

of Canada | du Canada

The Mining Association of Canada ANNUAL REPORT 20/5



TABLE OF CONTENTS

About The Mining Association of Canada (MAC)	3
Message from the Chair and the President and CEO	4
Report from the Chair of the TSM Governance Team	
Environment Committee	11
Aboriginal Affairs Committee	14
Public Affairs Committee	16
Science Committee	21
Tailings Working Group	24
Taxation Committee	
Transportation Committee	28
International Social Responsibility Committee	31
Energy Committee	
Northern Affairs Committee	
International Trade and Investment	40
Mining Industry Human Resources Council (MIHR)	42
MAC Board of Directors	44
Committee Membership	45
Membership	
MAC Staff	52

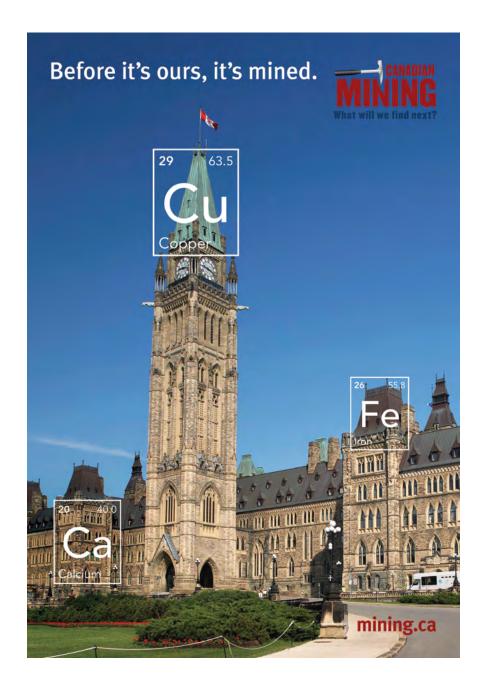
*



ABOUT THE MINING ASSOCIATION OF CANADA (MAC)

The Mining Association of Canada (MAC) is the national organization of the Canadian mining industry. It comprises companies engaged in mineral exploration, mining, smelting, refining and semi-fabrication. Member companies account for the majority of Canada's output of metals and major industrial materials.

MAC promotes the interests of the industry nationally and internationally, works with governments on policies affecting minerals, informs the public, and promotes collaboration to solve common issues and foster progress. MAC works closely with provincial and territorial mining associations and other industries, as well as with environmental and community groups across Canada.





MESSAGE FROM THE CHAIR AND THE PRESIDENT AND CEO

Bob Steane, Chair of the Board of Directors, and Pierre Gratton, President and CEO

As we reflect on the past year, top of mind for those in and following our industry was the largely low commodity price environment and how the industry was managing through it. As a cyclical industry, mining companies are adept at navigating ups and downs in the commodity market and are focused on controlling costs to weather the current downturn.

While it's easy to get swept up in uncertain or gloomy outlooks for the commodity market, perspective is needed. Industry leaders and policy makers need to look well beyond the current cycle to ensure Canada can maintain its current leadership in mining. That's why MAC remains focused on mining's future, communicating the actions that industry and governments can take now to seize growth opportunities.

Perspective is also needed so that we don't overlook the enormous contributions the mining sector makes, even during a downturn. Mining remains a major employer and economic driver across the country. The mining and minerals processing industries directly employ 375,000 people across Canada. At well over 10,000 employed, it is the largest private sector employer of Aboriginal Canadians. That's just direct jobs. Mining also supports some 3,700 companies in Canada, including many Aboriginal-owned businesses, which provide goods and services to the industry, extending mining's employment and economic reach even further.

Economic cycles for mining are predictably unpredictable. It's impossible to know exactly when they will start or end. It's better to invest time and effort in ensuring the key factors that support the mining industry's competitiveness are in place so that Canada and the industry are in good position to capitalize on growth opportunities. Unlike prices, these factors rarely change. To thrive, the industry needs an effective and efficient regulatory regime, a competitive tax structure, infrastructure to operate and get goods to market, strong relationships with Aboriginal and local communities, and a skilled labour force. MAC's message to policy makers is that Canada should continue to focus on these elements to ensure our country remains an important place where mining activity takes place.

Beyond the economic environment, 2015 was noteworthy because of the federal election. On October 19, 2015, Canadians elected a majority Liberal government. The new government ran on a platform focused on supporting Canada's middle class, but also placed a high priority on addressing climate change, investing in innovation and working towards reconciliation with Aboriginal people. Efforts to engage the new government on the industry's challenges and opportunities, and where mining can be a constructive partner to government are well underway.

Despite a long federal election campaign, MAC maintained a high level of advocacy in 2015. MAC engaged with government officials and Parliamentarians on a variety of issues that affect the industry's competitiveness, including the regulatory environment, Aboriginal inclusion in mining, innovation, transportation, infrastructure, trade and international development. Based on 2015 activity, MAC was featured in the *Lobby Monitor* in its top five most active advocacy groups list, and was once again featured in the *Top 100 Lobbyists List* by the *Hill Times*.

Several highlights achieved in 2015 relate to our Towards Sustainable Mining (TSM) initiative. The Finnish Mining Association (FinnMin) adopted TSM for its membership, the first mining association outside of Canada to do so. FinnMin's adoption of TSM stems from MAC's commitment to freely share the program with other countries seeking tools to improve their mining industry's performance.

One of the widely regarded strengths of TSM is that it pushes for continuous progress. TSM's protocols and indicators evolve to ensure they reflect best practice. That's why in March 2015, MAC's Board of Directors commissioned an independent, multi-interest task force to externally review the TSM *Tailings Management Protocol* and MAC's three tailings management guides. In November, the task force presented 29 recommendations to strengthen the tailings management component of TSM and the guides to the Board.



Bob Steane, Chair of the Board of Directors

Today, experts from our Tailings Working Group, TSM Governance Team and TSM Initiative Leaders are working to integrate all of the recommendations, drawing on valuable civil society input from our Community of Interest Advisory Panel.

MAC and our members recognize that the industry's privilege to operate rests on continuous improvement in the way we manage environmental impacts and engage with Aboriginal and local communities. Our industry has prioritized Aboriginal inclusion and have made significant progress in recent decades. Today, there are 265 active agreements in place between Aboriginal communities and mining companies. Building on this strengthening relationship, MAC's Aboriginal Affairs Committee worked throughout 2015 to examine ways in which the mining sector can enhance the benefits Aboriginal communities derive from mining activity. This culminated in the development of a position statement on government resource revenue sharing, released in early 2016. The statement supported government

resource revenue sharing as it can increase the participation of Aboriginal people, businesses and governments in the mining industry. It can also support broader reconciliation efforts by contributing to the elimination of socio-economic disparities between Aboriginal and non-Aboriginal Canadians.

There are incredible opportunities for greater Aboriginal inclusion in the benefits that mining activity brings to regions. Many of these opportunities lie in Canada's North. However, developing and operating mines in remote and northern regions is challenging. In 2015, MAC established a new Northern Affairs Committee, which is working to raise awareness of the vast opportunities the North presents for sustainable mineral development and the challenges that must be overcome to spur socio-economic development. Last year, MAC and other industry partners released a groundbreaking study, *Levelling the Playing Field*, that found that the lack of infrastructure in Canada's remote and northern regions makes it twice as expensive to build and operate base and precious metal mines. MAC is actively engaging with governments to share the study's findings and policy recommendations to address the infrastructure deficit in Canada's North.

The Canadian mining industry's growth depends on its ability to access key markets for its products. As such, we communicate to government the importance of pursuing an active trade agenda. Recent international trade developments bode well for Canada's mining sector. In 2015, participating countries concluded negotiations for the Trans Pacific Partnership and work continued on the Canada-European Union Economic and Trade Agreement.

Trade starts at home and, as such, an effective transportation system is essential to getting goods to market and capitalizing on trade agreements. In 2015, MAC was actively engaged in important policy developments related to rail and marine shipping. On rail, the government launched its 2015 Statutory Review of the *Canada Transportation Act*. In its submission to the review panel, MAC underscored that the mining industry is the railways' single largest customer group and, therefore, it is critical that persistent rail service issues get resolved. On marine shipping, MAC worked closely with Transport Canada on global policy developments from the International Maritime Organization (IMO) that have domestic implications. Recent success in our work with the IMO has resulted in millions of dollars in avoided costs to the mining industry.

Beyond our borders, we continued to make great strides in international social responsibility in the mining sector. MAC and fellow members of the Resource Revenue Transparency Working Group saw their work in pushing for Canada's adoption of payment transparency legislation come to fruition with the coming into force of the *Extractive Sector Transparency Measures Act.* This brings Canada in line with the global transparency effort to curb corruption in developing countries by arming communities with the financial information they need to hold their governments accountable for how they spend mining revenues. Additionally, as part of its efforts to build capacity and expertise in CSR practices abroad, MAC developed a guide to help companies overcome common implementation challenges with site-level grievance mechanisms—an important community relations tool that helps companies address community concerns.

Canada's leadership in CSR continued to be recognized internationally, including MAC's TSM initiative and the Government of Canada's renewed Extractive Sector



Pierre Gratton, President and CEO

CSR Strategy. In fact, improvements to the strategy attracted the attention of Professor John Ruggie, former Special Representative of the UN Secretary-General on Business and Human Rights. Specifically, he pointed to Canada's introduction of consequences for non-participation in the National Contact Point process as a leading practice that should be emulated more widely.

MAC's membership also grew in 2015 and early 2016 with the addition of Goldcorp Inc., Western Copper and Gold Corporation, Victoria Gold Corporation and Kaminak Gold Corporation as full members. MAC also welcomed several new associate members, Deloitte, Willms & Shier Environmental Lawyers LLP, Convergint Technologies, Miller Thompson Lawyers LLP, PearTree Securities, Quadra and CanNorth. MAC's membership is now at the highest level in its history, which is indicative of the importance of engaging with federal decision-makers to ensure the industry remains competitive on the world stage.

MAC's achievements in 2015 were due to the collective efforts of many people. These individuals include our Board of Directors, Executive Committee and TSM Governance Team, and the committed industry representatives who lend their expertise to MAC committees, task forces and working groups. We also boast one of the strongest association staffs in Ottawa, composed of individuals who are recognized for their expertise and professionalism by government and other associations. With their mix of skills and experience, they deliver tangible outcomes that benefit the entire industry. Their work is much appreciated by the Board and members of MAC.

For more details on the topics discussed here, and on other aspects of MAC's work, we encourage you to read the *Annual Report* in full.

- → The Finnish Mining Association (FinnMinn) became the first mining association outside of Canada to implement TSM.
- → MAC established an independent task force to review the tailings management component of TSM, and to make recommendations on how to strengthen the requirements and guidance.
- → MAC published a new TSM Water Stewardship Policy Framework.
- → TSM Leadership Awards were presented to facilities outside of Canada for the first time.



Louise Grondin, Chair of the TSM Governance Team

REPORT FROM THE CHAIR OF THE TSM GOVERNANCE TEAM

Louise Grondin, Senior Vice President, Environment and Sustainable Development Agnico Eagle Mines Limited

The Towards Sustainable Mining (TSM) Governance Team examines opportunities for improving the mining industry's performance and reputation with key stakeholders.

Finland's Adoption of TSM

In 2015, the Finnish Mining Association (FinnMin) adopted TSM for its membership, the first mining association outside of Canada to do so. FinnMin has the ability to tailor the TSM initiative so that it reflects the unique aspects of its domestic mining sector and the expectations of its communities of interest. However, seven core components of TSM must be integrated. This includes, but is not limited to, public reporting of facility-level results, independent verification of results and the establishment of an external

community of interest advisory body. Adoption of TSM must also be a condition of membership for members of FinnMin, as is the case with MAC.

FinnMin's adoption of TSM stems from MAC's commitment to freely share the program with other countries seeking tools to improve the performance of their mining industry. In recent years, international interest in TSM has been growing. MAC has responded by engaging with governments and associations in several countries to share information on TSM and to explore their potential adoption of the initiative.

Tailings Management

Following the tailings dam breach at the Mount Polley mine in 2014, MAC and its members initiated an internal review of its tailings management program led by MAC's Tailings Working Group to ensure the requirements and guidance continue to contribute to best practice.

In March 2015, MAC took a step further by commissioning a seven-member, multi-interest task force to perform an external review of the TSM *Tailings Management Protocol* and MAC's three tailings management guides, and to advise on potential improvement. In November 2015, the Independent TSM Tailings Management Review Task Force presented its final report to the MAC Board of Directors. In it, the Task Force indentified 29 recommendations to strengthen the tailings management requirements and guidance under the TSM initiative. Upon accepting the report, the MAC Board instructed the TSM Governance Team, Initiative Leaders and Tailings Working Group to expeditiously identify how best to integrate the recommendations into TSM.

Implementation of the Task Force's recommendations will result in several enhancements to the TSM *Tailings Management Protocol*. For example, the Task Force report calls for an internal audit to be required at the Level A rating versus Level AA, and an external audit at Level AA versus Level AAA.

Throughout 2016, with the support from the Community of Interest Advisory Panel, MAC and its members will work to implement the recommendations of the Task Force report, which is available on MAC's website (*www.mining.ca*).

TSM Performance

The 2015 TSM Progress Report shows steady improvement in company results, and maintained the overall high performance levels achieved in 2014. Notable highlights include:

- → There was a significant lift in results for TSM's newest protocol, biodiversity conservation management. In 2014, 67% of facilities achieved a Level A or higher for biodiversity conservation reporting, compared to 55% in 2013.
- → For the first time in the Aboriginal and community outreach protocol, more than 90% of facilities achieved at least a Level A, with the majority of facilities achieving a Level AAA.
- → Overall progress was made in the energy use and GHG emissions management protocol. In 2014, 75% of facilities reported a Level A or higher for having a comprehensive energy use and GHG emissions management system an increase of 15% year-over-year for this indicator.







