargaining agreement with United Steelworkers local 6166, which represents workers at its operations in Thompson. Before the 2011 summer shutdown, general managers spent considerable time communicating the business plan for the Manitoba operations. This sound life-of-mine plan delivered great news to all Vale stakeholders. Also in 2011 Vale held annual open houses and issued quarterly public business updates, and the Thompson Community Liaison Committee met quarterly. In 2011 Vale continued to report on water management, sustainability, community investment and its commitment to the Thompson Aboriginal Accord.

In Sudbury the company held its annual open house, which provided an opportunity for public consultation on the company's site-specific standard application for sulphur dioxide. Attendees learned about the Clean AER project, which is the largest single environmental investment in Ontario's history. This retrofit of the Copper Cliff smelter will reduce sulphur dioxide emissions by 70% from current levels by 2015. In addition to its environmental benefits, the Clean AER project offers tremendous economic benefits for local suppliers and the community at large, generating approximately 1,300 jobs at peak construction.

In 2011 Port Colborne's Community Based Risk Assessment process entered the regulatory review phase. In 2012 the Port Colborne refinery will be looking at new ways to engage its local stakeholders through an information open house. In December 2011 Vale announced a $1.25 million investment in Port Colborne's new Health and Wellness Centre as part of its commitment as a long-standing partner to the community.

For Vale's Labrador operations team in Newfoundland and Labrador, 2011 was a transitional year. The labour dispute involving the production and maintenance employees was resolved early in the year, and by the end of the first quarter operations at the mine site had begun to return to normal. On the environmental management side, a break in the tailings line resulted in a tailings spill. Vale worked closely with regulators and with Aboriginal leaders to develop a clean-up plan. Vale had regular communications with governments, local communities and local media on the clean-up and remediation effort, which was successfully completed to the satisfaction of all stakeholders.

In 2011 Vale experienced continued success in meeting employment and business commitments to nearby Inuit and Innu communities on whose traditional territory the Voisey's Bay mine and concentrator operates. Training, employment support and cultural awareness were among the topics discussed with and presented to Vale workers.

Workers at the Labrador operations and at the Long Harbour construction project finished the year without a lost time injury, an excellent safety record of which everyone can be proud. Also in 2011

the Long Harbour Community Liaison Committee, which is composed of members representing local governments, community groups, area businesses and regulatory agencies, met quarterly, as did the Fisheries and Aquaculture Liaison Committee. Both committees provided valuable input on local issues that have arisen during the construction of the Long Harbour Processing Plant.

ENERGY AND GHG EMISSIONS MANAGEMENT

In 2011 Vale chose a company energy leader and developed Vale Canada Limited's "energy professionals" network for sharing best practices. This energy group is instrumental in identifying potential avenues for transforming the company's energy matrix to more renewable or sustainable options. Vale Canada Limited designated investment funds to conduct energy studies and implement energy-saving projects that would not normally meet the financial threshold for prioritization under the capital budgeting process.

Also in 2011 Vale rolled out the Sustainability Action Plan at its Canadian sites. Part of the plan's mandate is to improve performance on several key environmental indicators, including the use of direct and indirect energy. The company set an intensity target for the Port Colborne refinery, and identified energy-saving projects at Voisey's Bay. By recovering energy for heating from processing and facility operations at Voisey's Bay, and by rationalizing the use of the generators by upgrading the units, the company's annual diesel fuel use was reduced by more than 700,000 litres. In addition the introduction of zero-based budgeting in Sudbury led to the development of energy targets for several unit operations within the facility.

Vale drafted a Corporate Guideline on Climate Change Adaptation in 2011, a policy that complements the Corporate Guideline on Climate Change and Carbon the company developed in 2008. Globally, Vale continued to participate voluntarily in the Carbon Disclosure Project and in the Global Reporting Initiative. Through such policy commitment and reporting activities, Vale has developed a stronger understanding of its carbon footprint and its exposure to climate change risks and opportunities. In 2011 Vale Canada Limited continued to support climate change initiatives and worked with the Corporate Sustainability group to identify and implement opportunities for improved performance.

TAILINGS MANAGEMENT AND CRISIS MANAGEMENT PLANNING

In 2011 Vale Canada Limited continued to improve its performance in the area of tailings management by implementing a management review in Voisey's Bay and by contracting with a third-party engineering firm to review the OMS (operation, maintenance and surveillance) manual in Thompson. In 2012, the company will continue its implementation of the tailings management framework.

