

Mining Association of Canada  
Towards Sustainable Mining

28<sup>th</sup> Meeting of the  
**Community of Interest Advisory Panel**  
**POST-VERIFICATION REVIEW REPORT**

October 1-3, 2018  
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**Towards Sustainable Mining**  
Vers le développement minier durable



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## 1 Introduction

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The purpose of this report is to present the summary of discussions of the Mining Association of Canada (MAC) Community of Interest Advisory (COI) Panel (“the Panel”) post-verification review (PVR) for Imperial Metals and Dominion Diamond Mines (Dominion). Meeting presentations and briefing materials were provided to the Panel and are not duplicated in the body of this report.

For more information on the October 2018 Panel Meeting, please see the *October 2018 COI Panel Meeting Report* under separate cover.

This report is organized by the following sections:

- **Section 2:** Overview of Towards Sustainable Mining (TSM) initiative
- **Section 3:** Overview of the TSM verification system
- **Section 4:** Overview of the COI Panel PVR process
- **Section 5:** Results and discussion of the 2018 PVR: Imperial Metals
- **Section 6:** Results and discussion of the 2018 PVR: Dominion Diamond Mines
- **Section 7:** Key takeaways from the 2018 PVR
- **Section 8:** Panel feedback on the PVR process

## 2 About the Towards Sustainable Mining Initiative

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Established in 2004, Towards Sustainable Mining (TSM) is the Canadian mining industry’s commitment to responsible mining. It is a set of tools and indicators to drive performance and ensure that key mining risks are managed responsibly at participating mining and metallurgical facilities. By adhering to the principles of TSM, mining companies demonstrate leadership by:

- Engaging with communities
- Driving world-leading environmental practices
- Committing to the safety and health of employees and surrounding communities

Participation in TSM is a condition of membership in MAC. It requires that members subscribe to a set of guiding principles that are supported by specific performance indicators against which member companies must report their results. All MAC members must report against indicators in the following performance measurement protocols:

- Aboriginal and Community Outreach
- Energy and Greenhouse Gas (GHG) Emissions Management
- Tailings Management
- Biodiversity Conservation Management
- Safety and Health
- Crisis Management and Communications Planning
- Preventing Child and Forced Labour

For more information on TSM, including company scores, governance, and oversight by the Panel, visit <http://mining.ca/towards-sustainable-mining>

### 3 Towards Sustainable Mining External Verification System

TSM includes a number of elements 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.

**This report is focused on the final layer: the COI Panel Review.** Each year, the Panel chooses two or three companies who have undergone an external self-assessment for the PVR at the October Panel meeting.

More information on the TSM external verification system, including the [terms of reference](#) for verification service providers, can be found on MAC's website.

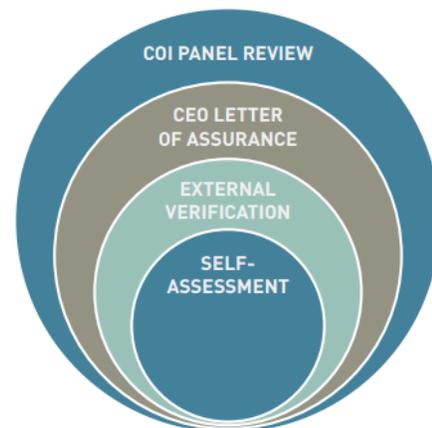


Figure 1: TSM assurance levels

### 4 COI Panel Post-Verification Review Process

The purpose of the PVR process is to have the Panel lend public credibility to the TSM results by:

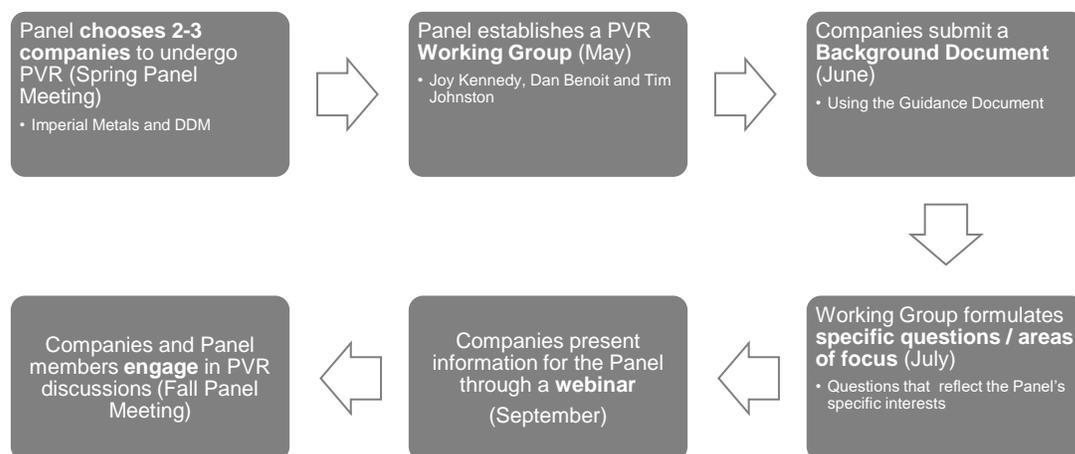
- ✓ Engaging in dialogue with the companies undertaking the PVR to identify best practices and challenges on environmental and social issues faced by mining companies and communities;
- ✓ Driving continued performance improvements by identifying both opportunities and impediments to reaching the highest level of TSM performance;
- ✓ Determining whether the member companies are finding the verification process useful;
- ✓ Bringing cohesiveness in the application of the self-assessment and verification processes; and
- ✓ Improving TSM (including the verification process).