Cameco Corporation, Cigar Lake Mine, Saskatchewan

Community of Interest Advisory Panel

In 2015, the Community of Interest (COI) Advisory Panel held two meetings to address various issues relevant to the mining industry. At the March meeting in Toronto, a delegation from Finland's Network for Sustainable Mining joined the COI Panel. MAC's COI Panel was a source of inspiration in the Network's creation, which was established in 2014 to foster co-operation and dialogue between the Finnish mining industry and its stakeholders.

The meeting also included a substantive discussion on the Mount Polley tailings breach and MAC's approach to tailings management. The meeting included an update from Imperial Metals on the incident and the reclamation efforts to date, an expert panel to provide context on tailings management, and a group discussion on the information communities need in order to have confidence in how tailings facilities are managed and regulated.

The Panel's second meeting took place in October in Saskatoon. During the three-day meeting, the Panel visited

Cameco's MacArthur River Mine and Key Lake Mill in Northern Saskatchewan. The Panel also had an opportunity to meet with Cameco's local communities of interest to learn more about key social and environmental issues that matter to them. The primary focus of the meeting was the Post-Verification Review for Agnico Eagle Mines and Taseko, which presented their 2014 results.

The Panel also held a preliminary discussion on climate change. Panel members raised several practical suggestions on how the sector could help address global climate change, and industry representatives shared their perspectives on the realities of shifting to a low carbon future. The Panel will continue exploring this topic throughout 2016.

TSM Water Stewardship Framework

In 2015, the MAC Board of Directors adopted a TSM Framework on Water, which includes 13 commitments that go beyond legal compliance. Through adoption of this framework, MAC members will ensure that responsible policies and practices are implemented to identify and manage water-related risks and opportunities and to ensure water use and discharge decisions consider other users and ecosystem needs. They will engage collaboratively with communities of interest to understand water needs and uses, and manage potential impacts of their facilities on water resources.

The framework also includes commitments related to managing water in a transparent and accountable manner, which includes public reporting on water-related performance.

TSM Recognition and Outreach

Vale, Dominion Diamond Corporation and Diavik Diamond Mines Inc. were recognized with the 2015 TSM Excellence Awards for their innovative projects that raise the bar for corporate responsibility in the Canadian mining sector.

Dominion Diamond Corporation and Diavik Diamond Mines Inc. were jointly awarded the 2015 TSM Environmental Excellence Award for their Joint Regional Grizzly Bear DNA Program in the Northwest Territories. Vale's Manitoba Operations was recognized with the 2015 TSM Community Engagement Excellence Award for its involvement in the Thompson Economic Diversification Working Group.

In 2015, eight mining facilities operated by Agnico Eagle Mines Limited, First Quantum Minerals Ltd., IAMGOLD Corporation and Teck Resources Limited were recognized with TSM Leadership Awards. For the first time, TSM Leadership Awards were given to mining operations outside of Canada. These include Agnico Eagle's Kittila mine in Finland, First Quantum Minerals' Çayeli mine in Turkey, IAMGOLD's Essakane Gold Mine in Burkina Faso and IAMGOLD's Rosebel Gold Mine in Suriname. Implementation of TSM is mandatory for all MAC members' Canadian facilities, however, these companies voluntarily apply TSM to their international sites.

MAC continues to receive inquiries internationally regarding TSM, including from governments and associations in Greenland, Norway, Sweden and Chile. Most notably, in December 2015, MAC was notified by the Botswana Chamber of Mines that its Board voted in favour of adopting TSM. MAC is currently engaging with the Chamber to work towards an agreement. MAC also had opportunities to present on TSM at an Executive Management Course held by McGill University in Lima, Peru and at the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development in Geneva.

TSM Training Workshops

In 2015, MAC continued to provide TSM training for its members. This included a workshop with New Gold's New Afton mine in Kamloops, BC and Shell Canada's corporate team in Calgary and facility team in Fort McMurray, AB. MAC also helped organize two training sessions for members of the Quebec Mining Association (QMA) in Montreal and Val D'or. MAC and the QMA will continue to collaborate on future training programs for Quebec-based mines.

MAC provided training to Debswana, a joint venture between De Beers and the Government of the Republic of Botswana, on TSM implementation. Debswana has been applying TSM for the past few years and has invited MAC to provide training to verification service providers in 2016.

Plans for 2016

- → Implementing the Independent TSM Tailings Management Task Force's recommendations. This will involve a cross-committee effort to address each of the 29 recommendations. The COI Advisory Panel will support and advise MAC as work in this area progresses.
- → Finalizing reviews of the TSM Safety and Health and the Crisis Management Planning Protocols.
- \rightarrow Exploring how to further incorporate water stewardship into TSM.
- \rightarrow Continuing to respond to growing national and international interest in TSM.
- → Supporting member companies' implementation of TSM through training workshops.



- → Committee work focused on the implementation of the major federal regulatory reform that began in 2012, and on the review of the *Metal Mining Effluent Regulations*.
- → Specialized and highly-effective task forces of MAC member experts addressed ongoing challenges with the Fisheries Act, the Species at Risk Act and the Canadian Environmental Assessment Act.
- → MAC advocated that the new Liberal government revive effective multistakeholder forums, including the Species at Risk Advisory Committee and the Regulatory Advisory Committee on CEAA.

ENVIRONMENT COMMITTEE

Chair: Marc Butler, Director of Regulatory Affairs, Sudbury Integrated Nickel Operations, Glencore Canada

The Environment Committee addresses general environmental issues and legislation affecting the industry.

In 2015, the Environment Committee met jointly with the MAC Science Committee in Ottawa in February and October. The number of meetings was reduced in light of budget considerations and the federal election. Committee meetings were augmented with informational webinars and by work through task forces.

The Committee's work in 2015 continued to focus on the implementation of the major changes in federal legislation that began in 2012, and on the review of the *Metal Mining Effluent Regulations* (MMER). A description of the work on the MMER review is found in the report of the Science Committee. The Committee expanded its work on the *Species at Risk Act* and also worked on air pollution, climate change, and the first draft assessments of metals under the Chemicals Management Plan.

Species at Risk Act

In late 2014, a MAC Task Force on the *Species at Risk Act* (SARA) was established. Over the course of 2015, the group met by teleconference several times to set priorities for MAC's work on species at risk. The Task Force is focused on reviewing and responding to proposed Recovery Strategies published by Environment and Climate Change Canada for public consultation.

In May, the MAC SARA and CEAA Task Forces met with the Canadian Wildlife Service, the Canadian Environmental Assessment Agency and the Major Projects Management Office to discuss the interaction between SARA and the *Canadian Environmental Assessment Act* (CEAA 2012). While the discussion did not point to clear solutions to problems encountered by mining projects during CEAA assessments, it did suggest ways to assess and address species data gaps. MAC subsequently engaged with NatureServe Canada to better understand how companies can add wildlife data generated through baseline studies and environmental assessments to its database, and how the database can help MAC understand the state of data for relevant SARA-listed species. In 2016, MAC plans to hire a co-op student to work with NatureServe Canada, its network of Conservation Data Centres and MAC members to understand the state of data for 33 priority species.



Canadian Environmental Assessment Act

Beginning in late 2014, the first draft conditions for mining projects that completed assessments under CEAA 2012 were published for comment. The CEAA Task Force reviewed each of the draft conditions and submitted comments, which were followed by meetings with Agency staff. The dialogue was successful in improving the wording of conditions. However, the process also highlighted structural problems with CEAA 2012. A particular challenge is formulating conditions for the life of a mine early in the planning process without the means to subsequently adjust those conditions, and without the capacity and jurisdiction to oversee the life of a mine. For example, it is the province that issues an operating licence, manages air quality and approves reclamation plans. Federal conditions written before a mine is built may thus diverge over time from provincial requirements, which are likely to evolve in response to new science, technology and policies.

The effect of another new feature of CEAA 2012, the provision for substitution and equivalency, remains unknown. Only British Columbia has used the substitution provision for a few projects, and their assessments are not yet completed.

The new Liberal government has committed to reviewing federal environmental assessment processes, as well as the *Fisheries Act* and the *Navigation Protection Act*. In preparation for legislative reviews, MAC initiated outreach to other groups interested in environmental assessments, including Aboriginal organizations, environmental groups and other industry associations. MAC also continued to advocate for reviving the multi-stakeholder Species at Risk Advisory Committee and the Regulatory Advisory Committee on CEAA.

Fisheries Act

The MAC *Fisheries Act* Task Force met with officials from Fisheries and Oceans Canada in January to review progress on the development of guidance. In September, MAC organized a webinar to share members' experience in moving through the *Fisheries Act* authorization process.

At time of writing, the timing and scope of a *Fisheries Act* review is unknown. MAC's advocacy continues to note the prolonged transition problems encountered by members following the 2012 amendments to the Act, and emphasized the importance of sufficient capacity and transition planning for any future changes.





Air Pollution

Discussions with Environment Canada on proposed Environmental Performance Agreements on air pollutants for base metal and iron ore pelletizing facilities were concluded in early 2015, but have not yet been signed. The delay in finalizing the Agreements required some members to obtain extensions under the 2006 Pollution Prevention Planning notice, which the Agreements were intended to complete.

MAC is monitoring the work of the Canadian Council of Ministers of the Environment (CCME) on air quality. MAC shares with other associations a representative on a CCME expert advisory group for the development of Canadian Ambient Air Quality Standards. CCME work in 2015 focused on SO2.

Chemicals Management Plan

MAC continued to monitor Canada's Chemicals Management Plan (CMP) under the *Canadian Environmental Protection Act* (CEPA). The second phase of the CMP includes the assessment of cobalt, selenium, and boron and their compounds. The Draft Screening Assessment Report for cobalt and its compounds was published in late 2014, and for selenium and its compounds in July 2015. MAC coordinated a review of the draft assessments with interested members, the Cobalt Development Institute and the North American Metals Council Selenium Working Group. MAC submitted formal comments and met with officials to discuss them in detail.

MAC participated in stakeholder consultations on the third phase of the CMP, which will begin in 2016. The third phase will include assessments of variable-composition mixtures such as slags and drosses produced by smelters and refineries, as well as many metals and non-metallic elements. MAC engaged with officials to discuss how best to provide information needed for the assessments relevant to our sector and how to access information generated by the international metals community through, for example, Europe's REACH program.

Other Activities

During the year, the Committee also considered climate change and climate change adaptation, federal provisions for spills reporting and Environmental Emergencies Regulations, Federal Environmental Quality Guidelines, and negotiations of a global treaty on mercury (Minamata Convention). The Committee also organized a webinar on changes to Canada's Workplace Hazardous Materials Information System (WHMIS) to reflect the Globally Harmonized System of Classification and Labelling (GHS).

To boost its effectiveness, MAC belongs to several formal and informal industry groups. Lyle Safronetz (Vale) represented MAC on the Workplace Hazardous Materials Information System Current Issues Committee. Justyna Laurie-Lean (MAC) was the representative on the Industry Coordinating Group on CEPA, the Environmental Health Industry Coordinating Group, the Industry Steering Committee on Clean Air and Climate Change, the North American Metals Council and the Chemicals Management Working Group of the International Council on Mining and Metals. Ms. Laurie-Lean is also the mining industry representative on the multi-stakeholder National Pollutant Release Inventory Work Group.

For more information on MAC's environmental initiatives and the reduction of releases from member facilities, please see the *Towards Sustainable Mining (TSM)* Progress Report, available on MAC's website (*www.mining.ca/tsm*).



- → Development of a position statement supporting government resource revenue sharing with Aboriginal communities.
- → Continued partnership with the Macdonald-Laurier Institute on its research project, Aboriginal People and the Natural Resource Economy in Canada.
- → Participation in several Aboriginal business development fora to promote increased Aboriginal inclusion and opportunities in the mining sector.

ABORIGINAL AFFAIRS COMMITTEE

Chair: Sean Willy, Director, Corporate and Social Responsibility, Cameco Corporation

The Aboriginal Affairs Committee (AAC) works to identify, evaluate and offer informed advice to the MAC Board of Directors on strategies to foster and strengthen the relationship between Aboriginal people and the mining industry in Canada.

In November 2015, MAC's Board of Directors approved a position statement supporting a principled, open and transparent approach to government resource revenue sharing (GRRS) between the Crown and Aboriginal communities that are primarily affected by a specific resource project. MAC and its members believe that GRRS can provide Aboriginal communities, businesses and governments with greater opportunities to participate in the mineral exploration and mining industry. It could also significantly contribute to the elimination of socio-economic disparities between Aboriginal and non-Aboriginal Canadians. Also, by enhancing and clarifying Aboriginal benefits, these arrangements can result in increased certainty for commercial access to land and resource development. GRRS is understood as the sharing of resource royalties paid by industry to governments with Aboriginal communities, and is not an additional tax or royalty imposed on the industry.

The AAC held three meetings during the year that included participation of invited guests, such as key government officials and stakeholders.

The AAC and MAC continued to engage with the Macdonald Laurier Institute (MLI) on its multi-year research project, *Aboriginal People and the Natural Resource Economy in Canada*. As a result of this extensive project, the MLI has become an authoritative voice on Aboriginal participation in natural resource industries. In 2015, it published more than 30 articles, which were strongly aligned with MAC's focus areas. For example, the MLI studied the importance of Aboriginal engagement in the environmental stewardship of resource projects, including during permitting processes, in environmental monitoring and in efforts to mitigate environmental impacts.

Advocacy Activities

MAC advocacy activities regarding Aboriginal affairs focused primarily on the Crown's duty to consult and, when appropriate, to accommodate. Issues that have been identified relate to ambiguity, unpredictability and discrepancies between Crown consultation policies, guidelines and consultation in practice, and coordination between provincial/ territorial and federal coordination.

Given that the mining industry is, proportionally, the largest private sector employer of Aboriginal people in Canada, MAC advocated for enhanced government support for Aboriginal skills training initiatives, including the Aboriginal Skills and Employment Strategy and other programs.

The potential for a significant increase in Aboriginal employment remains strong, but essential skills training and education investments are required.