Crisis management planning and preparedness is a critical component of Vale's risk management activities. In 2009 Vale Canada Limited completed implementing the final components of its crisis management system. In 2012, the company will revise the corporate system to reflect recent organizational changes and will close the administrative gap recorded in 2011. All facilities will test the crisis management framework by executing table-top exercises and mock drills.

NEW PROTOCOLS FOR SAFETY AND HEALTH AND BIODIVERSITY

At Vale life matters most and people are valued. The company applauds MAC's initiative for developing a safety and health protocol and has begun to align its safety systems accordingly. Vale is looking forward to reporting against this protocol in future years.

Protecting biodiversity is a priority for Vale. In 2011 the company actively supported biodiversity work by partnering with the Manitoba department of conservation's woodland caribou collaring program, supporting the Vale Inco Living with Lakes Centre, and conducting extensive biodiversity studies in Voisey's Bay. During 2012 Vale will seek to fully understand MAC's new protocol, share best practices across its facilities, and develop a holistic plan to improve biodiversity management at the company's Canadian facilities.

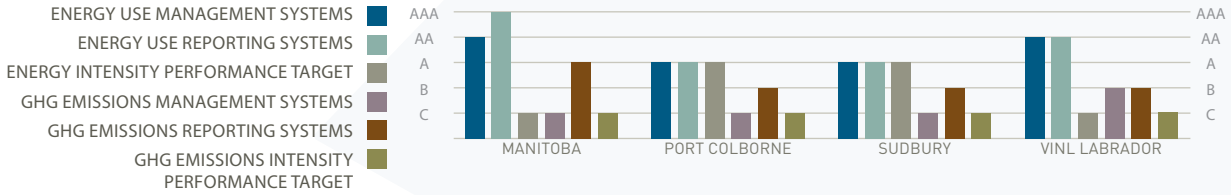
For more information, please visit the Vale website: www.nickel.vale.com

MEASURING COMPANY PERFORMANCE

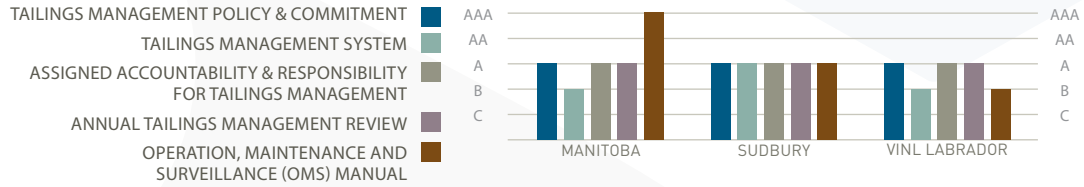
CRISIS MANAGEMENT PLANNING ASSESSMENT

	PREPAREDNESS	REVIEW	TRAINING
CORPORATE	Y	Y	Y
MANITOBA OPERATIONS	Y	Y	Y
ONTARIO OPERATIONS - PORT COLBORNE	Y	Y	Y
ONTARIO OPERATIONS - SUDBURY	Y	Y	Y
VINL LABRADOR OPERATIONS	Y	Y	Y

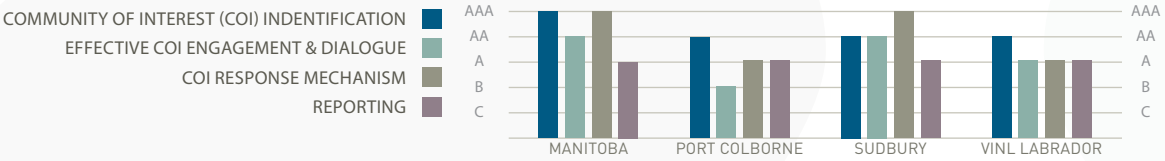
ENERGY USE & GHG EMMISSIONS MANAGEMENT ASSESSMENT



TAILINGS MANAGEMENT ASSESSMENT



ABORIGINAL & COMMUNITY OUTREACH ASSESSMENT



Xstrata Copper Canada is part of the Xstrata Copper business unit headquartered in Brisbane, Australia, the fourth-largest copper producer in the world. The company plays a vital role in people's lives by producing the copper and precious metals used in their homes, cars and everyday objects, which range from cell phones to kitchen utensils. Guided by Xstrata's 17 sustainable development standards, Xstrata Copper Canada manages activities at each stage of the sustainable development cycle — exploration, mining and milling, smelting and refining, and closure and rehabilitation.

