



**TOWARDS
SUSTAINABLE
MINING**

TSM 101: **A Primer**



THIS DOCUMENT PROVIDES AN OVERVIEW OF TOWARDS SUSTAINABLE MINING (TSM) — AN IMPORTANT TOOL THAT HELPS MINING COMPANIES, GOVERNMENTS, INVESTORS AND MANUFACTURERS TO ENSURE METALS AND MINERALS ARE PRODUCED RESPONSIBLY.

Protecting the environment includes the surrounding watersheds near Cameco's northern Saskatchewan operations. Cameco performs more than 20,000 water analyses each year.

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What is TSM?

TSM is a globally recognized sustainability program that supports mining companies in managing key environmental and social risks. TSM was the first responsible mining standard in the world to require site-level assessments with external verification and is mandatory for all companies that are members of implementing associations.

Through TSM, nine critical aspects of social and environmental performance are evaluated, independently validated, and publicly reported against 34 distinct performance indicators.

AT ITS CORE, TSM IS:

Accountable: Assessments are conducted at the facility level where the mining activity takes place — the first sustainability standard in the world to do this in the mining sector. Publicly reported results provide local communities and others with an interest in a mine site's operations with a detailed look at the sustainability performance of mines and metallurgical facilities.

Transparent: Mining companies publicly report their facilities' performance against the performance indicators on the websites of implementing associations. Results are externally verified by qualified auditors and experts every three years.

Credible: TSM is overseen by an independent Community of Interest (COI) Advisory Panel. This multi-interest group helps mining companies and communities of interest foster dialogue, improve the industry's performance and continually improve the TSM program.

MEASURING, VERIFYING AND REPORTING PERFORMANCE WHERE IT COUNTS — AT THE MINE SITE.



Over the past 10 years, Agnico Eagle has worked closely with its community partners to create education, training, high-quality jobs and business opportunities in Nunavut.

Global Uptake of TSM

Each mining association that commits to TSM to improve their sustainability practices can tailor its performance areas.

Each mining association can tailor the performance areas and approach used to reflect their unique national context. However, there are core components that all associations must implement in order to maintain the high standards of TSM as it is adopted around the world.

THESE CORE COMPONENTS INCLUDE:

1. GUIDING PRINCIPLES

Associations must commit to a set of Guiding Principles that reflect the environmental and social goals of the industry and its communities of interest.

2. PERFORMANCE INDICATORS

Associations must implement performance indicators to measure success in adhering to those Guiding Principles.

3. FACILITY-LEVEL REPORTING

Performance indicators must be assessed at the facility level and the results of these assessments must be publicly reported.

4. INDEPENDENT VERIFICATION

Associations must implement an appropriate framework for independent verification of performance to ensure that facilities' self-assessed results accurately reflect performance.

5. CONDITION OF MEMBERSHIP

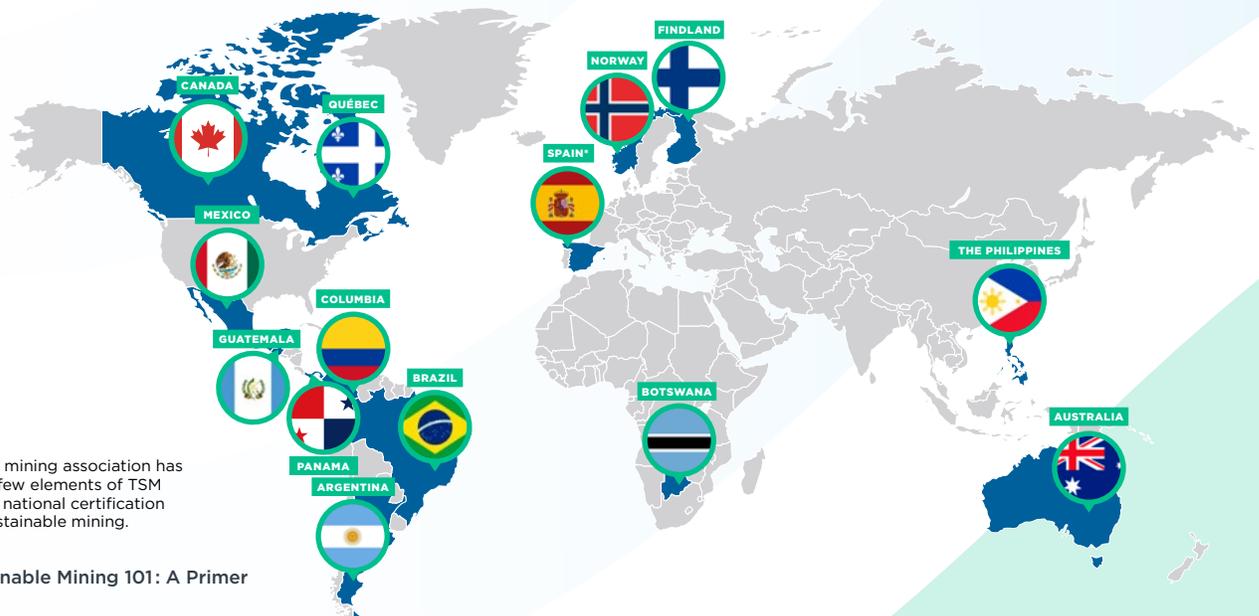
TSM must be a condition of membership in the implementing association.