During 2015, MAC and its members advocated for robust and meaningful consultation with Aboriginal groups with respect to a provision in the *Extractive Sector Transparency Measures Act* that will require them to disclose the payments they receive from mining and oil and gas companies.

Outreach Activities

Throughout 2015, MAC participated in targeted outreach activities regarding Aboriginal participation in the mining sector, including attending the PDAC Convention's Aboriginal Program and the Green Mining and Aboriginal Business Roundtable held by Natural Resources Canada and Aboriginal Affairs and Northern Development Canada in March.

In November, MAC was a key sponsor and an active participant in the Canadian Aboriginal Minerals Association's annual conference. Pierre Gratton opened the conference with a keynote speech, which focused on achieving greater collaboration between Aboriginal communities, industry and governments in future mining project developments.



- → Effective government relations and public affairs strategy designed to navigate through an electoral year. Maintained a strong level of advocacy to promote the Canadian mining industry's challenges and opportunities, the sector's vast contributions to the nation's economy, and policy priorities to ensure sustainable mining growth.
- → Successful *Mining Day on the Hill* lobby day, which involved a high-level of participation of senior government officials from a wide range of federal government departments relevant to the mining industry.
- → New advertising campaign focused on three themes: minerals and metals in contemporary products; careers in mining; and mining's commitment to reclamation and the environment.

PUBLIC AFFAIRS COMMITTEE

Chair: Tom Ormsby, Head of External and Corporate Affairs, De Beers Canada

The Public Affairs Committee (PAC) provides advice and guidance on MAC's public affairs and communications programming.

Federal Election

The PAC was deeply involved in the development of MAC's 2015 government relations strategy, which focused early on activities and priorities leading up to, during and after the election. Plans were developed a full year in advance of the fixed election date should an early election be called. In response to the continuing polling showing a three-way race, plans were balanced across the three major parties to ensure the industry was engaged in platform development across the board. Following the Liberal government's victory, MAC focused its efforts on making outreach to the new government to ensure that the importance of the Canadian mining industry is well understood and recognized.

In the months that followed the election, MAC worked alongside the PAC to identify policy commitments made by the new government in its Throne Speech that impact the mining industry. These included commitments to climate change, clean tech and innovation, and reconciliation efforts with Canada's Indigenous peoples. MAC and its members are currently engaging with the new government on the Canadian mining industry's progress in these areas, including:

- → MAC members' efforts to protect the environment, improve energy efficiency and reduce greenhouse gas emissions.
- → The industry's investments in innovation to develop and implement lower-emission and fuelefficient technologies.
- → Efforts to increase the participation of Aboriginal people in the mining sector through consultation, employment, business development opportunities, and through agreements and partnerships with Aboriginal communities.

The Liberal government has also committed to review the environmental assessment process for natural resource projects.

On this, MAC and its members have communicated support for such a review, and are asking the government to employ a multi-stakeholder approach to policy development to ensure broad and meaningful consultation.

Federal Advocacy

Advocacy efforts in 2015, which involved active participation and consultation with the members of the PAC, Board of Directors, and other MAC members, predominantly focused on the regulatory and economic environment for mining.

In 2015, the industry continued to face a downturn in commodity prices driven by slowing global economic growth. As a result, companies focused on controlling costs. Throughout the year, MAC communicated the need for policy makers to not overlook the industry's current and future economic contributions just because commodity prices were low. Given the cyclical nature of mining, MAC urged the government to use the down period to position Canada for growth for when the market rebounds, and to work to maintain Canada's competitiveness and global leadership in mining. This meant advocating for the following key issues:

- \rightarrow An efficient and effective regulatory regime to encourage sustainable mining development.
- → A positive fiscal regime and strategic tax incentives that would encourage growth for cost-intensive projects and enable the industry to cope with the current economic environment.
- → Critical infrastructure, including roads, ports, and power generation, in remote and northern regions to make building and operating new mines possible.
- \rightarrow The free flow of trade and opening up the industry to new and emerging markets to sell its products.
- → Government support to extend the benefits of Canadian mining abroad and to encourage best practices in corporate social responsibility, domestically and internationally.
- → An effective transportation system, and resolving issues related to rail service and challenges associated with the domestic implementation of international marine shipping policies.
- → Greater participation of Aboriginal people in the mining sector through effective and meaningful consultation, ongoing engagement, and through economic and societal benefits like direct and indirect jobs, education and skills training, business development, and community investments.

MAC earned notable mentions as an influential advocacy organization in several politically-oriented media outlets. MAC's President and CEO, Pierre Gratton, was once again listed by the *Hill Times* in its *Top 100 Lobbyists List*. MAC was also featured in the *Lobby Monitor* as being in the top five most active advocacy groups for 2015. Despite the prolonged election period, MAC's lobbying records echo that it was very active year with more than 100 meetings with senior federal government officials, Parliamentarians and their staff.

MAC Events

Mining Day on the Hill and Annual Reception

MAC's annual *Mining Day on the Hill* event, held on November 17, 2015, was once again a highlight. Given the timing of the federal election, the lobby event focused on federal government officials as Parliamentarians were not yet in position to meet. Approximately 40 MAC member delegates from across the country participated in 25 meetings across the National Capital Region. Despite the reduced scope, the day was productive and involved the participation of senior-level government officials from a wide range of departments relevant to mining.

The event was developed around the theme "Canadian Mining: Down, but Never Out", in recognition of the cyclical nature of mining. The theme showcased the industry's role as a major contributor to Canada's economy, and as the provider of the metals and minerals needed for the products and infrastructure Canadians depend on and the technologies that will help Canada move towards a lower carbon future. Throughout the day, delegates and officials met to discuss the bold steps that can be taken now to maintain Canada's leadership in mining, seize growth opportunities, and compete for highly-mobile global mineral investment.

The Mining Day program concluded with MAC's annual reception at the Fairmont Château Laurier. The reception was very well attended by industry representatives, stakeholders, elected and non-elected officials. While unable to attend in-person, the Honourable Jim Carr, Minister of Natural Resources, shared congratulatory remarks for the conclusion of MAC's Mining Day event and highlighted the importance of mining to the government's mandate.



National Mining Week

To mark the 19th annual National Mining Week in May 2015, MAC partnered with Natural Resources Canada on the second annual Mineral Outlook Dialogue Conference, which brought together senior government officials and industry representatives to discuss key policy areas related to innovation, Aboriginal engagement, international corporate social responsibility, and the mining supply sector. Following the conference, MAC hosted a reception that featured remarks from MP Kelly Block, the former Parliamentary Secretary to the then Minister of Natural Resources.

Speaking Events

The PAC helps identify speaking opportunities and supports MAC's events through their attendance, promotion and, at times, sponsorship. Throughout the year, MAC participated in several major mining conferences across Canada, including the PDAC Convention, CIM Convention, Nunavut Symposium, AME BC's Mineral Exploration Roundup, and the Energy and Mines Ministers' Meeting. At the invitation

of the Government of Canada, MAC's President and CEO, Pierre Gratton, presented at the South Africa Indaba Conference to promote Canada's mining leadship and MAC's Towards Sustainable Mining (TSM) initiative.

Mr. Gratton was the keynote speaker at several events throughout the year to promote the industry's vast economic and social contributions to Canada, where government and industry can work together to maintain and enhance Canada's competitiveness and leadership in mining, and opportunities and challenges facing the sector:

- → Economic Club of Canada, Toronto, May 2015.
- → Yellowknife Chamber of Commerce, organized by the NWT & Nunavut Chamber of Mines, September 2015.
- → Vancouver Board of Trade, September 2015.
- → Yukon Geoscience Forum, November 2015.
- → Canadian Aboriginal Minerals Association's Annual Conference, Vancouver, November 2015.



Canadian Mining Ad Campaign

Heading into the final stages of the election, MAC launched its latest advertising campaign in September 2015, which ran in high-traffic areas around the National Capital Region and in national media outlets. The ads were developed around three broad themes: minerals and metals as building blocks of contemporary products and green technologies; mining careers and the sector's role as a major direct and indirect employer; and mining's commitment to reclamation and the environment. The campaign achieved more than 14 million ad impressions and generated approximately 140,000 visits to MAC's website.

Annual Opinion Polling on Canadian Attitudes on Mining

To understand how Canadians view our sector, MAC conducted its fourth annual public opinion poll in 2015. The PAC assisted MAC in updating the questions, and using the findings to inform MAC's activities and priorities in the year ahead. Results continued to show a largely positive view towards the industry, its vast economic and societal contributions to Canada, and its role in providing the building blocks of useful, modern products. Highlights include:

- \rightarrow 76% say they have a favourable view of Canadian-owned mining companies.
- → Majorities have very positive associations with mining's contributions:
 - Products we need (80%)
 - Positive role in the Canadian economy (89%)
 - The provider of good jobs (75%)
- \rightarrow 75% say the mining industry is making a sincere effort to limit environmental impacts.
- \rightarrow 70% say that Aboriginal communities are benefitting more from mining projects than in the past.

Results reveal that Canadians want a healthy and growing mining industry, but one that is adopting best practices in protecting the environment, engaging with communities and operating under a strong regulatory system.

Communications Support for TSM

In recent years, the PAC has become more involved in providing support to MAC to enhance the communication and promotion of the TSM initiative. The Committee helped develop the TSM Excellence Awards in 2014 to celebrate innovative projects that are raising the bar in environmental and community engagement performance. In 2015, communications efforts promoted the second annual award finalists and winners. At the CIM Awards Gala in May 2015, Vale was celebrated with the TSM Community Engagement Excellence Award for its involvement in the Thompson Economic Diversification Working Group, which has been working to spur economic development and diversification in Thompson, Manitoba. Dominion Diamond Ekati Corporation and Diavik Diamond Mines Inc. were jointly recognized with the TSM Environmental Excellence Award for their regional grizzly bear DNA program, which assessed bear population trends in the Northwest Territories. In fall 2015, MAC also promoted the winners of the TSM Leadership Awards, which celebrate facilities that achieve the highest performance levels of TSM. In 2015, eight mining facilities were recognized with this important distinction, four of which were given to mining operations outside of Canada – a first for the TSM Leadership Awards. For a list of the winners, please see the Report from the Chair of the TSM Governance Team on page 10.

Throughout the year, members of the PAC provided valuable input into other TSM-related activities. Together with the TSM Initiative Leaders, the PAC reviewed and updated the TSM crisis management planning protocol and accompanying Crisis Management Planning Reference Guide to ensure that they continue to reflect best practice.

The PAC also provided critical input on communications activities surrounding MAC's commissioning of an independent task force to review the association's tailings management requirements and guidance under TSM.

Media and Social Media Engagement

MAC continued to maintain a high level of proactive and reactive media engagement on mining-related news and issues. In 2015, MAC was quoted in approximately 200 media stories in outlets across the country and continued to be regularly approached by media (national and regional outlets, political media, and trade publications) for comment on a wide range of topics. MAC's Twitter presence (@theminingstory) has also continued to increase, growing to almost 6,000 followers by year-end. Tweet content includes factoids about the Canadian mining sector, and links to MAC and member company news. MAC's President and CEO, Pierre Gratton, is also on Twitter (@GrattonPierre).

Publications

Throughout the year, MAC issued seasonal newsletters to communicate new developments in the industry and positive news from MAC and its member companies. The newsletter is sent to Ottawa-based decision-makers in a high-quality print format, and electronically to industry stakeholders across the country.

In 2015, MAC produced two new publications. In May, MAC released a northern tax study, *Levelling the Playing Field*, which found that the costs to explore, build and operate new mines are significantly higher in remote and northern regions of Canada due to an acute lack of infrastructure. The findings of this study earned significant attention from government stakeholders and media. In November, MAC published a new guide on site-level grievance mechanisms, which was developed by MAC's International Social Responsibility Committee, with some assistance from the Office of the CSR Counsellor. MAC also continued to produce its annual publications. The MAC *Annual Report 2015* was published in June, and the *2015 TSM Progress Report* was published in December. The 2015 edition of MAC's flagship publication, *Facts and Figures*, was launched in February 2016 in both print and electronic versions. All publications are available on MAC's website (*www.mining.ca*).

Paul Stothart Memorial Scholarship in Mineral Economics

In 2015, Jeffrey Schlachter (University of Alberta) was selected as the recipient of the Paul Stothart Memorial Scholarship in Mineral Economics (\$3,500 value). Mr. Schlachter is studying a Master of Business Administration at the University of Alberta. He also holds a Bachelor of Science in Mining Engineering with distinction from the same university. His academic achievements and his extensive work experience in the mining sector impressed the scholarship's selection committee. Mr. Schlachter is a professional mining engineer and has held several engineering positions at mines and coal plants in the province of Alberta.

The scholarship was established in 2012 from the generosity of MAC member companies in memory of the late Paul Stothart, MAC's former Vice President of Economic Affairs, and is awarded annually. For eligibility and application requirements, please visit the MAC website (*www.mining.ca*).



- → The multi-stakeholder consultation undertaken by Environment and Climate Change Canada to review the *Metal Mining Effluent Regulations* concluded in early 2015.
- → The Mine Environment Neutral Drainage program initiated a study of tailings management practices, which will include a detailed examination of alternatives to conventional slurry for the management of tailings.

SCIENCE COMMITTEE

Chair: Kent England, Manager, Environment and Licensing, Cameco Corporation

The primary focus of the Science Committee is the application of sound science and technology towards mitigating and/ or minimizing the impacts of mining on aquatic and terrestrial ecosystems.

During 2015, the MAC Science Committee met jointly with the MAC Environment Committee in February and October to collaborate on issues related to the *Fisheries Act*, the *Metal Mining Effluent Regulations* (MMER) and the Environmental Effects Monitoring (EEM) Program.

Metal Mining Effluent Regulations

The multi-stakeholder consultation process for the 10-year review of the MMER, initiated by Environment Canada in 2012, concluded in April 2015. The review considered whether diamond and coal mines should also be regulated, whether new parameters to the MMER should be added, whether to make the limits for currently regulated parameters more stringent, and how to improve the EEM program that is required by the MMER. The multi-stakeholder consultations were carried out by a working group and several sub-groups through meetings and teleconferences.