The Panel agreed that the PVR process is **not intended to be a “verification of the verification”** undertaken by the verification service providers for each company. Rather it should focus on building a meaningful dialogue with the companies selected to undergo the PVR process to gain a better understanding of the successes and challenges regarding the key environmental and social issues in mining; to challenge the companies on their performance; and determine whether verification is working as the Panel expected. The PVR process should also allow the Panel to gain understanding in how the TSM indicators translate into real action and build confidence in the verification process.

The scope of the PVR process includes the verification process (design, etc.), the verified results, lessons learned, and changes needed to improve performance identified by the company. The specific areas of focus for each year's PVR are decided by the Panel. A subset of the protocols may be chosen by the Panel for deeper examination in the hope of exploring how companies are taking action to meet the protocol criteria.

**The Panel selected Imperial Metals and Dominion from the list of companies verifying their 2017 TSM results to undergo PVR in 2018.**

As part of the process, companies undergoing the PVR are asked to prepare a Company Background Document and webinar presentations to help the Panel understand the company, its verified TSM results, and any relevant background information prior to the Fall Panel Meeting. Figure 2 outlines the PVR process.



**Figure 2: PVR Process 2018**

The PVR Working Group reviews the company background documents and decides on the focus areas and approach for engaging with the companies. This year, the PVR Working Group was composed of the following Panel members: Joy Kennedy, Dan Benoit and Tim Johnston.

The PVR Working Group decided on the following themes for the webinar and face-to-face discussions with Imperial Metals and Dominion (see below). The companies answered specific questions during the webinar and provided additional information on the focus areas to prepare the Panel for the face-to-face meetings.



Topics of Interest:

- **Reflections on Mount Polley** (including: role of government, impact on other areas of performance, lessons learned)
- **Collaboration** (including sharing lessons learned and innovative practices)
- **Energy and GHGs** (including barriers to improving performance)
- **Women in Mining**



Topics of Interest:

- **Socio-economic impacts** (including approaches and results/outcomes)
- **Collaboration** (including sharing lessons learned and innovative practices)
- **Energy and GHGs** (including barriers to improving performance)
- **Women in Mining**

**This report summarizes the information provided by the companies in their PVRs and summarizes the Panel discussion on the presented information.**

## 5 Results of the Post-Verification Review: Imperial Metals



### About Imperial Metals:

Imperial Metals is a Canadian mining company active in the acquisition, exploration, development, mining and production of base and precious metals. Its mine operations include:

- Red Chris, a copper-gold open pit mine in British Columbia (B.C.)
- Mount Polley, a copper-gold open pit mine in B.C.
- Huckleberry, a copper open pit mine in B.C.; this site suspended operations in August 2016 and remains under care and maintenance

The focus of the Panel's PVR was on the Mount Polley mine site, which was the site externally verified in 2017.

The Mount Polley mine was the site of a tailings' storage facility breach in August 2014. This breach was the result of a foundational failure along the perimeter embankment and resulted in water and tailings being released to the downstream environment; the mill was immediately shut down and the mine was placed on care and maintenance status. Independent investigations concluded that the root cause of failure was an engineering design that had not properly characterized the strength of a clay unit in the native soil foundation. In June 2016 Mount Polley received regulatory approvals to resume mine operations while remediation work continued. [note – MPMC had restarted partial operation in August 2015]

The following Imperial Metals team members attended the PVR discussions with the Panel:

- Lyn Anglin, Chief Scientific Officer and Vice President Environmental Affairs, Imperial Metals
- Stephen Monninger, Environmental Superintendent at Mount Polley Mine Site
- Colleen Hughes, Environmental Supervisor at Mount Polley Mine Site
- Luke Moger, Operations Manager at Mount Polley Mine Site

Additional information on Imperial Metals and its performance can be found in its PVR Background Document, PVR webinar slides and on its website: <https://www.imperialmetals.com/our-operations/mount-polley-mine/overview>



Figure 1: Crews planting native shrubs along Reach 2 of upper Hazeltime Creek, October 2017

## 5.1 Reflections on Mount Polley

The Panel decided that the PVR discussion with Mount Polley should focus on reflections from the Mount Polley tailings dam breach in 2014, including the role of government, potential impacts on other areas of performance and lessons learned. This led to a wide-ranging discussion on a number of topics, which are summarized below under the following subsections: employees, Indigenous representation, Public Liaison Committee (PLC) governance and dialogue, civil society and public engagement, regional engagement on environmental concerns and other environmental topics.

### 5.1.1 Employees

Key themes related to the discussion with the Panel on Mount Polley employees, are summarized below:

- **Stability of Mount Polley Environment Team following the dam breach**
  - Mount Polley's Environment team has 6 people; this team has a high retention rate with only two team members leaving since the breach to pursue other opportunities (and these two left to pursue graduate degrees, working on research projects at Mount Polley with support from the mine).
  - Mount Polley augments this team by relying on consultants.
- **Communicating TSM scores to employees**
  - A Panel member suggested developing a simple message for employees that emphasizes what is important to the company and why; this may partially be driven by TSM.
  - A Panel member reflected that team morale seemed highest when there was a common purpose in response to a disaster; the new common purpose could become meeting TSM or other corporate goals; this needs to be a simple objective and part of corporate culture.
  - A Panel member suggested recognizing employees with an environmental certificate for their role in the reclamation work on site; Imperial Metals shared that they previously had a star program that was very successful and had an environmental component.
  - Imperial Metals suggested biodiversity could be included in the environmental certification concept to increase internal engagement on biodiversity.
- **Mount Polley labour strike**
  - Union employees were on strike from May until August 2018; Imperial Metals shared that the strike occurred because they were unable to negotiate a new union agreement once the existing agreement had expired.
  - Issues raised by the union included the use of temporary employees that were not being transitioned to full-time employees, as per the terms of the previous collective bargaining agreement, and wages and benefits.
  - The strike was ultimately resolved with an overwhelming vote to accept a new agreement and return to work (75-80% support).