6. MULTI-INTEREST ADVISORY BODY

Associations must establish an independent, multi-interest advisory body that represents challenging interests and a broad spectrum of societal perspectives. This body must work closely with the association to support the governance and implementation of TSM.

Companies with operations in two or more TSM implementing jurisdictions can choose how they approach TSM implementation. For example, the company could use the national version of TSM in each jurisdiction, or one national version of TSM in all jurisdictions where it operates.

JURISDICTIONS WHERE MINING ASSOCIATIONS ARE IMPLEMENTING TSM



* Spain's national mining association has incorporated a few elements of TSM in the country's national certification standard for sustainable mining.

Guiding Principles

In each country where TSM is adopted by the national mining association, a set of guiding principles is developed that outlines commitments to sustainability that will be supported by concrete protocols, indicators, and criteria in the TSM program.

For example, the Mining Association of Canada's TSM Guiding Principles read as follows:

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

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

WE WILL DEMONSTRATE LEADERSHIP WORLDWIDE BY:

- Involving communities of interest in the design and implementation of TSM.
- 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. Respecting the rights of our workers and not engaging in practices of forced or child labour, as defined in ILO Conventions 29, 138 and 182.
- Contributing to global initiatives to promote the production, use and recycling of metals and minerals in a safe and environmentally responsible manner.
- Seeking to minimize the impact of our operations on the environment and biodiversity, through all stages of development, from exploration to closure.
- Working with our communities of interest to address legacy issues, such as orphaned and abandoned mines.
- Practicing continuous improvement through the application of new technology, innovation and best practices in all facets of our operations.

IN ALL ASPECTS OF OUR BUSINESS AND OPERATIONS, WE WILL:

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

A New Gold employee helps youth from local Indigenous schools plant culturally important shrubs at the company's New Afton operation in Kamloops, British Columbia.

OUR ACTIONS MUST REFLECT A BROAD SPECTRUM OF VALUES THAT WE SHARE WITH OUR EMPLOYEES AND COMMUNITIES.

Protocols

TSM protocols support mining companies in developing management systems and meeting other requirements to achieve the commitments laid out in the TSM Guiding Principles. These protocols go beyond regulatory or legislative requirements, to which companies are already expected to adhere. Each protocol is made up of a set of indicators that help mining facilities build, measure and publicly report on the quality of their management systems and their performance.

The most up-to-date versions of the protocols applied by each TSM partner association are available on the [TSM website](#).

COMMUNITY AND PEOPLE

1. INDIGENOUS AND COMMUNITY RELATIONSHIPS

Building strong relationships with our communities of interest, in particular Indigenous communities, is a fundamental component of TSM. **The indicators of the *TSM Indigenous and Community Relationships Protocol* are supported by detailed criteria to determine whether:**

- Processes are in place to identify communities of interest, including Indigenous communities and organizations.
- Processes have been established to support the development and maintenance of meaningful relationships with communities of interest.
- Mining facilities are actively building meaningful relationships and implementing engagement and decision-making processes with Indigenous communities.
- Processes have been established to mitigate adverse community impacts and optimize social benefits generated from facilities.
- Processes are in place to respond to incidents, concerns, and feedback from communities of interest.