MAC's engagement in the review was supported by the Committee as well as a Task Force of MAC's Board of Directors. MAC coordinated its input to the review process with the Coal Association of Canada and with provincial and territorial mining associations.

At the final April working group meeting, officials committed to informing stakeholders on the department's conclusions from the review, but that step has not yet occurred.

Canada Mining Innovation Council

The Canada Mining Innovation Council (CMIC) is a national non-profit organization that is working to develop and implement strategies for investment in mining research, development and innovation (RDI) in Canada. One of CMIC's key programs is Towards Zero Waste Mining[™], aimed at stimulating technology innovation in Canada to achieve zero waste in the industry within 10 to 20 years, with an integrated focus on productivity, energy and the environment. The approach will foster a gradual progression and adoption of innovative technologies, promoting more efficient and sustainable operations and reducing the environmental impact of mining projects.

As a supporting member of CMIC, MAC was a member of its Board of Directors until June 2015, and expects to resume membership with a new representative in 2016. MAC works with CMIC to facilitate advocacy meetings with senior levels of government.

MAC is supporting CMIC's bid for funding through the Government of Canada's commitment to investing \$200 million annually to create sector-specific strategies that support innovation clusters and clean technologies.

National Orphaned and Abandoned Mines Initiative

The National Orphaned and Abandoned Mines Initiative (NOAMI) works towards supporting policy development to eliminate future mine abandonment, and improved mine closure and remediation. NOAMI also provides education and engagement opportunities for Aboriginal communities. MAC supports NOAMI as a member of its Advisory Committee, and provides administration and financial support.

A major focus of NOAMI is on relinquishment, or the return of mined lands to the Crown. Since 2013, NOAMI has published two reports on the topic. The first presented case studies and the second presented criteria to assess condition of sites. These reports can be found on NOAMI's website (*www.abandoned-mines.org*). NOAMI expects to continue work on this theme through 2016 with a project evaluating needs for long-term monitoring and maintenance of sites, and the associated costs.

NOAMI is also working to finalize a national inventory of active and inactive mine sites. The inventory will provide an overview and a portal to existing provincial and territorial databases. Such an inventory is important to the development of sound policy, and cost-effective planning for clean-up.

Canadian Ecotoxicology Workshop

MAC was a member of the Canadian Ecotoxicology Workshop (CEW) Advisory Committee until June 2015. In December 2015, MAC was invited to once again be a member of the Advisory Committee, with a different representative. The last CEW was held in Saskatoon in October 2015, and MAC was a workshop sponsor. In the past, the workshop has frequently included a technical session on mining, but this was not the case in 2015, although there were presentations on both uranium mining and oil sands. The Science and Environment Committees recommend that MAC work with the organizers of the 2016 workshop to include a technical session on mining.



Mine Environment Neutral Drainage Program

Since its establishment in 1989, the Mine Environment Neutral Drainage (MEND) program has served as a credible driver of research to enhance understanding of acidic drainage and its prevention. It has accomplished this through a strong focus on innovative, peer-reviewed research driven by a multi-stakeholder steering committee that has maintained two objectives: increasing information and technology transfer. MEND has made great progress in addressing research priorities identified by the Canadian mining industry, civil society, and federal, provincial and territorial governments.

MAC chairs the multi-stakeholder MEND Steering Committee and is the sole source of funding for MEND. These funds act as seed capital to fund research proposals, and for many MEND projects. Funds contributed by MAC are matched or exceeded by monies and/or in-kind contributions from other organizations, including companies, consultants, universities and government departments.

Recent reports completed by MEND were:

- → Role of Nitrate in the Remobilization and Attenuation of Selenium in Coal Mine Waste: assesses the potential links between explosive-derived nitrogen compounds and the remobilization and attenuation of selenium associated with coal mine waste materials.
- → Re-Analysis of Data from Metal Mining Effluent Regulations Environmental Effects Monitoring Program.
- → In-Pit Disposal of Reactive Mine Wastes: Approaches, Updates and Case Study Results: an update of its 1995 report that provides a summary of 12 case studies of in-pit disposal of mine waste at locations around the world.

In 2015, MEND initiated a study of tailings management practices. This project will conduct a detailed examination of alternatives to conventional slurry for the management of tailings (i.e., thickened, paste and filtered tailings) and will document the strengths, limitations and risks of these alternative technologies, as compared to conventional slurry. The study is expected to be complete in 2016.

MEND is supporting a Glencore/McMaster University/Genomics Canada project to increase the understanding of the degradation of thiosalts in treatment systems at the microbial level.



- → The MAC Tailings Working Group (TWG) conducted a review of the tailings management components of the Towards Sustainable Mining (TSM) program, which is comprised of the Tailings Management Protocol and three accompanying Guides.
- → In 2016, the TWG will undertake the process of making proposed revisions to the Guides, in collaboration with the TSM Governance Team and the TSM Initiative Leaders.

TAILINGS WORKING GROUP

Chair: Mike Davies, Vice President, Environment, Teck Resources Limited

The Tailings Working Group (TWG) reviews the management of tailings and mine waste to develop industry guidelines for the safe and environmentally-responsible operation of tailings and water management facilities. It also promotes effective facility management and risk assessment at MAC member facilities and throughout the broader mining industry. The TWG contributes to MAC's Towards Sustainable Mining (TSM) initiative, specifically with the development and implementation of the TSM *Tailings Management Protocol*, and with joint delivery of tailings management workshops.

As described in the report from the TSM Governance Team (Page 7), MAC commissioned an Independent Task Force in March 2015 to undertake a high-level review of the TSM *Tailings Management Protocol* and the three accompanying Guides:

- → A Guide to the Management of Tailings Facilities
- → Developing an Operation, Maintenance and Surveillance Manual for Tailings and Water Management Facilities
- → A Guide to the Audit and Assessment of Tailings Facility Management

The objective of this review was to determine whether deficiencies exist and what and how improvements could be made to the tailings management component of TSM. The report of the Task Force, featuring 29 recommendations for improvement, was completed in November 2015. Upon reviewing the report, the MAC Board of Directors committed to expeditiously identify how to best integrate the recommendations into TSM for implementation.

The TWG, first established in 1996, conducted an internal review of the tailings management component of TSM, independent from but in parallel with the work of the Independent Task Force. The TWG held meetings in April, June and October, and focused its review on three main areas:

- 1. A 'gap analysis' of the existing tailings management framework;
- 2. Evaluation of the need to include more technical components into the guides; and
- 3. Risk assessment and management of critical controls for tailings facilities.

Based on this review, the TWG also believes that the *Tailings Management Protocol* and the three Guides should be revised.



In relation to the Guides, it was felt that the revised versions should:

- → Retain the strong and current emphasis on tailings management systems, and have a stronger emphasis on technical aspects of tailings management, especially those critical to physical and chemical stability of facilities;
- → Explicitly include risk-management and provide a risk-management framework for tailings management; and
- → Address best available technologies and best available practices for tailings management.

The TWG has reviewed the recommendations of the Task Force, and noted a high degree of convergence between the Task Force and TWG recommendations.

In 2016, the TWG will initiate the work required to undertake revisions to the Guides, starting with the *Guide to the Management of Tailings Facilities*, in collaboration with the TSM Governance Team and the TSM Initiative Leaders, and in consultation with MAC's Community of Interest Advisory Panel.

With respect to other related activities in 2015, MAC participated in a workshop entitled "State of Practice in Tailings Management", held in Montreal in May, in conjunction with the CIM Annual Convention. MAC presented an overview of the *Tailings Management Protocol* and Guides, and MAC's internal and external review of the TSM requirements and guidance. The workshop covered a broad range of topics, including:

- → The Mount Polley Independent Expert Panel Report commissioned by the BC Government
- → BC Government actions
- \rightarrow Regulatory processes in Canada, as they apply to tailings facilities
- → The MAC and Canadian Dam Association guidelines and their application
- → Potential areas of research

A panel discussion was held on the role of Aboriginal communities in tailings management, community engagement, mining company and consultant views, and lessons learned.

MAC also gave presentations on its tailings management initiatives and participated in panel discussions at the Canadian Dam Association Conference in October in Mississauga and at the Tailings and Mine Waste 2015 Conference held the same month in Vancouver.

TWG members continue to communicate ongoing improvements to the TSM system for tailings management, and the industry's commitment to adopting best practices in tailings and mine waste management.



- → Provided input to the federal budget through pre-budget submissions, mines ministers briefings and other activities.
- → Released the Levelling the Playing Field report, a study that assesses the cost differential between remote and northern and centrally-located mining projects, and the economic implications that result.

TAXATION COMMITTEE

Chair: Vacant

The Taxation Committee monitors finance-related issues of national importance, advocates for tax changes to enhance industry competitiveness, and serves as a useful network for members to exchange information on tax and fiscal issues.

Federal Budget Engagement

Then Finance Minister Joe Oliver tabled Budget 2015 on April 21, 2015, and was the final budget tabled by the Conservative government. Budget 2015 saw the government return to a slight surplus and did not contain much new spending. Some relevant elements included in Budget 2015 that MAC advocated for included:

- → The one-year renewal of the 15% Mineral Exploration Tax Credit an important tax incentive for the junior exploration sector.
- → Renewal of funding for key areas such as environmental assessment, the Major Projects Management Office, Aboriginal skills training initiatives, and geoscience.

Consultation for Budget 2016 began in June 2015. The consultation was truncated, however, due the federal election. As such, engagement on the budget was effectively postponed until after the new Liberal government assumed power in October 2015. In February 2016, the House of Commons Standing Committee on Finance resumed pre-budget consultations. During this time, MAC submitted its position paper to Finance Canada and appeared before the committee as a witness to inform consultations.

Remote and Northern Tax Study

MAC and partners released the *Levelling the Playing Field* study in May 2015. The report was produced by MAC, the Prospectors & Developers Association of Canada, the Association of Consulting Engineering Companies - Canada, the NWT & Nunavut Chamber of Mines, and the Yukon Chamber of Mines. Throughout the year, MAC highlighted the report's findings and policy recommendations at speaking engagements across the country, including the Nunavut Mining Symposium, the Vancouver Board of Trade, and the Economic Club of Canada. MAC also engaged with elected officials as well as representatives from the federal and territorial governments to highlight opportunities where public policy could facilitate critical infrastructure and mineral development in Canada's remote and northern regions.

The study's main findings were two-fold. First, the costs to explore, build and operate mines are significantly higher in remote and northern regions of Canada's provinces and territories. Second, this cost premium is directly linked to the lack of infrastructure in these areas. Unlike those operating in more southern regions, companies operating in remote and northern areas need to invest in costly, but essential infrastructure like ports, power generation, winter and permanent roads, and accommodation facilities.



In many cases, there are also sparse populations or no people for hundreds of kilometres from the project or mine.

Results indicate that mining capital costs are higher for a range of commodities: 2.5 times higher for base metal mines; approximately double for gold mines; and 15-20% higher for diamond mines in the territories. Exploration costs varied directly with distance from transportation infrastructure, with the most remote project costing six times that of the least remote project.

The study reveals additional strategic investments are warranted to overcome the remote and northern cost burden and to make these regions more competitive for global mineral investment. In the absence of additional public infrastructure investments, the authors recommend taxation policy reform for both the exploration and production phases of mining that will help level the playing field for companies seeking to work in remote and northern regions of Canada.

Policy Recommendations:

- → To support exploration, the group advocates for a new and enhanced federal Mineral Exploration Tax Credit for projects in remote and northern parts of Canada at 25% versus the current 15%, as well as financial incentives to make the costs of drilling for early-stage exploration projects more economically feasible.
- → To support mining companies building and operating in remote and northern areas, the group recommends a base 10% investment tax credit, in addition to either: 1) a 15% investment tax credit for eligible infrastructure; or 2) a pardonable 25% conditionally repayable contribution for infrastructure investments. Flexibility is needed to enhance the project economics for companies in both taxable and tax-limited positions.
- → With infrastructure being a critical need, the group also recommends the establishment of a northern infrastructure investment bank in the territories for mine-related infrastructure that generate public benefits, but do not meet the "public use" criterion of existing federal programs.

MAC intends to continue communicating the results and recommendations of the *Levelling the Playing Field* report, and is considering next steps to expand research to identify how strategic investments in mining can create win-win scenarios that enable government to deliver on broader social and economic development objectives for remote and northern regions. One point of focus is the proposed Canada Infrastructure Bank by the Liberal government, which, depending on design, could prove transformative for remote and northern communities. MAC looks forward to working as constructive partners with government to ensure this mechanism provides the greatest benefit to Aboriginal peoples, northerners and all Canadians.



- → MAC made its submission to the federally-appointed panel undertaking the Statutory Review of the *Canada Transportation Act*.
- → Bill C-52, The Safe and Accountable Rail Act, was tabled and became law.
- → MAC actively engaged with Transport Canada and the International Maritime Organization on marine shipping developments that impact the Canadian mining industry, including on corrosivity testing, moisture management procedures and coal moisture testing methodologies.

TRANSPORTATION COMMITTEE

Chair: Vacant

The Transportation Committee contributes to the federal policy, legislative and regulatory environment for the transport of minerals and metals to enhance the competitiveness of Canada's mining industry.

Each year, Canadian exports of aluminum, gold, nickel, copper, zinc, iron ore, coal, uranium, potash and diamonds amount to tens of billions of dollars. In 2014, Canadian mineral export value reached approximately \$90 billion, representing 18% of Canada's total goods exports. These mineral and metal products account for much of the volume handled at Canadian ports, and around half of total rail freight volume and revenue generated by Canadian railways.

A low-cost, effective and reliable system of marine, rail and truck transportation is essential to the Canadian mining industry's international competitiveness. This is especially important as Canada must compete against other countries that have significantly shorter logistical supply chains. Given that trade starts at home, it is also key to enabling the industry to take advantage of the many trade agreements the government has negotiated.