### 5.1.2 Indigenous Representation

Key themes related to the discussion with the Panel on Indigenous representation at Mount Polley are summarized below.

- **Indigenous representation at Mount Polley**
  - A Panel member inquired about the lack of First Nations representation at the PLC meeting and representation amongst site staff observed during the site tour and asked what efforts have been made to encourage greater representation.
    - It was shared that all First Nations representatives on the PLC had been invited and Imperial had communicated the importance of this meeting, however, the early season snow storm made attendance for several PLC members difficult. It was

also noted that MPMC has had long-standing Participation Agreements with the 2 FN Bands and through these agreements holds regular Implementation Committee (IC) meetings with the bands. As well, there is regular participation of FN representatives on the Mount Polley Habitat Remediation Working Group (see below).

- Imperial Metals also shared that 23 of their 200 employees self-identify as First Nations, including 2 staff on the Environment team; the office manager and receptionist that were on site yesterday are also First Nations and many haul truck drivers and equipment operators are First Nations.
  - First Nations workers have participated in much of the reclamation work at Mount Polley (e.g. planting, construction of roads, reconstruction of the creek), including through establishing joint ventures with construction companies.
  - Imperial Metals has established committees and sub-committees through Indigenous Participation Agreements where monthly meetings take place.
  - Imperial Metals has also seen consistent and strong First Nation participation through the Habitat Remediation Working Group. This group has been very effective at providing opportunities for engagement with the FN and regulators and providing input to the remediation work at the mine site.
  - Imperial Metals asked if the Panel would typically invite local Indigenous representatives to PVR discussions; the Panel responded that this has not been explicitly discussed but typically the Panel visits communities in a separate session from the PVR discussions that always includes Indigenous representatives.
- **Indigenous training programs**
    - Barriers to First Nations employment identified by Imperial Metals include meeting entry level requirements (e.g. driver's license) and competition from other projects (e.g. losing potential candidates to other projects such as highway construction).
    - Imperial Metals has distributed training opportunities to communities with offers to subsidize training; the greatest challenge has been finding interested candidates.
    - A Panel member commented that best practices include asking Indigenous groups to set participation goals and working with them collectively to build that capacity, i.e. understand where they're at, what they want to do and help them get there, which might not be related to just job opportunities; Imperial Metals agreed with this suggestion and shared that their team incorporates this approach into their work, and Mount Polley representatives regularly discuss employment and training with the IC.
    - A Panel member suggested that the company could enhance communications directed at youth about opportunities in mining.
    - A Panel member suggested leveraging the Mining Industry Human Resources Council's Mining Essentials program offered for Indigenous training in Hazelton; Imperial Metals is aware of this program.

### **5.1.3 Public Liaison Committee Governance and Dialogue**

A Public Liaison Committee (PLC) was established for the Mount Polley mine site when the mine first started operation, comprised of representatives from the federal and B.C. governments and communities in the local region, including the Williams Lake Indian Band and Soda Creek Indian Band. The PLC now meets at least quarterly to provide an opportunity for Mount Polley to share information about mine activities and results of monitoring programs with the membership, and for the members to ask questions and share information and any concerns of their constituencies with the mine.

The PLC is currently undergoing a review of the PLC Terms of Reference to strengthen governance and ensure the PLC can provide constructive advice and be an effective channel of communication between the mine and affected communities.

Key themes related to the discussion with the Panel on PLC governance and dialogue are summarized below.

- **Improving the governance of PLC**
  - Imperial Metals shared that one of their challenges is the fact that PLC is mandated through an operating permit that specifies its composition and how it operates. They therefore have less control over how it is managed.
  - Imperial Metals identified a need to complete a review to identify where there may be duplication of efforts in other governance bodies/committees related to rehabilitation efforts. This duplication is straining the ability to allocate resources to effective engagement; a Panel member encouraged them to complete this review.
  - A Panel member asked if there are learnings from other Imperial Metals site PLCs that could be applied to Mount Polley; Imperial Metals responded that Huckleberry is under care and maintenance and therefore does not have a PLC, while Red Chris operates differently under an agreement with the Tahltan Nation and therefore has a different context.
  - A Panel member suggested setting term limits for PLC members in the PLC Terms of Reference as the COI Panel has in its Terms of Reference. For the COI Panel, this has resulted in continuous renewal to ensure that the Panel remains effective.
  - A Panel member suggested reflecting on how the ongoing operation of the PLC will result in better long-term benefits/impacts.
- **Improving the effectiveness of PLC dialogue**
  - Several Panel members suggested reducing the amount of material being presented at PLC meetings and recommended distributing quarterly update information in advance to allow the in-person meeting time to focus on dialogue.
  - Imperial Metals agreed that the dialogue during the PLC meeting yesterday was valuable and they would have preferred to spend more time on dialogue over presentation time.
  - Imperial Metals added that there is already a relationship of trust built with the PLC members and therefore not as much technical information may need to be shared.
  - Imperial Metals shared that in the past updates were provided to PLC when changes to the mine site operations were being proposed; this involved placing maps on tables with engineers nearby to answer questions; this created very productive meetings.
  - A Panel member suggested that a group of 30 people may be too large for accomplishing effective dialogue or decisions.
  - A Panel member also suggested developing a code of conduct to support effective dialogue; Imperial Metals agreed and added that this was currently being discussed.
- **Effectively engaging with challenging individuals**
  - It was observed that there are some very strong voices on the PLC, both in support of and critical of the Imperial's actions, which can result in a tense environment for dialogue and discourage other community members from participating.
  - A Panel member suggested that in some cases if an individual is not willing to participate constructively, the company may need to decide to disengage.

#### **5.1.4 Civil Society and Public Engagement**

Key themes related to the discussion with the Panel on civil society and public engagement are summarized below.