2. SAFE, HEALTHY, AND RESPECTFUL WORKPLACES

The *TSM Safe, Healthy, and Respectful Workplaces Protocol* maintains a strong focus on best practices for managing physical safety and health that is already ingrained in the culture of the mining industry. To this focus, it adds requirements related to psychological safety and respectful behaviour. **The indicators of the *TSM Safe, Healthy, and Respectful Workplaces Protocol* determine whether a facility:**

- Has made senior management accountable for the safety and health of employees and contractors.
- Has processes in place to prevent incidents.
- Has processes and programs to promote psychological safety and respectful behaviour in the workplace.
- Conducts training for all employees, contractors, and visitors, and fosters a culture of health, safety, and respect.
- Monitors and publicly reports physical and psychological safety and health performance.
- Sets physical safety and health targets for continuous improvement and meets them.

3. EQUITABLE, DIVERSE, AND INCLUSIVE WORKPLACES

Equity, diversity, and inclusion are strategic priorities and shared values for the mining sector. The *TSM Equitable, Diverse, and Inclusive Workplaces Protocol* is designed to support companies in undertaking broad engagement with a cross-section of people who bring diverse perspectives and experiences to review, develop, and implement a strategy and processes to foster equitable, diverse, and inclusive workplaces.

The indicators of the *TSM Equitable, Diverse, and Inclusive Workplaces Protocol* determine whether a company has:

- A corporate strategy for equitable, diverse, and inclusive workplaces.
- Facility-level processes to foster a workplace culture of equity, diversity, and inclusion.
- Facility-level approaches to information gathering, reporting, and setting objectives on equity, diversity, and inclusion.

4. CRISIS MANAGEMENT AND COMMUNICATIONS PLANNING

The *TSM Crisis Management and Communications Planning Protocol* provides mining companies with the tools needed to effectively manage and communicate about a crisis at a facility or at the corporate level. Where the crisis is caused by a physical emergency, such as a fire or flood, the tools offered in this protocol are intended to work in conjunction with emergency response plans at the facility. **The indicators of the *TSM Crisis Management and Communications Planning Protocol* determine whether a company's corporate office and facilities:**

- Have developed crisis management and communications plans and have teams in place to support the execution of these plans.
- Engage with local emergency responders such as fire, police and ambulance.
- Regularly review crisis management and communications plans and conduct crisis simulation training exercises.

The [Crisis Management and Communications Planning Reference Guide](#) provides recommendations, suggestions and examples to support companies in implementing this protocol.

5. PREVENTING CHILD AND FORCED LABOUR

The *TSM Preventing Child and Forced Labour Protocol* requires companies to verify that processes are in place to ensure that neither child nor forced labour, as defined by the relevant International Labour Organization conventions, occur at facilities that implement TSM. **The indicators of the *TSM Preventing Child and Forced Labour Protocol* require companies to verify that:**

- There are processes in place commensurate to jurisdictional risks to ensure that forced labour is not used, that no child under the age of 15 is employed, and that no child under 18 engages in particularly hazardous work.
- Supply chains and recruitment agencies are monitored for human trafficking and forced labour, where there is a high risk of forced labour.

ENVIRONMENT AND CLIMATE CHANGE

6. BIODIVERSITY CONSERVATION MANAGEMENT

TSM supports mining companies in adopting best practices in biodiversity conservation management through all stages of a mine's life cycle. **The indicators of the *TSM Biodiversity Conservation Management Protocol* determine whether a facility:**

- Has made formal commitments to manage biodiversity at the site.
- Has identified significant biodiversity aspects and is implementing action plans.
- Partners with interested stakeholders on conservation planning.
- Publicly reports on its biodiversity activities and performance.

7. TAILINGS MANAGEMENT

Tailings facilities are necessary components of mining activity, but it is crucial that these facilities be managed responsibly to protect human safety and the environment. As part of TSM, the Mining Association of Canada has developed tailings management guides that are used around the world. These include [A Guide to the Management of Tailings Facilities \(the Tailings Guide\)](#) and [Developing an Operation, Maintenance and Surveillance Manual for Tailings and Water Management Facilities \(the OMS Guide\)](#). The guides outline best practices in safe tailings management for facilities and **the TSM Tailings Management Protocol measures adherence to these guides, determining whether a facility:**

- Has a policy and commitments in place to safely manage tailings facilities.
- Has assigned accountability for tailings management to both a senior executive and the company's board of directors.
- Has implemented a tailings management system that conforms with the guides mentioned above.
- Has implemented an Operation, Maintenance and Surveillance Manual that conforms with the OMS Guide.
- Conducts an annual tailings management review.