Rail

Rail freight transportation has been challenging on several fronts. In the last two years, rail service, safety and liability challenges and events have been the subject of significant national media attention and the object of public concern. This has included the Lac-Mégantic disaster in July 2013, the back-log of shipments throughout the winter of 2014, and other long-standing rail service issues faced by many sectors, including the mining industry. These challenges have led the federal government to undertake large-scale reforms through legislation and associated regulations. MAC is monitoring any policy developments relevant to the mining industry and is engaging with government to address the sector's challenges.

The 2015 Statutory Review of the Canada Transportation Act

Further to a comprehensive submission to the Review Panel, MAC and representatives from MAC's member companies participated in several meetings and conferences attended by the Chair of the Review Panel, David Emerson. The Review Panel's final report, complete with recommendations, was submitted to the Minister of Transport in December 2015, and was subsequently tabled in the House of Commons in February 2016. At the time of writing, MAC and members were still digesting the report's contents and are awaiting the government's response.



Bill C-52, The Safe and Accountable Rail Act

The Safe and Accountable Rail Act received Royal Assent on June 18, 2015. At a high level, the legislation establishes minimum insurance levels for railway companies and a supplementary, shipper-financed compensation fund to cover damages resulting from railway accidents involving the transportation of certain dangerous goods. The law, which was two years in the making, is largely consistent with the broad principles that underscored MAC's submission to the consultation. Importantly, it closed a regulatory loophole that permitted the railways to unilaterally impose liability onto the shipper outside the oversight of the Government or Canada.

Marine

MAC's engagement on marine shipping issues focuses on international policy and regulatory developments from the International Maritime Organization (IMO), and the subsequent implementation of these measures domestically into Canadian laws and regulations. Working in partnership with the International Council on Mining and Metals (ICMM), international commodity associations and key domestic stakeholders, MAC focused on domestic and international developments on the implementation of MARPOL Annex V, amendments to the International Maritime Solid Bulk Cargoes Code, and new requirements with respect to product moisture testing and management procedures.

The IMO is the United Nations' special agency responsible for the global safety and security of shipping and the prevention of marine pollution by ships. Recent changes to MARPOL Annex V, which aim to prevent pollution in the marine environment, have raised important questions about impacts to the trade and shipment of certain mining products. As ores and concentrates were largely exempt from earlier programs such as the European Union's REACH (Restriction, Evaluation, Authorisation and Restriction of Chemicals), the IMO has emerged as the global regulator for chemical management of mining products. The mining industry has worked hard to develop a common voice to ensure proportional regulations based on sound science.

MARPOL Annex V

MARPOL is short for the International Convention for the Prevention of Pollution from Ships. Annex V is specifically focused on the treatment of ship garbage. Cargo residues, according to MARPOL, are a form of garbage and are dealt with in Annex V. Recently, amendments to Annex V created a new set of criteria determining that certain cargo residues are no longer allowed to be discharged into the sea as of January 1, 2013. Instead, dry residues and/or wash water containing residues meeting any of the criteria are to be discharged at port reception facilities, thus potentially hampering trade and complicating the shipping element of the logistics supply chain.

MAC and its members have been active on this file, engaging with Transport Canada regulators and the IMO, and providing industry views during the development of Canada's position on issues related to marine shipping.

In the fall of 2015, MAC participated in meetings with the IMO, which focused on the legal status of criteria for cargo deemed Harmful to the Marine Environment (HME), and the shipper's declaration as to whether the cargo meets those criteria or not. A working group produced an amended text for MARPOL Annex V that moves the HME criteria from the non-mandatory guidelines into the mandatory annex of the regulation. It also developed amendments to the International Maritime Solid Bulk Cargoes (IMSBC) code to make the shipper's declaration mandatory – a direct industry ask. It is anticipated that the amendment will be accepted and that the changes will come into effect on January 1, 2019. At this point, it is assumed that the implementation process at the international level – having begun in July 2012 – will be complete. MAC and the industry's efforts over the last four years have resolved potential challenges with HME lists, and the IMO has accepted industry's view that shipper self-classification is the best method for dealing with the variable nature of mineral products.



Moister Management Certification and Testing

Since September 2014, MAC and members of the IMO working group have been engaged with Transport Canada on the issue of complying with enhanced IMO moisture management certification requirements. This engagement led to several member companies receiving their full five-year approvals in 2015.

MAC and its members also advocated for Canada's approval of an improved method to assess the moisture level and transportable moisture limit for coal. The Modified Proctor Fagerberg Method for Coal Moisture Testing was developed by the Australian mining industry, and the Australian Maritime Safety Authority has approved the method for use domestically in Australia in advance of the IMO's formal approval. In July 2015, MAC hosted technical experts from Australia at an industry workshop in Vancouver to learn more about the model. MAC is currently seeking domestic approval in Canada in advance of the IMO's formal approval and has briefed Transport Canada on the subject. The department has indicated support for the method and informed MAC of its intention to assess early adoption in Canada.

Corrosivity Testing

A recent amendment to the IMSBC Code introduced criteria for identifying materials that are hazardous only in bulk. One of these criteria, corrosivity, requires the use of a test that was developed for liquids and solids that may become liquid. However, it has never been validated for solids, such as mineral concentrates.

The mining and metals concentrate industry has been assessing the properties of several solid bulk cargoes using this test and experienced a number of issues. As such, the industry supports developing a new or modified test that would be fully relevant and reliable for solid materials that may not become liquid during transport. To support this effort, MAC is working with members companies and other mining organizations and technical groups to help engage regulators on this issue. For example, MAC supported the development of ICMM's paper on this subject, and much of the substantive and constructive feedback the industry received came from Canadian regulators.



- → The federal government brought into force the Extractive Sector Transparency Measures Act, which was largely based on the framework developed by MAC and fellow members of the Resource Revenue Transparency Working Group.
- → Published a site-level grievance mechanism guide to assist companies in overcoming common implementation barriers.
- → Professor John Ruggie, former Special Representative of the UN Secretary-General on Business and Human Rights, pointed to Canada's National Contact Point process within the federal government's renewed CSR Strategy as a leading practice.
- → Continued constructive dialogue with Canadian faith-based organizations on issues related to mining and international development.

INTERNATIONAL SOCIAL RESPONSIBILITY COMMITTEE

Chair: Alanna Heath, Vice President, Government Affairs, Barrick Gold Corporation

The International Social Responsibility Committee's (ISR) mandate is to review international issues that affect the interests of the members, as well as identify emerging issues, set priorities, and develop policy advice and strategies for the MAC Board of Directors.

In 2015, the ISR Committee's work continued to be guided by the strategic plan it developed in 2014 to help guide its activities in the following areas:

- 1. Leadership in human rights
- 2. Monitoring and exploring emerging issues
- 3. Government engagement
- 4. Strategic civil society engagement
- 5. Improved international social responsibility performance

Extractive Sector Transparency Measures Act

In 2012, MAC partnered with Publish What You Pay-Canada, the Natural Resources Governance Institute and the Prospectors & Developers Association of Canada, forming the Resource Revenue Transparency Working Group (RRTWG). The group, which drew on the expertise of industry and civil society, worked towards informing Canada's development of a mandatory disclosure mechanism that would help establish greater transparency in the mining industry in Canada and overseas.

As a result, communities would have access to the financial information they need to hold their governments accountable for the responsible use of mining revenues.

For nearly two years, the RRTWG worked collaboratively on recommendations that would inform the development of regulations requiring the mandatory disclosure of payments made to governments derived from mining activities.

The RRTWG published its final framework in January 2014. Later that year, the federal government tabled the *Extractive Sector Transparency Measures Act*, which closely mirrored the working group's framework. The Act received Royal Assent a month later and came into force on June 1, 2015.

In 2015, Natural Resources Canada formed a multi-stakeholder working group, including mining, oil and gas and civil society representatives, to develop a guidance document and technical specifications to help companies comply with the requirements of the legislation. These documents were published in early 2016.

Human Rights - Remedy and Site-Level Grievance Mechanisms

In 2014, the ISR Committee began working on a guide to help companies overcome common challenges when implementing site-level grievance mechanisms—an important community relations tool that helps to ensure that community complaints are heard and addressed effectively by companies.

After a rigorous third-party review by several leading experts on dispute resolution, the guide was finalized and published in 2015 in English, French and Spanish. MAC's guide underscores the importance of dispute resolution at an early stage and at the community level, and will help companies build more effective site and community level grievance mechanisms. It also complements other guidance documents, which address the design elements of grievance mechanisms. With this project, MAC took an additional step forward in its efforts to identify CSR challenges and contribute to solutions.

OECD Stakeholder Engagement Due Diligence Project

Since 2013, MAC has been working with industry and civil society representatives on the development of an OECD guide focused on due diligence in stakeholder engagement as it applies to extractive industries. This project is sponsored jointly by Canada and Norway and was accepted as part of the OECD Proactive Agenda that covers topics relevant to mining, including work on artisanal and small-scale mining, conflict minerals and profit shifting (transfer pricing).

To guide this project, the OECD formed a multi-stakeholder advisory group, co-chaired by Canada and Norway, in June 2013.

At the request of the Government of Canada, MAC joined other associations on this advisory group, such as the International Council on Mining and Metals and the World Gold Council, to ensure the guide is useful for industry. MAC brings its expertise derived from the TSM initiative which, through the Aboriginal and Community Outreach Protocol, has established a useful, site-level tool for due diligence on engagement systems.

In 2015, the guide produced by the advisory group received final approval from the OECD. MAC is assisting the OECD in promoting the guide, as it is closely aligned with the TSM Aboriginal and Community Outreach Protocol and will be a useful tool for companies seeking to implement engagement systems based on the TSM system.

Canada's Extractive Sector CSR Strategy

In late 2014, the federal government launched a new Extractive Sector Trade Strategy and an enhanced CSR Strategy, which included recommendations developed by MAC's ISR Committee.

For example, it strengthened the roles of the Office of the Extractive Sector CSR Counsellor and the OECD National Contact Point and introduced consequences for companies that choose not to participate in the process.

This enhanced strategy sends a welcome signal that Canada supports and promotes a strong and vibrant Canadian mining sector both at home and abroad.

The Government of Canada is also setting a high bar for corporate responsibility performance and furthering Canada's position as a global leader in the extractive sector. Improvements to the strategy attracted the notice of Professor John Ruggie who, in 2015, was commissioned by the OECD to undertake a review of the National Contact Point (NCP) network.

As part of that review, Mr. Ruggie cited Canada's decision to establish consequences for non-participation as "an example that deserves to be emulated more widely within the NCP community"¹.

Outreach and Engagement

In 2015, the ISR Committee continued to engage with faith-based organizations. In the spring, the Committee organized a day of dialogue in Toronto with KAIROS, which brought together members of both MAC and KAIROS to discuss issues pertaining to Aboriginal rights and poverty alleviation. The topic of climate change also featured prominently in the discussion.

In the fall, MAC participated in the second annual mining dialogue organized by St. Paul's University. This half day symposium featured a variety of speakers and was primarily focused on mining and human rights abroad.



1 Ruggie, J., and Nelson, T., Human Rights and the OECD Guidelines for Multinational Enterprises: Normative Innovation and Implementation Challenges. Working Paper No. 66, May 2015.



Plans for 2016

The ISR Committee has identified a number of priorities as it implements its new strategic plan in the year ahead. Highlights of these priorities include:

Leadership in Human Rights

- → Explore the possible development of a new MAC membership commitment to implement the Voluntary Principles (VPs) on Security and Human Rights.
- → Define a process whereby MAC members can demonstrate alignment with standards endorsed by the federal government, such as the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multi-National Enterprises.
- → Promote MAC's new Site-Level Grievance Mechanism Guide.

Monitoring and Exploring Emerging Issues

- \rightarrow MAC has identified three key areas to monitor and will react accordingly:
- 1. the international application of FPIC;
- 2. corruption and anti-bribery compliance; and
- 3. tax issues related to profit shifting, base erosion, transfer pricing and international tax planning.

Government Engagement

- → Continue to engage with the Canadian International Resource and Development Institute to help ensure its successful implementation.
- → Engage with the Government of Canada to support the successful implementation of Canada's enhanced CSR Strategy.

Strategic Civil Society Engagement

- → Leverage membership in the Devonshire Initiative to enhance engagement opportunities with development-oriented NGOs.
- → Build on dialogue efforts with Canadian faith-based organizations, and explore opportunities to connect domestic initiatives with similar activities taking place at the international level.
- → Continue outreach with the socially-responsible investment community through Businesses for Social Responsibility to help improve CSR-related research activities.



- → Monitored government progress on setting targets and regulations for greenhouse gas emissions.
- → Continued measuring and reporting emissions of MAC member companies.
- → Improved company results under the TSM Energy Use and Greenhouse Gas Emissions Management Protocol.

ENERGY COMMITTEE

Chair: Chris Adachi, Leader, Energy and Carbon Management, Teck Resources Limited

The Energy Committee promotes overall energy management, including improved energy efficiency and greenhouse gas intensity performance.

Energy Efficiency and Greenhouse Gas Reduction

The Energy Committee encourages continuous improvement in enhancing energy efficiency and reducing greenhouse gas (GHG) emissions among MAC members' facilities. Every year, the committee engages the Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC) to prepare industry data on energy, and GHG consumption and emissions. For example, according to CIEEDAC's 2015 report, direct emissions from Canada's metal and non-metal mines (excluding coal and oil sands mining) accounted for just 1.1% of the country's direct and indirect GHG emissions in 2014. Meanwhile, non-ferrous metal smelting and refining (excluding aluminum) accounted for 0.5% of the country's direct and indirect emissions in the same year.

MAC also participates in the Canadian Industry Program for Energy Conservation, serves as Co-Chair of the Mining Sector Task Force, and engages in the Mining Sector Energy Management Dialogue.

Towards Sustainable Mining: Energy Use and GHG Emissions Management

Improving energy efficiency and reducing GHG emissions are priorities for the Canadian mining industry to limit impacts on the environment and to help reduce operational costs at mine sites.