- **How can realities best be communicated with diverse stakeholders in an apolitical climate?**
  - A Panel member suggested considering whether, given MAC's reputation for constructive dialogue, MAC might be in a position to engage with the B.C. government and some of the non-governmental organizations (NGOs) still campaigning around the Mount Polley breach

- to discuss communicating factual data to communities without prompting political reactions.
- A Panel member suggested that some of those NGOs could have been engaged in dialogue with the Panel and industry this week while they were both in Williams Lake for an event organized by civil society.
  - It was asked whether dialogue was possible if civil society saw a particular project or issue as a campaign, i.e. are they open to dialogue?
  - A Panel member shared they had spoken with one of the NGO representatives this week about TSM, correcting their assumption that the Protocols do not measure performance.
- **Civil society perspectives on justice**
    - There was a challenging exchange midway through the Imperial Metals PVR session when a Panel member shared that some NGOs who have been outspoken about Mount Polley feel there has been a lack of justice as no civil or criminal charges have been laid as a result of the breach. This Panel member explained that this sense of a lack of justice is why many of the outspoken NGOs continue to campaign on this issue.
    - Imperial Metals shared that the Chief Inspector of Mines published a report that articulated why charges were not being laid (i.e. they found no contraventions of the Mines Act).
    - Imperial Metals questioned whether punitive measures would satisfy NGOs and whether charges being laid accomplish more than the cost already incurred for the remediation efforts.
    - A Panel member further reflected that the government's decision to mandate PLC meetings in Mount Polley's permit may reflect government attempting to restore public trust by including in a permit what the mine was already doing.
    - A Panel member commented that the feeling of a lack of justice is further frustrated by the fact that there has not been an independent assessment of fault.
    - A Panel member commented that there may be further clarification of fault stemming from a court case currently ongoing between Imperial Metals and the engineering firms responsible for the dam design. Following this meeting, a settlement has been reached between the engineering firm and Imperial Metals, with a payment of \$108 million to Imperial Metals.
    - A Panel member suggested examining other avenues of justice, such as taking into account the substantial cost of the work completed by Imperial Metals to restore and reclaim the land.
    - A point was also made that actions that compromise the important remediation efforts of Imperial Metals, such as punitive fines, would not be in the greater public interest as they could compromise Imperial Metals' ability to complete the remediation work.
    - A Panel member commented that Imperial Metals is a symbol of resilience in the mining industry, particularly given their financial challenges, and their story should be promoted as one of a company doing its best in a very difficult situation.

### **5.1.5 Regional Engagement on Environmental Concerns**

Key themes related to the discussion with the Panel on regional engagement for environmental concerns (e.g. downstream of the dam failure) at Mount Polley are summarized below:

- **What has been done to confirm that wildlife and waterfowl are safe for food consumption?**
  - Imperial Metals conducted a risk assessment of food chain modelling, human health and subsistence use of land that concluded impacts were primarily physical and not chemical (i.e. low organic matter left due to scouring that occurred during the debris flow) and recommended that larger metal uptake studies would not be required because no bio-cumulation of metals was expected in animals.

- Imperial Metals commented that a baseline study has not been completed for this region; conducting an organ tissue sampling program would therefore be a massive undertaking.
- These findings have been reviewed by the affected communities; while not everyone was happy with the response or felt enough testing had been completed, the B.C. government accepted this approach.
- **Is there an opportunity to leverage more citizen-based monitoring?**
  - A Panel member shared that individuals in his community, downstream of Mount Polley, raised concerns about impacts to fish although this was scientifically impossible; community-based monitoring could help alleviate citizen concerns more than providing technical reports and data on a website. It was noted that the First Nations Health Authority had published results of fish testing that identified no concerns regarding fish consumption.
  - An example of a successful citizen-based monitoring program is where Teck consulted with elders and asked hunters to bring sampling kits with them to test moose to understand potential dust impacts on terrestrial life. Imperial Metals cautioned that sampling results may not always reflect the direct impacts of the mine (i.e. results may reflect impacts from other projects).
  - A Panel member's Indigenous community is implementing an Indigenous Guardians program, which trains youth on land use and monitoring activities and could have value for Mount Polley as well.
  - A Panel member reflected that the broader question is how science can build public trust, i.e. how can we bring communities alongside so that they also trust the numbers?
    - Imperial Metals suggested that they could approach the First Nations Health Authority, which conducts sampling, to understand how to build this trust.
    - A Panel member suggested that Imperial Metals could create a website on the Mount Polley reclamation work that provides regulatory and mine site data in an easy to understand manner, including visual presentation.
  - Imperial Metals questioned whether the focus should be on education and awareness around water quality issues more broadly rather than Mount Polley impacts specifically.
  - Imperial Metals shared that First Nations environmental staff have voluntarily answered questions during community meetings as community members, not as company staff.
- **Communicating the health of regional ecosystems and the role of regulators**
  - A Panel member suggested that the regulator should communicate potential downstream impacts for all projects so that communities understand the regional ecosystem and asked if there is a place where the health of the regional ecosystem can be examined with multi-stakeholder involvement.
  - Imperial Metals shared that the federal regulator previously conducted an assessment of Quesnel Lake to inform regional planning; they found lakeshore homes and docks were impacting the ecosystem, but funding was cut so the work did not continue.
  - Following the dam failure, the B.C. regulator paid for a lake stewardship program and associated training; at subsequent PLC meetings Imperial Metals recommended a stewardship group be formed for Quesnel Lake, but PLC members indicated they did not have the time to participate.

#### 5.1.6 Other Environmental Issues

Other key themes related to the discussion with the Panel on environmental issues at Mount Polley are summarized below:

- **Zero-discharge site design**
  - A Panel member shared a PLC member's perspective that Mount Polley was initially designed as a zero-discharge site, but that a temporary discharge pipe has been placed into Quesnel Lake and alternative solutions do not appear to have been considered.