Approximately 2,800 people are employed at the company's Horne smelter (Rouyn-Noranda, Quebec), CCR refinery (East-Montreal, Quebec), Kidd operations (Timmins, Ontario), recycling operations, 16 closed sites and the administrative office in Toronto.
Copper is 100% recyclable, and it is estimated that at least 80% of all mined copper is still being used. The Horne smelter—the only stand-alone working copper smelter in Canada—is both pioneer and world leader in recycling end-of-life electronics and scrap metal to retrieve their copper and precious metals.

The location of the Horne smelter, next to a residential area, means emissions are monitored closely, and results are openly discussed with the local citizens' committee and representatives of key provincial ministries. In 2011 Xstrata Copper Canada installed and commissioned a second gas collection hood on the anode furnace. The company met the reduction objectives of its multi-year plan to address arsenic emissions, and has developed a new five-year plan to lower arsenic emissions at ground level by another 50% from its 2011 target.

Xstrata Copper Canada's primary air emission is sulphur dioxide from metallurgical operations. The company maintained its world-class performance by capturing and treating 95% of sulphur dioxide at the Horne smelter.

The CCR refinery—the only copper refinery in Canada—refines copper anodes and precious metals from the Horne smelter and other sources. Xstrata Copper Canada completed the sealing of several electrolyte recirculation tanks, which reduces fugitive emissions of arsenic, nickel and acid mist into the atmosphere. In addition, the company implemented a process to reduce selenium content in its final effluent.

The Kidd mine is the deepest base metal mine in the world below sea level. In 2011 Xstrata Copper Canada achieved another record by reaching a depth of 9,660 feet. The deeper the mine, though, the greater the energy used. Despite this challenge, energy consumption at the Kidd mine has decreased by almost 4% since 2007, and projects are underway to achieve further reductions by optimizing and automating auxiliary fans.

In 2010 Xstrata Copper Canada permanently closed the Kidd copper and zinc metallurgical plants but left the mine and concentrator. The site is now part of 16 closed sites that are actively managed by local employees. These employees ensure that all on-site structures (such as dams and tailings), rock piles and the water treatment equipment are in good condition. In 2011 the company started the rehabilitation of the site by demolishing the copper smelter and refinery, and the zinc refinery and its buildings. Metals were segregated and sent for recycling.

Xstrata Copper Canada held meetings with First Nations communities in the Timmins area to discuss the plans for the Kidd plant closure. Discussions also took place on ways to build mutually beneficial relationships with communities where Kidd operations lie within traditional territories. Along with local stakeholders, the company is participating in committees to find alternative uses for the industrial area left by the former copper and zinc metallurgical plants. Xstrata Copper Canada also engaged in consultations with First Nations in British Columbia, where the company is conducting exploration activities.

In recent years, the company completed rehabilitation work at the Murdochville mine-smelter site and near the Gaspé port facilities, the largest rehabilitation project in Canada. Xstrata Copper Canada partnered with Genivar, an engineering consulting firm, to undertake the remediation. Genivar won the prestigious 2011 Schreyer Award at the Canadian Consulting Engineering Awards event, setting a benchmark for future mine decommissioning projects.

In 2011 the company's Canadian sites were externally verified. Xstrata Copper Canada met an important benchmark: all of its operating sites received TSM awards for external outreach, as well as an award for crisis management at the Kidd Mine. These awards confirm the company's contribution to Xstrata's worldwide leadership in sustainability, which was further strengthened by being named the Mining Sector Leader of the Dow Jones Sustainability Index for the fifth consecutive year.

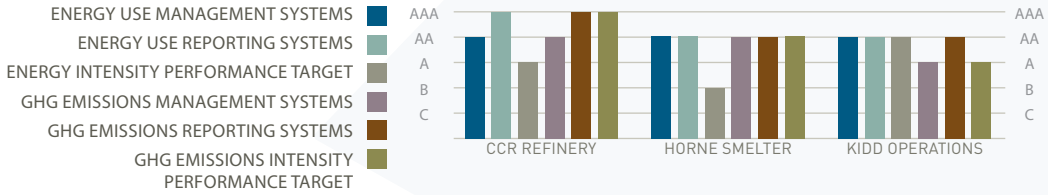
For more information, please visit the Xstrata Copper website: www.xstratacopper.com