The energy use and GHG emissions management protocol has three indicators that seek to confirm whether a facility has established a comprehensive system for energy use and GHG emissions. For this protocol, a facility must show its management system includes assigned accountability from senior management, and that it has a process in place to ensure energy data are reviewed regularly and are well integrated into operator actions. Facilities are also expected to provide energy awareness training, and have systems in place to track and report energy use and GHG emissions data for both internal and external reporting. Finally, in TSM's spirit of continuous improvement, this protocol seeks to confirm that facilities establish and meet targets for their energy use and GHG emissions performance. In 2014, 75% of facilities reported a Level A or higher for having a comprehensive energy use and GHG emissions management system – an increase of 17% year-over-year.

Climate Change

MAC and its members have been involved in federal consultations on measures to regulate GHG emissions for many years. Although the process has been slow, progress has been made in some areas. For example, the federal government announced standards for heavy-duty vehicle fuel efficiency and coal-fired power plant efficiency.



In 2014, the government announced regulations governing the use of industrial boilers.

MAC continues to highlight the importance of global competitiveness, the uniqueness of specific facilities and situations, and individual members' progress on increasing energy efficiency and reducing GHG emissions. MAC has also informed the federal government that the mining industry seeks a simple, low-cost and single-window reporting system under any proposed federal GHG regulatory regime. Given the many different targets and tools that have emerged at the provincial level in recent years, it is clear that developing a single, consistent national policy and reporting system will be difficult, but needed to avoid cumbersome and unnecessary duplication of efforts. Further, MAC continues to emphasize the role that energy efficiency and process investment could play in dealing with climate change, clean air and productivity issues.

Following the election of the new Liberal government in Ottawa in October 2015, and its campaign promise to put a price on carbon, MAC was given a mandate by its Board of Directors to review the association's existing climate change policy, and present an updated climate change policy to the Board for consideration. MAC established a task force from a cross section of committees within the association, including the energy committee, and set forth developing a principles for climate change policy design document. By year end 2015, the group had made progress, and was tracking to present a draft to the Board for consideration at MAC's March 2016 meeting.

Canadian Industry Program for Energy Conservation to Fund TSM

The Canadian Industry Program for Energy Conservation has made funding available for mining companies that are working to attain a Level A or higher in the TSM Energy Use and GHG Emissions Management Protocol. The partnership has been designed to provide cost-shared assistance of up to 50% of eligible costs to a maximum of \$40,000 to perform energy management systems implementation, process integration studies and/or computational fluid dynamics studies. The investment is a significant endorsement of MAC's TSM initiative by the federal government, and is indicative of an increasing and broader level of recognition of the merit of TSM as an effective sustainability standard.





2015 Highlights

- → The release of the Levelling the Playing Field report, documenting the high costs of operating in Canada's North and the opportunities for socio-economic development with the building of strategic infrastructure.
- → Regulatory developments in the Northwest Territories under Bill C-15, the Northwest Territories Devolution Act.
- → Bill S-6 received Royal Assent, amending the Yukon Environmental and Socio-economic Assessment Act.

NORTHERN AFFAIRS COMMITTEE Chair: Vacant

The Northern Affairs Committee contributes to the federal policy, legislative and regulatory environment to enhance the competitiveness of Canada's mining industry across the three territories.

The mining industry is the single largest private sector economic driver across Canada's territories and is a major employer. The opportunity for responsible mineral development is strong with an estimated \$35 billion in investment potential across the territories given the right market and investment conditions.

Despite Canada's current leadership in mining, there are two main indicators that suggest the industry's long-term viability is challenged: reserves for several base metals have experienced significant declines since the 1980s, and production volumes of key commodities have also been declining compared to other mining countries. Resolving these issues involves increasing exploration activity to make more discoveries as a means of replacing declining reserves, and then bringing new and existing discoveries into production. Remote and northern parts of Canada hold the key to resolving both challenges.

Locating, developing and operating mines in Canada's North is challenging. Raising awareness of the costs, challenges and opportunities that mining presents for northern Canada is a key priority of MAC's Northern Affairs Committee. The Committee's key focus is to work with governments to ensure the industry has a clear, effective and efficient regulatory permitting process, and to highlight the need for strategic infrastructure investments.

Levelling the Playing Field

In May 2015, MAC, the Prospectors & Developers Association of Canada, the Association of Consulting Engineering Companies-Canada and the three territorial mining chambers released the *Levelling the Playing Field* report.

The study's main findings were two-fold. First, the costs of mineral exploration and building and operating mines are significantly higher in remote and northern regions of Canada's provinces and territories. Second, this cost premium is directly linked to the lack of critical infrastructure in these areas, such as ports, power, and winter and permanent roads. In many cases, there are also sparse populations or no people for hundreds of kilometres from the project or mine.

The study reveals strategic investments are needed to level the playing field and make these regions more competitive for global mineral investment.



In the absence of additional public infrastructure investments, the authors recommend the following taxation policy reform:

- → To support exploration, increase the federal Mineral Exploration Tax Credit for projects in remote and northern parts of Canada to 25% versus the current 15%, and establish financial incentives to make the costs of drilling for early-stage exploration projects more economically feasible.
- → To support mining companies in building and operating in remote and northern areas, establish a base 10% investment tax credit in addition to either: 1) a 15% investment tax credit for eligible infrastructure; or 2) a pardonable 25% conditionally repayable contribution for infrastructure investments. Flexibility is needed to enhance the project economics for companies in both taxable and tax-limited positions.
- → With infrastructure being a critical need, establish a northern infrastructure investment bank in the territories for mine-related infrastructure that generates public benefits, but does not meet the "public use" criterion of existing federal programs.

Over the course of the year, MAC actively engaged with federal, provincial and territorial officials and other stakeholders to communicate the study's results and recommendations. MAC was pleased to see the Liberal government's commitment to develop the Canada Infrastructure Bank as it seems to align with the recommendation in our report. In 2016, MAC will be engaging constructively with government on this policy commitment.



Inukshuk, Rankin Inlet, Nunavut

Regulatory Environment

In 2015, there were legislative and other regulatory developments that affected the mineral project permitting process in each of the territories.

Northwest Territories

Since the enactment of Bill C-15, the *Northwest Territories Devolution Act*, in March 2014, the federal government has been moving forward with plans to amend regulations under the *Mackenzie Valley Resource Management Act* (MVRMA). Specifically, Bill C-15 proposed to consolidate the four Mackenzie Valley Land and Water Boards into one board. This move has been a source of contention amongst Aboriginal governments in the region. In February 2015, the Supreme Court of the NWT granted an injunction in favour of the Tlicho Aboriginal Government, delaying the government's plans for the amalgamation of the Land and Water Boards. This was appealed the following month by the federal government. Following the federal election, the new government put a hold on the appeal.

In the meantime, the NWT Land and Water Boards have continued MVRMA business as established prior to Bill C-15. As a result of the injunction, plans to incorporate certain associated components of Bill C-15 have been affected. MAC and industry partners have been engaged on this legislation from the outset through the consultation, legislative and subsequent regulatory phases, and will remain active in this process going forward.



Yukon

Bill S-6, An Act to amend the Yukon Environmental and Socio-economic Assessment Act and the Nunavut Waters and Nunavut Surface Rights Tribunal Act, received Royal Assent in June 2015. MAC participated in the consultation and legislative processes leading up to this as a stakeholder.

Concerns amongst First Nations communities and governments over the level of consultation led to calls for four amendments in the Bill to be rescinded during the federal election campaign in 2015. In early 2016, the new government launched a consultation process to address the concerns related to the following four amendments that were included in Bill S-6:

- → Time limits on the review process;
- → Exempting a project under assessment when an authorization is renewed or amended, unless there has been a significant change to the project;
- \rightarrow Ability for the federal minister to provide binding policy direction to the Board; and
- → Ability to delegate the federal minister's powers, duties or functions under the Act to the territorial government.

At the time of writing, MAC was actively participating in a consultation with officials and other stakeholders on whether these amendments should be rescinded or not.

Nunavut

The *Nunavut Planning and Project Assessment Act* (NUPPAA) became law on July 9, 2015. The Act provides the regulatory framework for land use planning and environmental assessment in Nunavut. MAC had engaged actively in the consultation and legislative processes that led to the legislation's enactment.





2015 Highlights

- → Supported the federal government's negotiation of Foreign Investment Promotion and Protection Agreements and Free Trade Agreements.
- \rightarrow Monitored and responded to trade and economic developments.

INTERNATIONAL TRADE AND INVESTMENT

MAC monitors and participates in government trade activities and works to promote open flows of trade and investment to enhance the international competitiveness of the Canadian minerals and metals industry.

The mining industry ranks alongside financial services and oil and gas as the most international of Canada's industry sectors. The industry accounted for over 18% of the value of Canadian goods exports in 2014, and 10% of Canada's stock of direct investment abroad in 2013. Canada is also a global hub for mining finance, with the Toronto Stock Exchange (TSX) and TSX Venture Exchange (TSX-V) hosting 57% of the world's publicly-listed mining companies. In 2014, 62% of all global mining equity financings were handled on the TSX and TSX-V.

Canada's success in mining is influenced in part by the federal government's trade efforts. This includes the overseas network of embassies and trade commissioners, the trade finance capacity through Export Development Canada, and an array of Free Trade Agreements (FTAs) and Foreign Investment Promotion and Protection Agreements (FIPAs).

Foreign Investment Promotion and Protection Agreements

In recent years, the federal government adopted an ambitious agenda to broaden and modernize Canada's trade infrastructure. As of December 31, 2015, Canada had 30 FIPAs in force. Canada had also signed an additional six agreements, had concluded a further five agreements, and remained engaged in negotiations with five others. MAC monitors and feeds into Canada's negotiation efforts on these agreements on a regular basis.

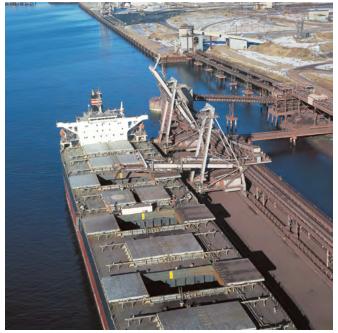
FIPAs are bilateral agreements that place investment-treatment obligations on each country. They also give foreign investors access to independent rules and arbitrators should disputes arise between the investor and the host government. These mechanisms provide Canada's overseas investors with an added layer of security and, while the enforcement components are rarely used, the mere existence of a FIPA gives foreign governments a set of rules on fairness and transparency.

Free Trade Agreements

By December 31, 2015, Canada had 12 FTAs in force, had concluded negotiations with 30 other countries, participated in ongoing negotiations with eight other countries, and had entered into exploratory discussions with four others.

Following the September 2014 final agreement between Canada and the European Union (EU) on a Comprehensive Economic and Trade Agreement (CETA), the document proceeded through the legal scrubbing process over the course of 2015. The EU is Canada's second largest export market for Canadian metals, the third largest market for non-metals, and the fourth largest market for mineral fuels. Between 2010 and 2012, Canada exported an average of \$20.4 billion worth of metal and mineral products annually to the EU. Key exports included gold, nickel, diamonds, aluminum and iron ore. Upon implementation, the new agreement will eliminate 98% of Canadian and EU tariffs, while phasing out remaining tariffs over time.





Port of Sept-Îles

Beyond the reduction of tariffs for metal products, the agreement expands into areas of investment, labour mobility and enhanced regulatory cooperation.

CETA is the first bilateral trade agreement in which Canada has included provisions on regulatory cooperation. By fostering cooperation earlier in the regulatory process, differences in approaches between Canada and the EU may be reduced, resulting in fewer barriers to trade once regulations are put into place. MAC had regular engagements with Canadian negotiators and periodic engagements with European negotiators over the course of the agreement, advancing issues such as labour mobility and regulatory cooperation.

On October 5, 2015, Canada and partners announced the conclusion of negotiations on the Trans-Pacific Partnership (TPP). The TPP is a multilateral trade negotiation that currently comprises 12 countries: the United States, Australia, Japan, Mexico, New Zealand, Singapore, Malaysia, Vietnam, Peru, Chile, Brunei Darussalam, and

Canada. Together, these countries represent a market of nearly 800 million consumers and a combined GDP of \$28.5 trillion – nearly 40% of the global economy. Canada's exports of metals and minerals to TPP countries were worth on average \$158.6 billion per year from 2012 to 2014. Through the reduction of tariffs, operators in Canada stand to gain significantly with TPP partners. For example, Japan currently applies tariffs of up to 7.9%, Vietnam of up to 40%, Malaysia of up to 50%, Australia of up to 5%, New Zealand of up to 10%, and Brunei of up to 20%.

The TPP negotiations also address numerous challenges that companies currently face in getting products, people, and services across borders on a day-to-day basis. As one of Canada's largest outward investing sectors – accounting for 10% (\$81.5 billion) of the 2013 total – benefitting from the greater certainty, transparency, and foreign investment protection that the TPP will bring is important for the mining industry to remain competitive on the world stage. MAC had regular engagements with Canadian negotiators over the course of the negotiations on topics of labour mobility and regulatory cooperation.

Ongoing free trade negotiations of interest to the Canadian mining industry include Japan, Dominican Republic, and India. MAC remains actively engaged with the federal government on these negotiations and other investment issues, as well as the implementation of policy responses on international corporate social responsibility.

In its meetings and discussions with foreign governments, MAC highlights the importance of efficient regulatory processes, modern infrastructure, investment in geological mapping and openness to foreign investment. Two-way flows of foreign investment can provide important conduits for gaining access to new technology, management skills and foreign market opportunities.

Additionally, it is critical to recognize that trade begins at home. Companies require access to the transportation infrastructure that will enable them to move their products to tide waters and to take advantage of newly-created market share. As such, MAC communicates to policymakers the importance of Canada's transportation system to the country's ability to capitalize on trade opportunities and compete against other countries with more robust transportation supply chains.