8. WATER STEWARDSHIP

The *TSM Water Stewardship Protocol* includes a set of performance indicators to measure water management at the mine site and engagement in multi-stakeholder activities to govern and manage watershed activities. **The indicators of the TSM Water Stewardship Protocol determine whether a facility:**

- Has a commitment and accountabilities in place and has communicated to relevant communities of interest to support water stewardship.
- Has implemented an operational water management system.
- Participates in watershed-scale planning.
- Conducts water reporting focused on performance outcomes at the site level.

9. CLIMATE CHANGE

The TSM Climate Change Protocol is designed to support mining companies in managing their climate-related risks and opportunities, including associated mitigation and adaptation strategies, target-setting, and reporting.

The indicators of the TSM Climate Change Protocol determine whether a company has:

- Corporate commitments, governance, and processes at the board and management levels to support the consideration of climate change implications in business strategy.
- Facility-level systems to manage energy, GHG emissions, physical climate impacts and adaptation.
- Facility-level energy and GHG emissions performance targets and annual reporting on energy, GHG emissions, potential physical climate impacts, and adaptation measures.

The [Guide on Climate Change Adaptation for the Mining Sector](#) provides tools that can be used by companies to consider climate related risks and opportunities and incorporate climate change adaptation into their decision-making.

HOW PROTOCOLS ARE DEVELOPED

The development of TSM protocols is a multi-stage process. For many protocols, this starts with a framework or set of commitments that establish the parameters for the development of performance indicators. Members of the national mining association and the multi-interest advisory body work collaboratively and iteratively, often for a year or more, to develop a new protocol or revise an existing one. The independent advisory body plays a particularly important role in validating the credibility and rigour of the TSM protocols to ensure that they match emerging expectations from a wide range of groups with an interest in the sustainability of mining activities.

Indicators

Each TSM protocol is made up of a set of indicators with detailed criteria designed to measure the quality and comprehensiveness of relevant management systems.

COMMUNITIES AND PEOPLE					ENVIRONMENT AND CLIMATE CHANGE			
Indigenous and Community Relationships	Crisis Management and Communications Planning	Safe, Healthy, and Respectful Workplaces	Equitable, Diverse, and Inclusive Workplaces	Preventing Child and Forced Labour	Tailings Management policy and commitment	Biodiversity Conservation Management	Water Stewardship	Climate Change
Community of Interest (COI) identification	Crisis management preparedness	Policy, commitment and accountability	Corporate leadership and strategy	Preventing forced labour	Tailings Management	Corporate biodiversity conservation commitment, accountability and communications	Water governance	Corporate climate change management
Effective COI engagement and dialogue	Review	Safety & Health Management systems	Facility efforts advancing EDI	Preventing child labour	Assigned accountability and responsibility for tailings management	Facility-level biodiversity conservation planning and implementation	Operational water management	Facility climate change management
Effective Indigenous engagement and dialogue	Training	Psychological safety & respectful behaviour	Facility performance monitoring and reporting		Tailings Management system	Biodiversity conservation reporting	Watershed-scale planning	Facility performance targets and reporting
Community impact and benefit management		Training, behaviour and culture			Operation maintenance review		Water reporting and performance	
COI response mechanism		Monitoring and reporting			Annual tailings management review			
		Performance						

Performance Rating System

Each year, mining facilities assess their performance on the TSM protocols. For each indicator, facilities assign a letter grade that reflects their performance. These performance results are published on the website of each national mining association that implements TSM, and externally verified every three years.

Most protocols assess performance on a Level C to Level AAA scale, with each performance level described in the diagram to the right. The *TSM Crisis Management and Communications Planning Protocol* and the *TSM Preventing Child and Forced Labour Protocol* use a different, Yes - No rating system, which simply assesses whether a company has met or not met the requirements.

The aim of associations that implement TSM is to have all of their member facilities achieve a Level A or better in all indicators and meet all of the requirements of the *TSM Crisis Management and Communications Planning Protocol* and *TSM Preventing Child and Forced Labour Protocol*.

THE GOAL IS FOR EACH FACILITY TO ACHIEVE LEVEL A OR HIGHER IN ALL PERFORMANCE AREAS.