MEASURING COMPANY PERFORMANCE

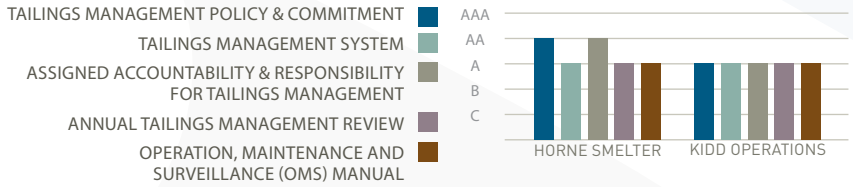
CRISIS MANAGEMENT PLANNING ASSESSMENT

	PREPAREDNESS	REVIEW	TRAINING
CCR REFINERY	Y	N	Y
CORPORATE	N	N	N
HORNE SMELTER	Y	N	N
KIDD OPERATIONS	Y	Y	Y

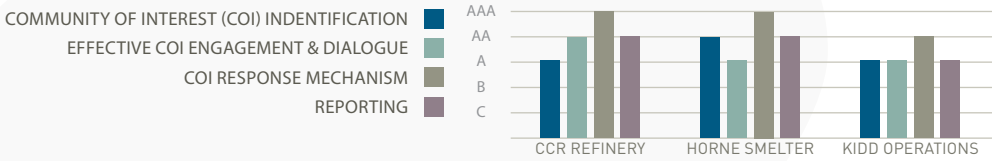
ENERGY USE & GHG EMMISSIONS MANAGEMENT ASSESSMENT



TAILINGS MANAGEMENT ASSESSMENT



ABORIGINAL & COMMUNITY OUTREACH ASSESSMENT



Xstrata Nickel is the world's fourth-largest nickel producer, with annual managed production of 106,000 tonnes of refined nickel. It is also one of the world's largest recyclers and processors of nickel and cobalt-bearing materials. A commodity business unit within Xstrata plc, a major global mining group, Xstrata Nickel is headquartered in Toronto.

Xstrata Nickel's Canadian mining operations and processing facilities are located in Ontario and Quebec, and the company also has facilities in the Dominican Republic, western Australia and Norway. Xstrata Nickel has a promising portfolio of growth projects in New Caledonia, Tanzania and Brazil.

Sustainability lies at the foundation of Xstrata Nickel's business strategy and activities. Sustainability requires meaningful engagement with communities of interest. At the same time, it requires maintaining the highest regard for environmental stewardship, social responsibility, corporate governance and transparent reporting, while delivering superior shareholder returns. These values underlie the company's support for TSM.

In 2011 Xstrata Nickel's Sudbury operations and Raglan mine both had their 2010 TSM performance verified. Compared with verified results from 2007, both operations showed improvement in the TSM performance elements of energy use and GHG management, external outreach, and tailings management.

In 2011 the Sudbury operations' performance again improved notably in energy use and GHG management indicators as a result of major investments in enhanced energy efficiency. The Sudbury operations now have an energy management system integrated into their operational management systems and business planning. Sudbury promoted energy awareness to key personnel and has taken steps to work with the external community on energy efficiency. The operations, however, did not meet their energy intensity performance target, but performance improved over 2011.

The review of the Sudbury operations' crisis management plan also showed enhanced performance in 2011. Improvements included the introduction of a new risk matrix and the implementation of review training, which was delivered to team members and site supervisors.

At the Raglan mine, performance improved in 2011 in one indicator under tailings management: the annual tailings managment review. Raglan strengthened the formal annual review of its tailings management systems and reported its performance to the accountable executive officer.

At the root of Xstrata Nickel's improved TSM performance are the 17 sustainable development standards that guide Xstrata plc. These standards itemize intent and performance requirements for core areas such as planning and leadership, biodiversity conservation, communication and

engagement, risk and incident management, and community. The TSM performance elements complement Xstrata's standards and assurance program.

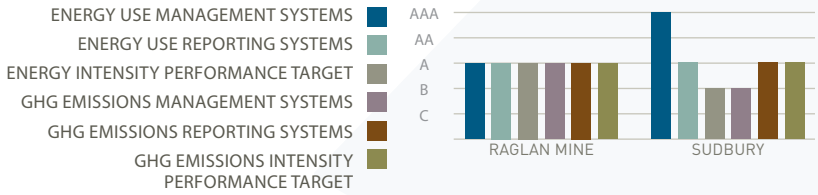
For more information on Xstrata Nickel's sustainability performance, please visit the company's website: www.xstratanickel.com