MINING INDUSTRY HUMAN RESOURCES COUNCIL

Executive Director: Ryan Montpellier Board Chair: Ingrid Hann, Head of Human Resources, De Beers Canada

The Mining Industry Human Resources Council (MiHR) is a non-profit, independent organization with a mandate to identify and address the HR and labour market challenges facing the Canadian mining sector. The organization is financially supported by the Mining Association of Canada, and receives the majority of its funding from the Government of Canada and revenue from program activities.

Key Activities of MiHR:

- → Labour Market Trends, Intelligence and Research: Provides industry and stakeholders with a centralized, trusted and responsive knowledge centre for minerals and metals labour market trends, intelligence, and research.
- → **Optimizing Human Resources Supply:** Develops and distributes tools that help employers effectively engage all potential sources of labour, including women, Aboriginal people and new Canadians.
- → Standards and Workforce Readiness: Develops and maintains a suite of National Occupational Standards and accompanying essential skills resources for select mining occupations.
- → Credentials and Recognition: Recognizes and promotes the skills of individuals through certification, and through the achievements and practices of employers and training providers.

MiHR contributes to the strength, competitiveness and sustainability of the Canadian minerals and metals sector by leading the collaboration of industry stakeholders in the development of solutions to national HR challenges. The Council is governed by a 15-person Board of Directors that provides direction and support to ensure that the stated mission, values and activities deliver tangible results for industry. Members of the Board represent a cross-section of MAC member companies, contractors, organized labour, and educators from across Canada. MiHR also brings together a network of over 250 industry volunteers to help inform its research and guide its project committees.

Labour Market Trends, Intelligence and Research: Highlights

National Labour Market Information: MiHR's labour market information (LMI) forecasting model is sector specific and is recognized as the go-to labour market resource for industry and stakeholders. The 2016 report will feature new analysis, including forecasts of the skills and qualifications requirements, an examination of the changes to the occupational structure of the mining workforce over time, an analysis of the talent pipeline for the mining industry, and a discussion about disability and the search for talent.

Regional Labour Market Information:

MiHR has completed, or is in the process of developing, the following regional labour market reports:

- → Saskatchewan Mining Industry Hiring Requirements and Available Talent Forecasts, 2015
- → Newfoundland and Labrador Mining Industry Hiring Requirements and Available Talent Forecasts, 2015
- → BC Mining Industry Hiring Requirements and Available Talent Forecasts, 2016 (in progress)



Optimizing Human Resources Supply: Highlights

Mining Alternative Careers for Immigrants: This three-year project will help immigrants living in Canada as well as Immigrant Serving Agencies by increasing their awareness of and access to accurate information about the Canadian mining sector, its careers, and the potential transferability of international skills and knowledge leading to employment in the sector. The intent of the project is to help reduce the industry's need for temporary foreign workers in the long term.

Gender Equity in Mining: The aim of this project is to expedite the institutional change necessary to improve gender equity in the Canadian mining and minerals industry through the application of tools, strategic human resources processes, and change agent activities for the sector.

Standards and Workforce Readiness: Highlights

National Occupational Standards and the Office of the Registrar: MiHR, in collaboration with the industry, creates National Occupational Standards (NOS) for key mining occupations. Certifying workers to industry-defined standards ensures that the training, skills and experience of existing and new workers meet the needs of employers. It also helps to create and support the ongoing growth of a highly-skilled labour pool that will enhance recruitment and retention. MiHR's new NOS project funding (2014-2017) was used to revise three current standards in 2015 (Underground Miner; Surface Miner; and Minerals Processing Operator) and add three new standards (Industry Trainer; Hoist Operator; and Frontline Supervisor) by 2016.

Mining Essentials: This work readiness training program was developed in partnership with the Assembly of First Nations to meet two goals:

- 1. to provide Aboriginal peoples with the skills and confidence needed to enter the mining workforce; and
- 2. to provide industry with a ready-to-work, local workforce based on a nationally-validated preemployment program. Since the program's inception, learners have achieved a 75% graduation rate and approximately 75% of graduates are employed or have returned to education.

Credentials and Recognition: Highlights

The Canadian Mining Certification Program (CMCP): The CMCP has now certified more than 1,100 workers. The program is governed by a multi-stakeholder certification standing committee, which reports to the MiHR Board. Companies implementing this program include: Teck Resources Limited, Glencore, Rio Tinto-Diavik, Cementation, New Gold, De Beers, Imperial Oil Esso (Kearl), Boart Longyear, and others. National certification is available for workers in the following occupational groups: Underground Miners; Minerals Processing Operators; Surface Miners; and Diamond Drillers.

For more information on the MiHR Council or any of its programs, visit *www.mihr.ca* or contact MiHR's Executive Director, Ryan Montpellier, at **rmontpellier@mihr.ca**.



MAC BOARD OF DIRECTORS

Chair: Bob Steane, Cameco Corporation Brent Bergeron, Goldcorp Inc. Brendan Cahill, Excellon Resources Inc. David Clarry, HudBay Minerals Inc. Alan Coutts, Noront Resources Ltd. Blair Dickerson, Rio Tinto Canada Robert Gallagher, New Gold Inc. Caitlin Glynn-Morris, First Quantum Minerals Pierre Gratton, Mining Association of Canada Louise Grondin, Agnico Eagle Mines Limited Tony Guthrie, De Beers Canada Inc.* Alanna Heath, Barrick Gold Corporation Elliot Holland, Dominion Diamond Corporation John Kearney, Canadian Zinc Corporation Pierre Lapointe, ArcelorMittal Exploitation Minière Canada s.e.n.c. Pierre Lebel, Imperial Metals Corporation Don Macdonald, KGHM International John McConnell, Victoria Gold Corporation** John McManus, Taseko Mines Limited Cory McPhee, Vale** Adam Miller, Royal Canadian Mint Krista Muhr, Eldorado Gold Corporation** Ed Opitz, Kinross Gold Corporation Tom Paddon, Baffinland Iron Mines Corporation Norm Pitcher, Eldorado Gold Corporation* George Read, Shore Gold Inc. Peter Read, Syncrude Canada Ltd. Marny Reakes, BHP Billiton Derek Riehm, Lundin Mining Corporation Brad Ryder, Glencore Canada Walter Sencza, Newmont Canada Corporation Marcia Smith, Teck Resources Limited Gordon Stothart, IAMGOLD Corporation Kristan Straub, Glencore Canada** Kelly Strong, Nyrstar Travis Temple, HudBay Minerals Inc. Eira Thomas, Kaminak Gold Corporation** Anne Marie Toutant, Suncor Energy Inc. Mark Travers, Vale* Kim Truter, De Beers Canada Inc.** Paul West-Sells, Western Copper and Gold Corporation Penggui Yan, HD Mining International Ltd. Scott Yarrow, Glencore Canada* Peter Zebedee, Shell Canada Energy Inc.

EXECUTIVE COMMITTEE

Brent Bergeron, Goldcorp Inc. David Clarry, HudBay Minerals Inc. Pierre Gratton, Mining Association of Canada Alanna Heath, Barrick Gold Corporation Elliot Holland, Dominion Diamond Corporation John Kearney, Canadian Zinc Corporation Cory McPhee, Vale** Peter Read, Syncrude Canada Ltd. Marcia Smith, Teck Resources Limited Bob Steane, Cameco Corporation Gordon Stothart, IAMGOLD Corporation Kristan Straub, Glencore Canada** Travis Temple, HudBay Minerals Inc. Anne Marie Toutant, Suncor Energy Inc.

OFFICERS

Bob Steane, Chair Anne Marie Toutant, Vice-Chair Gordon Stothart, Vice-Chair Travis Temple, Treasurer Pierre Gratton, President and CEO and Secretary

HONORARY LIFE MEMBERS

Jim Carter Doug Horswill William James Norman Keevil

*Left MAC Board in early 2016 **Joined MAC Board in early 2016



TSM GOVERNANCE TEAM

Chair: Louise Grondin, Agnico Eagle Mines Limited* Karina Briño, Mining Association of British Columbia David Clarry, HudBay Minerals Inc. Caitlin Glynn-Morris, First Quantum Minerals Ltd. Pierre Gratton, Mining Association of Canada Glen Koropchuk, De Beers Canada Inc. Josée Méthot, Association minière du Québec Shirley Neault, HudBay Minerals Inc. Tom Paddon, Baffinland Iron Mines Corporation Nicole Piggott, Iron Ore Company of Canada* Peter Read, Syncrude Canada Ltd. Marcia Smith, Teck Resources Limited Kristan Straub, Glencore Canada** Anne Marie Toutant, Suncor Energy Inc. Mark Travers, Vale Federico Velasquez, Anglo American Penggui Yan, HD Mining International Ltd. Scott Yarrow, Glencore Canada* Peter Zebedee, Shell Canada Energy Inc. *Left in early 2016 **Joined in early 2016

COMMUNITY OF INTEREST (COI) ADVISORY PANEL

Dan Benoit, Aboriginal Category Theresa Hollett, Aboriginal Category Timothy Johnston, Economic and Community Development Category Joy Kennedy, Social NGO Category (includes faith-based groups) Stephen Kibsey, Finance and Investment Category Chief Earl Klyne, Aboriginal Category Nathan Lemphers, Environmental NGO Category Doug Olthuis, Labour and Workplace Category Philip Oxhorn, International Development Category Alan Penn, Expert Category Claudine Renauld, Media and Communications Category Maya Stano, Expert Category Dave Walkem, Economic and Community Development Category Alan Young, Environmental NGO Category* Luc Zandvliet, Expert Category *Left position on Panel in early 2016

INDUSTRY REPRESENTATIVES ON THE COI PANEL

Pierre Gratton, Mining Association of Canada Louise Grondin, Agnico Eagle Mines Limited Josée Méthot, Association minière du Québec Shirley Neault, HudBay Minerals Inc. (observer) Peter Read, Syncrude Canada Ltd. Mark Travers, Vale Mark Wiseman, Avalon Rare Metals Inc. Scott Yarrow, Glencore Canada

TSM INITIATIVE LEADERS

Chair: Shirley Neault, HudBay Minerals Inc. Vice Chair: Shane Borchardt, Cameco Chris Adachi, Teck Resources Limited Tracy Anderson, First Quantum Minerals Ltd. Delphine Bastien, ArcelorMittal Exploitation Minière Canada s.e.n.c. Kim Bittman, Taseko Mines Limited Chris Browne, Vale Bob Butler, Glencore Canada Carolyn Chisholm, Rio Tinto Canada Chantal Clement, Goldcorp Inc. Larry Connell, Agnico Eagle Mines Limited Nick Cotts, Newmont Hope Bay Mining Ltd. Bryan Cox, Mining Association of British Columbia Louie Cyrenne, Iron Ore Company of Canada Art Frye, Imperial Metals Corporation Joe Fyfe, Glencore Canada Patrice Gilbert, Agnico Eagle Mines Limited Bronwyn Gorsline, Goldcorp Inc. Sonia Gupta, Suncor Energy Inc. Mario Julien, Glencore Canada Laurie Kelly, Teck Resources Limited Ed Kniel, Teck Resources Limited Mark Kruger, Syncrude Canada Ltd. Patrick Lauzière, Iron Ore Company of Canada Claudine Lee, Dominion Diamond Corporation Emma Leith, Agnico Eagle Mines Limited Chantae Lessard, Lundin Mining Corporation Janice Linehan, Suncor Energy Inc. Valérie Maltais, KGHM International Kristen Mariuzza, Lundin Mining Corporation Stephanie Marshall, Glencore Luke Moger, Imperial Metals Corporation Loris Molino, Vale Sebastien Moreau, ArcelorMittal Exploitation Minière Canada s.e.n.c. Michael Patterson, Anglo American Metallurgical Coal Canada Serge Pelletier, BHP Billiton Nicole Pesonen, Nyrstar David Putnam, De Beers Canada Inc. Gina Rau, Barrick Gold Corporation Lyle Safronetz, Vale Johan Skoglund, Nyrstar Roger Souckey, Goldcorp Inc. Gail Susana Ross, Barrick Gold Corporation Denis Therrien, Agnico Eagle Mines Limited Nathalie Tremblay, Association minière du Québec Dean Williams, Kinross Gold Corporation Dennis Wilson, New Gold Inc. Lynda Wilson-Hare, Glencore Canada Steve Woolfenden, IAMGOLD Corporation Scott Wytrychowski, Shell Canada Energy Inc.



Chair: Alanna Heath, Barrick Gold Corporation Vice-Chair: David Clarry, HudBay Minerals Inc. Grace Barrasso, IAMGOLD Corporation David Barrett, Eldorado Gold Corporation Brendan Cahill, Excellon Resources Inc. Dominic Channer, Kinross Gold Corporation Dale Coffin, Agnico Eagle Mines Limited Silvana Costa, New Gold Inc. Nick Cotts, Newmont Hope Bay Mining Ltd. Stephen Crozier, IAMGOLD Corporation Aidan Davy, International Council on Mining and Metals Christian Del Valle, Goldcorp Inc. Blair Dickerson, Rio Tinto Canada Mark Edwards, Teck Resources Limited Caitlin Glynn-Morris, First Quantum Minerals Ltd. Marie Inkster, Lundin Mining Corporation Simon Jimenez, Barrick Gold Corporation Matt Johnson, Lundin Mining Corporation Nadim Kara, Prospectors and Developers Association of Canada Etienne Lamy, Rio Tinto Canada Chantae Lessard, Lundin Mining Corporation Nicola Main-Thomson, Shell Canada Energy Inc. Kristen Mariuzza, Lundin Mining Corporation Cory McPhee, Vale Krista Muhr, Eldorado Gold Corporation John Mullally, Goldcorp Inc. Erica Myles, Shell Canada Energy Inc. Stephen Nairne, Lundin Mining Corporation Ed Opitz, Kinross Gold Corporation Channa Pelpola, Teck Resources Limited Mac Penney, Kinross Gold Corporation Jay Schlosar, Teck Resources Limited Alexandra Sewell, IAMGOLD Corporation Roger Souckey, Goldcorp Inc. Tricia Wilhelm, Anglo American Sean Willy, Cameco Corporation Dennis Wilson, New Gold Inc.