AAA	Excellence and leadership.
AA	Systems and process are integrated into management decisions and business functions.
A	Good practice. Systems and processes are developed and implemented.
B	Procedures exist but are not fully consistent or documented. Systems and processes are planned and being developed.
C	No systems are in place. Activities tend to be reactive. Procedures may exist but are not integrated into policies and management systems.

Reporting and Assurance Process

In order to ensure the credibility, accountability, and transparency of the TSM program, there are a number of processes in place to validate that published TSM performance results present an accurate picture of each facility's management systems and performance.

Self-Assessment: Facilities annually self-assess their performance against all indicators under the TSM protocols using the rating system described on the previous page. These results are published on the websites of the national mining associations that implement TSM.

External Verification: Every three years, a trained and accredited verifier critically reviews a company's self-assessments to determine if there is adequate evidence to support the performance ratings reported. Verifiers are experienced independent auditors and technical experts. Verifiers are able to change companies' self-assessed ratings to ensure they accurately reflect evidence of the facility's management practices and performance.

In conducting an external verification, the verifier and the company that they are verifying must adhere to the requirements of the *Terms of Reference for Verifiers*, available on the Mining Association of Canada's website. This includes requirements such as: advance notice of the verification to communities of interest, recognized audit credentials for verifiers, and a quality review of verifications by a third party.

External verifiers are also subject to the verification oversight process. This process ensures that active verifiers are conforming with the *Terms of Reference for Verifiers* and that verifiers are demonstrating sound interpretation and application of TSM protocol requirements.

CEO Letter of Assurance: In the year of external verification, a company's CEO, or equivalent, is required to publish a letter alongside their performance results that confirms the external

verification has been conducted in accordance with the *Terms of Reference for Verifiers*. These letters are posted alongside companies' published results on the websites of their national mining associations.

Post-Verification Review: Each year, the Community of Interest Advisory Panel (an independent, multi-interest advisory body) selects a sample of companies to present and discuss their TSM results.

The review process allows the national advisory body to examine facilities' management systems and processes and to engage in dialogue around the challenges faced by facilities around key sustainability issues.

LAYERS OF ASSURANCE



Community of Interest Advisory Panel

In each jurisdiction where TSM is adopted by the national mining association, there is a requirement to establish a national, multi-interest advisory body. In the Canadian context, this body is called the Community of Interest Advisory Panel (commonly referred to as “the COI Panel”).

This independent advisory body is comprised of individuals from Indigenous groups, local communities, mining communities, non-governmental organizations, and organized labour, among others. Industry representatives participate in the Panel on an exofficio basis.

The Panel serves as a platform to discuss and collaborate on issues related to TSM that are important to communities of interest and the mining industry. The Panel holds regular

meetings to provide advice on TSM. These meetings also involve in-depth dialogue around sustainability issues of continued or emerging importance for the mining industry and its communities of interest.

Another role played by the COI Panel is in relation to the post-verification review process, a key component of the TSM assurance framework, as described on a previous page.

Teck Greenhills Operations located near Elkford, British Columbia.



In each jurisdiction where TSM is implemented, the association must build a Community of Interest Advisory Panel — a multi-interest advisory body that reflects a cross-section of societal interests and perspectives.

Common categories include:

INDIGENOUS	Individuals who represent the interests of Indigenous peoples
ENVIRONMENTAL NGO	Individuals with environmental expertise and experience in advocacy for environmental protection
ECONOMIC AND COMMUNITY DEVELOPMENT	Individuals with expertise in business development at the community level and knowledge of community interactions with mining facilities
SOCIAL NGO, INCLUDING FAITH-BASED GROUPS	Individuals who represent civil society with knowledge of social justice issues
FINANCE AND INVESTMENT	Individuals with financial expertise and knowledge of socially responsible investing
INTERNATIONAL DEVELOPMENT	Individuals with expertise in alleviating poverty and improving the standard of living through responsible development
LABOUR AND WORKPLACE	Individuals with knowledge of the interests, safety and needs of workers
MINING COMPANY REPRESENTATIVES (EX-OFFICIO)	Senior representatives of mining companies that are members of the national association

Governance

The governance and decision-making process for the TSM program involves several groups and committees – both internal and external to the national mining association. Each of these groups has an important role to play in ensuring the credibility, transparency, accountability, and continual improvement of the program.