- Imperial Metals responded that there has been a PLC member consistently sharing this incorrect information about MP being originally designed as zero discharge site, and other related concerns, and efforts have been made to respond to this misinformation.
- Mount Polley originally planned to operate as a zero-discharge site only for the first few years, because it is located in a “rainforest” and need for water discharge would be inevitable. This was noted in the original mine permits.
- Imperial Metals discussed many discharge options with the community; through the comprehensive options assessment it became clear that a discharge pipe into Quesnel Lake would have the least environmental impact because Quesnel Lake is a large and nutrient-poor lake, and dischargers could be installed at depth, where they would not physically impact salmon spawning habitat as would likely be the case if the discharge was into the Quesnel River.
- **Presence of nutrients in nearby water systems**
  - A Panel member shared a PLC member’s concern that nutrients are not being comprehensively taken into consideration.
    - A Panel member suggested a conversation could be convened with the PLC to discuss the site’s objectives, i.e. is it to return to natural environment conditions pre-mining, minimize harm to the ecosystem, or to add nutrients to a nutrient-poor lake? This conversation could consider both concentration and volume of nutrients in the watershed system, rather than the site’s specific zone of impact.
    - Imperial Metals shared that the only high levels of nutrients are identified in a background site that is located far from the mine, and that studies of nutrient levels in river systems have also been shared with the PLC. The Mount Polley mine discharge is not generating a nutrient load above background levels in Quesnel Lake.
- **Reporting on biodiversity**
  - A Panel member commented that it was good to see improvements reported in the Biodiversity Protocol scores with the exception of reporting which remained at a Level C.
    - Imperial Metals agreed that while they have completed a lot of work to support biodiversity, which has been partially driven by TSM, they have not captured this work adequately in their reporting.
    - Imperial Metals is improving their biodiversity reporting approach and expect their biodiversity TSM scores will improve by the next reporting year. Following the meeting, a new Biodiversity Management Plan was developed.

## 5.2 Collaboration

The Panel was interested in discussing collaboration, i.e. sharing lessons learned and innovative practices with others. The subsequent discussion with the Panel is summarized below:

- A Panel member suggested summarizing Imperial Metal’s vast amount of technical information, which would be very valuable to the mining industry worldwide.
- A Panel member acknowledged the innovation applied to the restoration efforts, which will contribute to evolving science as results are collected over time.
- A Panel member reflected that the release of the revised Tailings Management Protocol may be an opportunity to present Mount Polley’s reclamation efforts.

## 5.3 Energy and GHG Emissions

The Panel was interested in discussing energy and GHG emissions, with a particular focus on any barriers to improving performance.

Imperial Metals shared that they have recently hired a GHG and electrical infrastructure manager (corporate role), who will be looking at alignment of Imperial Metal systems with TSM, i.e. what TSM aspects could improve our systems and improve our TSM scores, not solely for the sake of improving our TSM scores.

#### **5.4 Imperial Metal's TSM assessment results**

See the [2018 TSM Progress Report](#) for Imperial Metal's full TSM scores.

## 6 Results of the Post-Verification Review: Dominion Diamond Mines



### About Dominion Diamond Mines:

Dominion Diamond Mines (Dominion) is a Canadian mining company and one of the world's largest producers and suppliers of premium rough diamond assortments to the global market. They operate the Ekati Diamond Mine (Ekati), in which they have a controlling interest, and own 40% of the Diavik Diamond Mine (Diavik), both of which are located in the Northwest Territories (NWT) in Canada. Dominion also has world-class sorting and selling operations in Canada, Belgium, and India.

Claudine Lee, Head of Environment, represented Dominion in the PVR discussions. Additional information on Dominion and its performance can be found in its PVR Background Document, PVR webinar slides and on its website: <https://www.ddmines.com/>



Figure 2: Ekati Diamond Mine, Northwest Territories, Canada

### 6.1 Socio-economic Impacts

The Panel was interested in discussing the socio-economic factors at Ekati, in particular, approaches to managing socio-economic benefits and impacts and the resulting outcomes.

Claudine Lee began by providing further information in response to the Panel's questions from the PVR Working Group and the September webinar. This information is summarized by theme below:

- **Benefits provided to Northern communities**
  - Impact Benefit Agreements (IBAs) include financial transfers to Indigenous governments, which are reported under the *Extractive Sector Transparency Measures Act*.
  - Employment targets are set in the Socio-Economic Agreement with the Government of the Northwest Territories (GNWT) for IBA Indigenous parties, other Indigenous parties and Northerners.
    - Dominion has not met its Northern employment targets for the past couple of years due to the relocation of the company's headquarters from Yellowknife to Calgary,

- which affected approximately 90 office employees and was driven by cost reductions.
- Contracts have been awarded to many Northern and Northern Indigenous firms through a tender evaluation process that includes criteria for >50% Indigenous and Northern-owned businesses and number of Northern and Indigenous employees.
    - Quarterly contract updates are also sent to interested contractors to identify upcoming tenders and allow for preparedness.
  - Training is supported through contributions to the Mine Training Society; Dominion hires graduates from this program and supports their apprenticeship programs.
- **NWT taxation and royalty regime**
    - Income tax is paid on an annual basis and property tax is paid to the municipal and territorial governments.
    - Mining royalties are paid to the territorial government, which is 13% of the mine's output (i.e. sales price minus operating/marketing costs)<sup>1</sup>.
  - **What motivates best practices in engagement, beyond compliance?**
    - Dominion first wishes to acknowledge that the regulatory regime sets a high bar (e.g. involves Indigenous governments more than what you would see in other jurisdictions).
    - Best practices in engagement must be identified by the communities, i.e. how they want to be engaged and with what method; engagement should also occur at all levels (e.g. cultural events, town halls, technical leads, Chief and Council).
    - Best practices in engagement are identified through experience and relationship-building, i.e. listening to communities' top issues and working through specific concerns.
    - An example of success is Dominion's development of a series of terminology booklets translated into the Indigenous languages they interact with in the North; this involved a workshop with translators to talk about scientific terms; most Dominion meetings have 3-4 translators.