MEASURING COMPANY PERFORMANCE

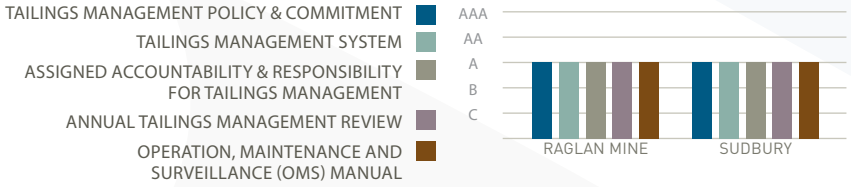
CRISIS MANAGEMENT PLANNING ASSESSMENT

	PREPAREDNESS	REVIEW	TRAINING
CORPORATE	Y	Y	Y
RAGLAN MINE	Y	Y	Y
SUDBURY OPERATIONS	Y	Y	Y

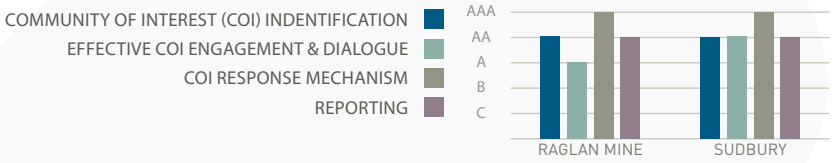
ENERGY USE & GHG EMMISSIONS MANAGEMENT ASSESSMENT



TAILINGS MANAGEMENT ASSESSMENT



ABORIGINAL & COMMUNITY OUTREACH ASSESSMENT



Xstrata Zinc Canada manages the North American operations of Xstrata plc's zinc business unit and includes mining and metallurgical operations in eastern Canada.

The following facilities have implemented TSM:

- Brunswick mine, Bathurst, New Brunswick
- Brunswick smelter, Bathurst, New Brunswick
- Noranda Income Fund, CEZ refinery (25% interest), Valleyfield, Quebec

The Perseverance mine in Matagami, Quebec, came on line in late 2008. TSM implementation began there recently and will be reported on in the future.

Xstrata plc has a stringent sustainable development framework that consists of 17 functional areas and is considered world-class. All facilities must implement the framework and must have their implementation externally verified (for more detail, see **www.xstrata.com/sustainability**) .

Several of Xstrata's framework standards apply directly to TSM indicators. For example, communication and engagement (Standard 4) and social and community engagement (Standard 12) relate directly to TSM's external outreach performance element. Xstrata Zinc has performed optimally in these areas, as shown by third-party auditing. As the Brunswick mine nears the end of its mine life, this performance area is increasingly important. The company is applying significant resources to minimize, as much as possible, the impact on employees and the local community.

Tailings dam management is a vital environmental concern. A tailings dam failure would be considered a catastrophic hazard under the Xstrata sustainable development framework (Standard 6). The Brunswick mine has a very strong management system in place because of the risk inherent in this type of facility. The management system, as well as the site's OMS manual, is subject to regular third-party audits and internal audits. No further work on the management system is anticipated at the Brunswick mine, as the priority now is effective closure planning.

Greenhouse gas and energy conservation remains an important metric at all Xstrata Zinc facilities, where the focus is on energy reduction.

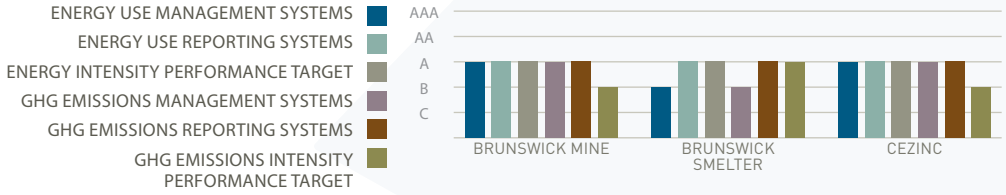
For more information, please visit the Xstrata Zinc Canada website: www.xstrata.com

MEASURING COMPANY PERFORMANCE

CRISIS MANAGEMENT PLANNING ASSESSMENT

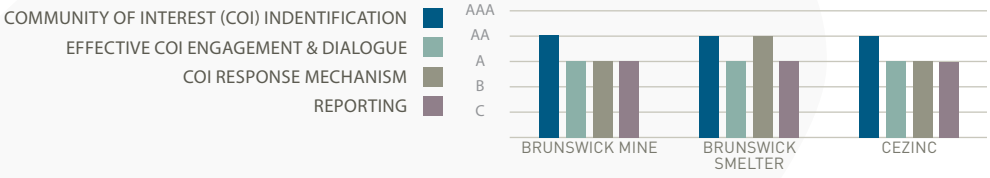
	PREPAREDNESS	REVIEW	TRAINING
BRUNSWICK MINE	Y	N	N
BRUNSWICK SMELTER	Y	Y	Y
CEZINC	Y	Y	N
CORPORATE	N	N	N

ENERGY USE & GHG EMMISSIONS MANAGEMENT ASSESSMENT



TAILINGS MANAGEMENT ASSESSMENT

ABORIGINAL & COMMUNITY OUTREACH ASSESSMENT



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