BOARD OF DIRECTORS

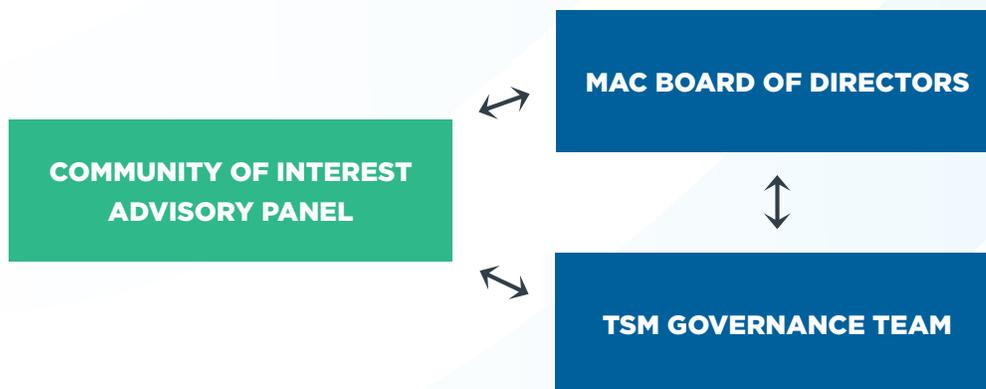
In the Canadian context, one representative of each Mining Association of Canada (MAC) member company sits on the association’s Board of Directors. While the MAC Board has many responsibilities beyond the scope of the TSM program, its role with respect to TSM is to set overall objectives and approve any major decisions related to the program.

The MAC Board aims to achieve consensus on all decisions related to TSM. In practice, the MAC Board will only consider a decision if the Community of Interest Advisory Panel (COI Panel) is comfortable with the direction proposed.

TSM GOVERNANCE TEAM

A sub-committee of the Board of Directors, the TSM Governance Team, is responsible for the strategic direction of TSM. This sub-committee reviews and considers issues of relevance to the national TSM program and, when needed, recommends decisions to the Board of Directors.

As with the decision-making process for the Board of Directors, the TSM Governance Team aims to achieve consensus when recommending decisions to the Board. In practice, the TSM Governance Team will not recommend a decision to the Board until the COI Panel is comfortable with the direction being proposed.



Implementation

Companies that have recently joined a mining association that implements TSM, or facilities that have recently entered into production, have three years to start publicly reporting TSM performance.

This phase-in period allows companies to conduct a gap analysis, implement management systems and train relevant personnel. In Canada, prospective members of the Mining Association of Canada are also required to conduct an initial TSM self-assessment as part of their application for membership.

YEAR 1: GAP ANALYSIS, TSM IMPLEMENTATION AND TRAINING

The first step in TSM implementation is to ensure that all relevant personnel are trained on the TSM protocols. This is an essential step in ensuring that TSM is consistently applied at all participating facilities.

Following training, facilities conduct a gap analysis of existing management systems against the TSM protocols. This helps the facility to identify any critical gaps and typically results in an action plan to meet Level A performance.

YEAR 2: SELF-ASSESSMENT AND AGGREGATE — LEVEL REPORTING

The facility conducts its first self-assessment and submits these results on a confidential basis to their national mining association. These results are then included in anonymized, industry-level reporting of TSM reporting on the association's website. This step gives the company and its facilities an opportunity to become familiar with the reporting process.

YEAR 3: SELF-ASSESSMENT AND PUBLIC FACILITY-LEVEL REPORTING

The next step is to publicly report facility-level results on the association website, alongside a company profile that describes the results and the company's plans to address any gaps.

YEAR 4: EXTERNAL VERIFICATION OF SELF-ASSESSMENT

The facility coordinates its first external verification process and is responsible for selecting a qualified professional from the approved list of verifiers. The external verification process is described on a previous page.



Junior Mechanical Engineer at Agnico Eagle's Goldex mine in Quebec.
Photo credit: Agnico Eagle Mines by Mathieu Dupuis.

Training

Comprehensive training is available to facilities that are implementing TSM.

Companies can access the self-paced, TSM online training platforms on the Mining Association of Canada's [website](#).

To request an in-person or virtual training session, companies can reach out to their national mining association contact.

Alignment with Other Global Standards

As other mining sustainability standards have emerged in recent years, TSM has played a leading role in fostering collaboration among them.