Key themes from the subsequent discussion with the Panel are summarized below:

- **Do Métis have IBAs or other resource revenue sharing agreements?**
  - Dominion has an IBA with the North Slave Métis Alliance (NSMA) and are currently discussing contract opportunities with the NSMA economic development arm.
  - Dominion also identified the Fort Resolution Métis Council and the Deninu K'ue First Nation as a potentially impacted group during the Jay extension assessment (i.e. they were not previously identified by the Ekati assessment conducted in the 1990s); Dominion does not have an IBA with them, but they are treated equally with other groups (e.g. the company meets with them regularly).
  - Dominion also sometimes works with Deninu K'ue First Nation and Fort Resolution Métis Council collaboratively if both groups wish to do so, as they are both based in the community of Fort Resolution (Deninu K'ue).
- **Encouraging youth in continuing education**
  - Dominion:
    - Provides \$25,000 to junior schools in each community annually, allowing them to spend these funds on their identified priorities.
    - Brings younger students and their teachers to Ekati every other year (i.e. different high schools each year, on a rotating basis), which includes a job shadowing component based on student interests.
    - Has a student reclamation program at Ekati, where they bring youth representatives from each community for a few days to work with Ekati's

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<sup>1</sup> The facilitator additionally shared that the territorial government shares a proportion of the royalties with settled land claim holders through a set formula.

reclamation team; this is an area where students could see a longer-term career because a number of mines will be closing in the next 10-15 years.

- **Key opportunities and challenges in the NWT co-management regime**
  - Dominion shared that a key constraint for communities is their capacity; while they receive honorariums and/or participatory funding, their capacity is still limited, and the co-management regime is rigorous (e.g. 1000-page aquatic response framework).
  - Dominion is also constrained in what they can fund (e.g. cannot fund communities to review company's own studies).
  - A Panel member commented that a key difference between operating in the territories vs. provinces is demographics (e.g. NWT has a higher percentage Indigenous population and smaller populations), which impacts politics, representation, services, etc.
  - A Panel member commended the significant local economic benefits that have accrued to Northern and Indigenous businesses from the diamond mines but noted that it is their rich diamond deposits that made it possible to operate profitably within the rigorous co-management regime.

## 6.2 Energy and GHG Emissions

The Panel was interested in discussing energy and GHG emissions at Ekati, with a particular focus on any barriers to improving performance at their Northern mine site.

Claudine Lee began by providing further information in response to the Panel's questions from the PVR Working Group and the September webinar. This information is summarized by theme below:

- **NWT carbon pricing regime**
  - The GNWT wants to build a carbon pricing system in the North for the North; the NWT is reliant on diesel without many alternatives.
  - GNWT Finance released their proposed carbon pricing regime in July, which had not been consulted on, with the following elements:
    - Fuel purchase/use is taxed with the exception of the aviation sector, due to its importance in providing food supply to the North, and
    - Power/heat generation is taxed with a 75% rebate to the company and the remaining 25% placed in a fund for emission reduction initiatives for the company.
- **Implications of the NWT carbon pricing regime on Ekati**
  - Ekati has pits that are 30 km apart, which contributes to a higher rate of transportation emissions compared to other mine sites and puts Ekati at a disadvantage.
  - The other two territories (Yukon and Nunavut) are using the federal backstop option<sup>2</sup>, which means Ekati and the other diamond mines in the Northwest Territories are at a steeper disadvantage than those in the neighbouring jurisdictions.
  - Dominion has communicated to GNWT that they would like to see the money received through carbon taxes reinvested in clean and alternative energy options, particularly because operating costs are increasing, and revenues are decreasing in the diamond mines.
  - Dominion has researched wind and solar power options in the past, but the capital rate of return is low, particularly because all equipment and materials must be brought in by air or winter road, which has weight and length limitations.

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<sup>2</sup> A Panel member shared that the federal backstop plan or option will be applied for provinces and territories that do not implement their own carbon price regime or whose carbon price regime is not approved by the federal government. The federal backstop plan outlines a carbon emission threshold over which a tax must be paid, while an equivalent amount of emissions under the threshold would receive a rebate.

- Dominion is examining an extension of the Ekati mine life for 40-50 years, which may change the economic calculations for this investment.

Key themes from the subsequent discussion with the Panel are summarized below:

- **Importance of developing a carbon pricing regime unique to the Northern context**
  - MAC emphasized that while everyone generally agrees with the concept of developing a carbon pricing regime that is unique to the Northern context, this has not been followed with action, i.e. there are no programs in place to facilitate a transition to a low-carbon economy in the North, therefore it will just increase the cost of living in the North.
  - MAC recently met with the federal Minister of Northern Affairs, who supports the idea of energy efficiency programs for industry in the North; this concept should also apply to Northern regions of provinces – for example, the Raglan Mine turbine would not have happened without federal and provincial support.
- **Renewable energy options in NWT**
  - Dominion shared that the GNWT released a climate change framework to 2030 that includes hydropower, but this will have to go through an environmental assessment process and will not be an easy project to approve.
    - A Panel member added that the climate change framework is not costed (i.e. does not specify whether energy costs will increase as a result).
  - A Panel member commented that geothermal energy is being used in Manitoba near the NWT border; there are many heat and hydro power sources near the NWT, but utility connections are required. Dominion would note that there are no geothermal energy sources near Ekati or the other diamond mines.
  - Dominion shared that Ekati is located 200 km from the tree line and therefore wood is not a viable energy source.
- **Canadian recent membership in the Carbon Neutral Alliance of countries**
  - Dominion hasn't seen any response to this announcement in the North.
  - Dominion reflected that the focus should be balanced between contributors of GHG emissions and economic development; for example, Dominion is the second largest employer in the NWT and the North is a relatively small contributor to Canada's GHG emissions.

### 6.3 Women in Mining

The Panel was interested in discussing the role of women in mining at Dominion. Claudine Lee began by sharing that in addition to being a priority of the company, gender diversity was raised by the NSMA during the Jay extension environmental assessment process. As a result, one of the environmental assessment measures was to host a workshop to discuss barriers to hiring women at the mine. This workshop was hosted in Yellowknife with women representatives from a variety of groups, where they discussed barriers to applying for, obtaining, accepting and maintaining a job at Ekati. The following lessons learned were shared by Claudine Lee from this experience:

- One of the barriers identified was flying to a remote site and staying overnight, i.e. being away from home for days at a time when women are often the primary caregivers for children, elders and the community more broadly.
  - Suggested solutions included bringing children to Ekati for an on-site daycare or hosting a daycare in Yellowknife so that women can drop-off children and go to site, although this was considered risky due to potential weather delays.
- Women wanted opportunities for training in a lower pressure environment; Dominion provided funding to the Mine Training Society for a women-only drilling training course.
  - A subsequent challenge was the move from a women-only training environment to a male-dominated workspace; better preparation for that transition was needed.

- A Panel member suggested a women-buddy system may help with this transition.

Key themes from the subsequent discussion with the Panel are summarized below:

- **Sexism and racism on site**
  - Dominion acknowledged that, like other remote work sites, the company needed to take steps to ensure that sexism and racism is not an issue on site. Dominion shared a number of initiatives that they have implemented to address this issue, including:
    - Sensitivity and cross-cultural training, which is part of staff orientation,
    - Measuring performance by asking workers if they feel supported and have access to equal opportunities,
    - A whistleblower line, and
    - A zero-tolerance policy on discrimination (based on sexual orientation, race, etc.).
- **Engaging men on women's rights**
  - Dominion held forums with employees to set the expectation that this is an issue they need to work on together.
  - Dominion's previous Chief Operating Officer, Chantal Lavoie, was a strong advocate for inclusiveness, which set the bar high; Chantal also previously sat on the COI Panel.
- **Investing in female entrepreneurship**
  - A Panel member asked if investments had been made in female entrepreneurship such as daycare set-up, laundry business, etc.
  - Dominion's Ekati Plus Program includes some programs focused on skills for women.

## 6.4 Other Topics of Interest

Other topics of interest that the Panel identified and discussed with Dominion are summarized below:

- **What learnings from the co-management regime in the NWT could be applied and advocated for in the South?**
  - An important factor is that the co-management regime was built for the North by the North; there is still a lot of distrust of the government in the North, so people feel better about decisions that are made in a co-management process, and there continues to be collaboration once a decision is made (e.g. in enforcement, implementation).
  - It is a rigorous system that ensures people have a voice, and that their views are valued, considers the environment in which you work and balances the issues that are important.
  - It is also a long and complicated process that can sometimes get political.
  - There has been some discussion of how the co-management regime can be used to implement UNDRIP and the TRC recommendations; Dominion has been learning from other mining company approaches to reconciliation.
- **Lessons learned from Ekati's Independent Environmental Monitoring Agency**
  - A Panel member commented that in the South, a common challenge is implementing and learning from monitoring programs and asked what Dominion had learned from their experiences with Ekati's Independent Environmental Monitoring Agency.
  - Dominion shared that the Agency was at the forefront of recognizing Traditional Knowledge; Agency members represented different areas of expertise from across the NWT as well as representing each IBA group.
  - Dominion reflected that at the beginning, the Agency pushed the company in the right direction; now that Ekati has a good handle on the details, the Agency has evolved to examining the big picture; the issues the Agency now raises are well managed by Ekati, but it is good they continue to be raised.
  - Dominion shared that the regulatory approach has also evolved; Diavik and Snap Lake had similar independent environmental monitoring agencies established, while Gahcho Kué, which is newer, has a community-based monitoring approach.

- Dominion agreed with a Panel member's comment that despite the associated costs, the Agency has provided value in terms of building relationships with communities.
- **How can TSM and the COI Panel help Dominion continuously improve beyond TSM Level AAA?**
  - Dominion performs quite well due to the NWT regulatory system; many Dominion commitments (e.g. local procurement, etc.) are identified through work with their partners.
  - Dominion reports at Level AAA for Aboriginal and Community Outreach and Biodiversity Protocols and has provided many examples of their work (i.e. may already be beyond Level AAA).
  - Dominion has also previously reported Level AAA on almost all protocols including Energy and GHG Emissions Management.
  - Moving beyond Level AA or AAA may not always be the right choice from a business perspective (e.g. is that investment best spent on an internal/external audit, or on another activity on site?).
- **Changes in practices after the acquisition of Dominion by The Washington Companies**
  - Dominion did not see any significant changes in practice after the acquisition; the transition from BHP Billiton to **Dominion** ownership in 2013 was a more significant change, (i.e. moving from a large corporation with many standards to a small company operating its first mine).
- **Does TSM conflict or overlap with any other reporting systems?**
  - Dominion responded that the different reporting systems they use are quite distinct; ISO 14001 is completed earlier in the year, which is then rolled into TSM reporting.
- **Sorting and cutting diamonds in Canada**
  - Dominion shared that they tried training a Canadian workforce in sorting and cutting but realized this is a very complex task that requires a lifetime of learning and therefore providing the required training would be very expensive.
  - At Ekati, workers complete the pre-work (e.g. cleaning, cutting, initial sorting) and then the diamonds are sent to India where sorting and cutting skills already exist and there is a large market to support these skills.
- **Responsible sourcing verification for Canadian diamonds**
  - Dominion has a Canadamark™ hallmark that is used for certified polished diamonds and engraved on stones above a certain size; some of the India retailers may use other marks, but Canadamark™ certification is a guarantee that the diamond is ethically sourced.
  - MAC shared that they are working with the Responsible Jewelry Council (RJC) to align TSM and RJC's code of conduct standard to allow for a streamlined assurance process.
- **Absenteeism on site**
  - A Panel member asked Dominion to elaborate on a recent news article written about absenteeism at Dominion sites; Dominion responded that absenteeism has a financial impact to their business and in response to this, Dominion asked the union to include a response to this in their collective agreement, which they have done. Dominion is also actively discussing this issue with Indigenous economic development corporations that they work with.
  - A Panel member asked if there was a racialized or gendered profile to the absenteeism; Dominion responded that absenteeism was primarily seen in entry-level positions under the collective agreement.