RESPONSIBLE SOURCING ALIGNMENT SUPPLEMENT

With the TSM Responsible Sourcing Alignment Supplement, mine sites can use their TSM performance to meet the requirements of four other global standards, including:

- The International Council on Mining and Metals' Mining Principles
- The World Gold Council's Responsible Gold Mining Principles
- The International Copper Alliance's Copper Mark
- The Responsible Minerals Initiative's Risk Readiness Assessment.

It also serves to qualify mine sites for ResponsibleSteel recognition.

Facilities interested in using this tool to support alignment with other sustainability standards should contact their national mining association for more information.

M3 INTEGRATED ASSESSMENT PROTOCOL

The Mining, Minerals, and Metals Standards Partnership (M3 Partnership) is a collaboration of TSM, the Initiative for Responsible Mining Assurance (IRMA), Responsible Jewellery Council, and ResponsibleSteel. The partnership aims to drive improvement in social and environmental performance through alignment with existing global standards.

The [M3 Partnership Integrated Assessment Protocol \(M3 IAP\)](#) is a tool that allows mine sites to be assessed against multiple site-level standards in a single audit, supporting alignment across standards, and demonstrating conformity with multiple standards with greater efficiency and reduced cost.

GLOBAL INDUSTRY STANDARD ON TAILINGS MANAGEMENT

Following the tragic failure of a major tailings facility at a mine in Brazil in 2019, the Global Tailings Review was launched to develop the *Global Industry Standard on Tailings Management* (GISTM). In response to the release of the GISTM, TSM requirements were reviewed, and amendments were made to improve alignment with the GISTM. In general, although the two standards emphasize different aspects of tailings management, they are well-aligned and both strive to minimize harm related to tailings management. GISTM and TSM are both rigorous and comprehensive standards for tailings management that have been internationally recognized and implemented. For more information on how the two standards compare, see the Mining Association of Canada's [website](#).

Milestones

YEAR	EVENT
1999	<ul style="list-style-type: none"> Partially in response to the Whitehorse Mining Initiative of the early 1990s, the Mining Association of Canada's (MAC) Board of Directors establishes a Task Force to consider a sustainability initiative, which is a precursor to the TSM Governance Team.
2002	<ul style="list-style-type: none"> TSM Guiding Principles are developed, and the development of TSM protocols begins.
2004	<ul style="list-style-type: none"> TSM is launched with four protocols (<i>Tailings Management, Crisis Management, External Outreach, Energy Use and GHG Emissions Management</i>). COI Advisory Panel is formed.
2005	<ul style="list-style-type: none"> MAC wins the Globe Foundation Award for Environmental Excellence for the TSM initiative.
2006	<ul style="list-style-type: none"> First round of external verification by all MAC member facilities.
2011	<ul style="list-style-type: none"> Two new TSM protocols are introduced (<i>Biodiversity Conservation Management, Safety and Health</i>).
2012	<ul style="list-style-type: none"> MAC wins the Prospectors and Developers Association of Canada Environmental and Social Responsibility Award for the TSM initiative.
2013	<ul style="list-style-type: none"> MAC and Stratos, a third-party consultant that supports the TSM program, are recognized with the Excellence in Corporate Social Responsibility Award for TSM.
2015	<ul style="list-style-type: none"> The Finnish Mining Association adopts TSM.
2016	<ul style="list-style-type: none"> The Argentinean Chamber of Mining Companies adopts TSM.
2017	<ul style="list-style-type: none"> The Chamber of Mines of the Philippines and the Botswana Chamber of Mines adopt TSM. The <i>TSM Preventing Child and Forced Labour Protocol</i> is introduced.
2019	<ul style="list-style-type: none"> The <i>TSM Water Stewardship Protocol</i> is introduced.
2020	<ul style="list-style-type: none"> The Norwegian Mining and Quarrying Industries Association adopts TSM. The TSM Responsible Sourcing Alignment Supplement is introduced.
2021	<ul style="list-style-type: none"> The Minerals Council of Australia and the Mining Association of Colombia adopt TSM. The London Metals Exchange recognizes TSM as an equivalent environment and safety program and includes TSM in the LMEpassport.
2022	<ul style="list-style-type: none"> The Natural Resources, Mines and Quarries Trade Union of Guatemala adopts TSM.
2023	<ul style="list-style-type: none"> The <i>TSM Equitable, Diverse and Inclusive Workplaces Protocol</i> is introduced. CAMIMEX, the Mexican mining chamber, and CAMIPA, the mining chamber of Panama, adopt TSM.



Learn more at the
tsminitiative.com