## 6.5 Dominion Diamond Mines TSM assessment results

See the [2018 TSM Progress Report](#) for Dominion's full TSM scores.

## 7 Key Takeaways of 2018 Post-Verification Review

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Several themes emerged during both PVRs. Key takeaways include:

### Reflections on Mount Polley

- **Engaging employees on TSM**
  - It was observed by a panel member that it appeared that the Mount Polley team really pulled together around the rehabilitation effort after the tailings breach and that as this work comes to completion, the team could consider looking to new common purposes such as working towards increasing TSM scores or other corporate goals that could help maintain the team cohesion.
- **Promoting effective dialogue**
  - The following suggestions were made by Panel members to support effective dialogue at the Mount Polley mine site:
    - Reducing the amount of material being presented to allow more time for dialogue,
    - Developing a code of conduct to support effective dialogue<sup>3</sup>, and
    - Reviewing how regulatory bodies participate to identify potential duplication of effort.
  - A Panel member suggested hosting a dialogue between MAC, NGOs and government to discuss communicating realities without prompting political reactions.
- **Regional engagement on environmental concerns**
  - A Panel member suggested that regulators communicate potential downstream impacts for all projects so that communities understand the regional ecosystem.
  - There should be space for multi-stakeholder engagement on the health of a regional ecosystem.
  - Community-based monitoring can help alleviate citizen concerns.

### Collaboration

- **Sharing innovative practices with others**
  - Summarizing Mount Polley's vast amount of technical information and innovations applied during their rehabilitation efforts would be valuable to the mining industry.
- **Key opportunities and challenges in the NWT co-management regime**
  - The co-management regime was built by the North for the North and is influenced by its demographics, which also influences politics, representation, services, etc.
  - A key constraint for community participation is their capacity, particularly because the system is so rigorous (e.g. 1000-page studies require review can be a long process).
  - Another challenge is the duration of the assessment process, which can also sometimes get political.
  - One of the common project conditions under this regime is an independent environmental monitoring agency; this has proven valuable to Dominion in terms of the advice provided and building stronger relationships with communities.

### Socio-economic Impacts

- **Exposing youth to mine employment opportunities**

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<sup>3</sup> Mount Polley's PLC has since updated and revised its Terms of Reference, which now includes a section on codes of conduct.

- Both companies were asked about/encouraged to support Indigenous youth visits to mine sites to expose them to career opportunities (e.g. Dominion's program bringing youth to Ekati).

### Energy and GHG Emissions

- **Barriers to improving performance at Northern mine sites**
  - There is a lack of low-carbon energy alternatives to diesel power in the North and a lack of programs in place to facilitate a transition to a low-carbon economy, such as energy efficiency programs for industry.

### Women in Mining

- **Supporting women in mining**
  - Dialogues on women in mining (e.g. inclusion, sexism) must include both men and women.
  - Other actions that can support women in mining include women-only training programs, women-buddy systems on mine sites, investing in female entrepreneurship and examining daycare or other caregiver options.

## 8 Panel Feedback on the Post-Verification Review Process

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Panel members expressed appreciation for the excellent quality of information provided by Dominion and Imperial Metals through the PVR process, especially through financial and other challenges their companies have faced. The Panel also thanked Imperial Metals for the Mount Polley site tour and were extremely impressed with the rehabilitation work that has taken place, which included involvement with local communities and First Nations.

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*"The tour was very important – to see and feel the scale and extent of the breach and remediation beyond photos. Very impressive work."*

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The Panel acknowledged that extenuating weather-related circumstances resulted in poor attendance at the PLC meeting and suggested if Indigenous COI are unable to attend company-hosted meetings, the Panel could instead plan to visit them in their communities, though this is challenging when conditions such as weather prevent participation. Imperial Metals noted that there is a separate committee established through the Partnership Agreements that the mine has signed with each First Nations Band. It is the mine's experience that First Nations representatives prefer to meet through this committee when engaging with the mine.

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## Annex 1: List of Companies That Verified Their TSM Results

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### Past companies:

2007: Albion & Hudbay Minerals  
2008: Barrick, Xstrata Nickel & Xstrata Zinc  
2009: BHP Diamonds - EKATI & IAMGOLD  
2010: Breakwater & Teck  
2011: De Beers & Iron Ore Company of Canada  
2012: Cameco & Inmet  
2013: Teck & Vale  
2014: ArcelorMittal & Barrick  
2015: Taseko & Agnico Eagle  
2016: Hudbay Minerals & Suncor Energy  
2017: Glencore & Rio Tinto

### 2018 Company Selection for PVR:

The following companies were verifying their 2017 TSM results and were therefore in the pool to be selected to undergo the Panel's PVR. As a rule, the Panel seeks to select companies that have not been subject to a recent PVR and takes into account commodity type, and location.

- Agnico Eagle
- Cameco
- CEZinc (Glencore)
- **Dominion Diamond Mines**
- First Quantum Minerals
- IAMGOLD
- **Imperial Metals**
- Nyrstar Canada
- Teck Resources