ABORIGINAL AFFAIRS COMMITTEE

Chair: Sean Willy, Cameco Corporation Charles Birchall, Willms & Shier Marguerite Chambers, HudBay Minerals Inc. David Clarry, HudBay Minerals Inc. Stephen Crozier, IAMGOLD Corporation Blair Dickerson, Rio Tinto Canada Kara Flynn, Syncrude Canada Ltd. Patrice Gilbert, Agnico Eagle Mines Limited Sandra Gogal, Miller Thomson LLP Alan Hair, HudBay Minerals Inc. Leanne Hall, Deloitte & Touche LLP Rachel Houmphan, Rio Tinto Canada Barbara Kirby, Mining Industry Human Resources Council Heather Lawrence, Teck Resources Limited Stephen Lindley, SNC-Lavalin Inc. Erica Myles, Shell Canada Energy Inc.

Mark Prystupa, Suncor Energy Inc. Alexandra Sewell, IAMGOLD Corporation Jody Shimkus, HD Mining International Ltd. Ken Smith, BHP Billiton Roger Souckey, Goldcorp Inc. Melanie Sturk, Mining Industry Human Resources Council Mark Travers, Vale Federico Velasquez, Anglo American Joseph Wabegijig, Hatch & Associates Inc. Colin Webster, Noront Resources Ltd. Leslie Williams, Prospectors and Developers Association of Canada

ENERGY COMMITTEE

Chair: Chris Adachi, Teck Resources Limited Michael Aire, Newmont Mining Corporation Colin Alie, Shell Canada Energy Inc. Melissa Barbanell, Barrick Gold Corporation Louiza Bell, Teck Resources Limited Charles Birchall, Willms & Shier Russell Blades, Barrick Gold Corporation Corinne Boone, Hatch & Associates Inc. Shane Borchardt, Cameco Corporation Cheryl Brownlee, Ontario Mining Association Marc Butler, Glencore Canada Tim Butler, Iron Ore Company of Canada Ben Chalmers, Mining Association of Canada Marc-Andre Charette, Cameco Corporation Brynn Clark, KGHM International Andrew Cooper, New Gold Inc. Gilles Couture, ArcelorMittal Exploitation Minière Canada s.e.n.c. Robert Duinker, Hatch & Associates Inc. Bill Ferdinand, Barrick Gold Corporation Patricia Groulx, Teck Resources Limited Alan Luck, Shell Canada Energy Inc. Brendan Marshall, Mining Association of Canada Stephanie Meyer, Stratos Inc. Shirley Neault, HudBay Minerals Inc. Lewis Oatway, Vale Mark Passi, Glencore Canada Frank Petrolo, Vale David Putnam, De Beers Canada Inc. Adrianna Stech, Ontario Mining Association Harold Todd, Teck Resources Limited Liezl Van Wyk, Diavik Diamond Mines Inc. Scott Yarrow, Glencore Canada



ENVIRONMENT COMMITTEE

Chair: Marc Butler, Glencore Canada Marko Adzic, Teck Resources Limited Raj Anand, Imperial Metals Corporation Tracy Anderson, First Quantum Minerals Ltd. Joe Armstrong, Vale Mike Aziz, Goldcorp Inc. Nicola Banton, KGHM International Lynne Barlow, Syncrude Canada Ltd. Jeffrey Barnes, Stantec Meera Bawa, Teck Resources Limited Tim Bekhuys, New Gold Inc. Anne Belanger, Prospectors and Developers Association of Canada Suzanne Belanger, Teck Resources Limited Fariel Benameur, Rio Tinto Canada Debbie Berthelot, BHP Billiton Charles Birchall, Willms & Shier Perry Blanchard, Vale Corinne Boone, Hatch & Associates Inc. Stephane Brienne, Teck Resources Limited Karina Briño, Mining Association of British Columbia Jim Chan, ERM Canada Corporation Carolyn Chisholm, Rio Tinto Canada Derek Chubb, ERM Canada Corporation Chantal Clement, Goldcorp Inc. Richard Cook, Knight Piésold Ltd. Jay Cooper, HudBay Minerals Inc. James Cormier, Glencore Canada Melanie Cote, Glencore Canada David Cotsman, RWDI Gilles Couture, ArcelorMittal Exploitation Minière Canada s.e.n.c. Erin Cullen, Vale Oliver Curran, Baffinland Iron Mines Corporation Sheila Daniel, AMEC Foster Wheeler AES, Inc. Jeremy Dart, Barrick Gold Corporation Scott Davidson, New Gold Inc. Michael Davies, Teck Resources Limited David Derosa, Teck Resources Limited Chris D'Odorico, Teck Resources Limited Martin Duclos, Goldcorp Inc. Mike Dutton, Vale Kent England, Cameco Corporation David Ewing, Teck Resources Limited Vaness Felix, KGHM International Bill Ferdinand, Barrick Gold Corporation Nigel Fisher, New Gold Inc. Mark Freberg, Teck Resources Limited Art Frye, Imperial Metals Corporation Joe Fyfe, Glencore Canada Nicol Gagstetter, Rio Tinto Canada Katherine Gizikoff, Taseko Mines Limited Julie Gravel, ArcelorMittal Exploitation Minière Canada s.e.n.c. Alan Hair, HudBay Minerals Inc. Brent Hamblin, First Quantum Minerals Ltd. David Harpley, Canadian Zinc Corporation Shane Hayes, Barrick Gold Corporation

Steven Hilts, Teck Resources Limited Bernard Hince, Glencore Canada Tom Hoefer, NWT and Nunavut Chamber of Mines Ross Hunsaker, Nyrstar Carolyn Hunt, Vale Lesley Hymers, Ontario Mining Association Matt Hynes, Vale Frank Javor, Vale Troy Jones, Teck Resources Limited Nadim Kara, Prospectors and Developers Association of Canada Laurie Kelly, Teck Resources Limited Dale Klondnicki, AMEC Foster Wheeler Jody Kuzenko, Vale Donald Laflamme, Rio Tinto Canada Anthony Lambert, BHP Billiton Lisa Lanteigne, Vale Simon Latulippe, WSP Group Patrick Lauzière, Iron Ore Company of Canada Claudine Lee, Dominion Diamond Corporation Janice Linehan, Suncor Energy Inc. Gordon Macdonald, Diavik Diamond Mines Inc. John Machin, Syncrude Canada Ltd. Erik Madsen, Baffinland Iron Mines Corporation Melinda Mamer, Suncor Energy Inc. Kristen Mariuzza, Lundin Mining Corporation Stephanie Marshall, Glencore Canada Dennis Martin, Vale Shane Matson, Goldcorp Inc. Dave McDonald, Vale Christy McDonough, BHP Billiton Samantha McGarry, Glencore Canada Allison Merla, Vale Bruce Mikkila, Vale Jim Millard, Baffinland Iron Mines Corporation Mary Mioska, Western Copper and Gold Corporation Shannon Mitchell, Vale Loris Molino, Vale R. Liam Mooney, Cameco Corporation Christine Moore, Intrinsik Environmental Sciences Inc. Maurice Moreau, Glencore Canada Kevin Nagy, Cameco Corporation Shirley Neault, HudBay Minerals Inc. Bryan Neeley, Goldcorp Inc. Joel Page, Glencore Canada Alvaro Paredes, AMEC Foster Wheeler Mark Passi, Glencore Canada Michael Patterson, Anglo American Kelly Payne, Rio Tinto Canda Chad Pearson, Glencore Canada Steve Pelletier, Glencore Canada Nicole Pesonen, Nyrstar Jason Plamondon, Knight Piésold Ltd. Kristin Pouw, Hatch & Associates Inc. Lee Preziosi, Iron Ore Company of Canada David Putnam, De Beers Canada Inc. Chris Ransom, Glencore Canada

George Read, Shore Gold Inc. Stephane Robert, Agnico Eagle Mines Limited John Roberts, Aurora Energy Resources Inc. Lindsay Robertson, Klohn Crippen Berger Ltd. Keith Russell, Partners in Performance Mark Ruthven, AMEC Foster Wheeler Lyle Safronetz, Vale Jared Saunders, Vale Pamela Schwann, Saskatchewan Mining Association Christa Seaman, Shell Canada Energy Inc. Walter Sencza, Newmont Canada Corporation Sean Sharpe, Glencore Canada Isabelle Shelvey, Syncrude Canada Ltd. Jody Shimkus, HD Mining International Ltd. Brad Sigurdson, Saskatchewan Mining Association Johan Skoglund, Nyrstar Helga Sonnenberg, Stantec Adrianna Stech, Ontario Mining Association Heather Sullivan, Glencore Canada Stephanie Thibeault, Goldcorp Inc. Mark Tinholt, Teck Resources Limited Ryan Todd, New Gold Inc. Nathalie Tremblay, Association minière du Québec Nick Tremblay, Rio Tinto Canada France Trépanier, Goldcorp Inc. Scott Trusler, MMG Resources Inc. Fred Turatti, Rio Tinto Mark Vancook, New Gold Inc. Richard Viflanzoff, Charles Tennant & Company (Canada) Ltd. Kelly Wells, Canada North Environmental Services Kathryn Wherry, Hatch & Associates Inc. Leslie Williams, Prospectors and Developers Association of Canada Dennis Wilson, New Gold Inc. Mark Wiseman, Avalon Rare Metals Inc. Steve Woolfenden, IAMGOLD Corporation Linda Wrong, Lundin Mining Corporation Scott Yarrow, Glencore Canada Warren Zubot, Syncrude Canada Ltd.

PUBLIC AFFAIRS COMMITTEE

Chair: Tom Ormsby, De Beers Canada Inc. Doug Brown, Teck Resources Limited Scott Brubacher, HudBay Minerals Inc. Heather Bruce-Veitch, Iron Ore Company of Canada Carolyn Chisholm, Rio Tinto Canada Dale Coffin, Agnico Eagle Mines Limited Peter Fuchs, Glencore Canada Claudine Gagnon, Rio Tinto Canada Robert Gereghty, Cameco Corporation Tanya Giulford, Shell Canada Energy Inc. Jean-Pierre Gregoire, Rio Tinto Canada Angela Hamlyn, Canadian Institute of Mining, Metallurgy and Petroleum Jeff Hanman, Teck Resources Limited Alanna Heath, Barrick Gold Corporation Jeff Hryhoriw, Cameco Corporation Tracey Irwin, Saskatchewan Mining Association

Matt Johnson, Lundin Mining Corporation Dany Laferriere, Suncor Energy Inc. Benjamin Little, IAMGOLD Corporation Andrea Mandel-Campbell, Kinross Gold Corporation Christine Marks, Goldcorp Inc. Ryan McEachern, Canadian Association of Mining Equipment and Services for Export Cory McPhee, Vale John Mullally, Goldcorp Inc. Tom Ormsby, De Beers Canada Inc. Deana Pagnan, Prospectors and Developers Association of Canada Mac Penney, Kinross Gold Corporation Cheryl Robb, Syncrude Canada Ltd. Emily Robb, Vale Steve Robertson, Imperial Metals Corporation Christopher Ryder, BHP Billiton Alexandra Sewell, IAMGOLD Corporation Jody Shimkus, HD Mining International Ltd. Michael Southern, Suncor Energy Inc. Mathieu St-Amant, Association minière du Québec Heather Sullivan, Glencore Canada Bryan Tucker, Rio Tinto Canada Jean Vavrek, Canadian Institute of Mining, Metallurgy and Petroleum Federico Velasquez, Anglo American Tracey Wolsey, Suncor Energy Inc. Scott Yarrow, Glencore Canada Alexa Young, Teck Resources Limited

TAILINGS WORKING GROUP

Chair: Michael Davies, Teck Resources Limited Jennifer Abols, Lundin Mining Corporation Chris Anderson, Teck Resources Limited Tracy Anderson, First Quantum Minerals Ltd. Debbie Berthelot, BHP Billiton David Bleiker, AMEC Foster Wheeler Karina Briño, Mining Association of British Columbia Cameron Brown, Western Copper and Gold Corporation Bob Chambers, Klohn Crippen Berger Ltd. Carolyn Chisholm, Rio Tinto Canada Chantal Clement, Goldcorp Inc. Jay Cooper, HudBay Minerals Inc. Jerry Dani, Goldcorp Inc. Scott Davidson, New Gold Inc. Randy Donato, Vale Norman Eenkooren, Suncor Energy Inc. Barry Esford, Cameco Corporation Joe Fyfe, Glencore Canada Helen Harper, Glencore Canada Stephen Hebb, Iron Ore Company of Canada Carlos Iturralde, De Beers Canada Inc. Karlis Jansons, Tetra Tech Troy Jones, Teck Resources Limited Michel Julien, Agnico Eagle Mines Limited Anthony Lambert, BHP Billiton Simon Latulippe, WSP Group Marc Lincoln, De Beers Canada Inc.

Gord Livingstone, Syncrude Canada Ltd. Jim Maltby, Glencore Canada Scott Martens, Shell Canada Energy Inc. Todd Martin, Anglo American Wayne Mimura, Syncrude Canada Ltd. Sebastien Moreau, ArcelorMittal Exploitation Minière Canada s.e.n.c. Shirley Neault, HudBay Minerals Inc. Greg Noack, Klohn Crippen Berger Ltd. Kate Parsons, KGHM International Lee Preziosi, Iron Ore Company of Canada David Putnam, De Beers Canada Inc. Patrice Richer, Glencore Canada Gonzalo Rios, Agnico Eagle Mines Limited Stephane Robert, Agnico Eagle Mines Limited Rob Rotzinger, Taseko Mines Limited David Rouleau, Taseko Mines Limited Lyle Safronetz, Vale Brad Sigurdson, Saskatchewan Mining Association Rick Siwik, Siwik Consulting Inc. Nick Smart, De Beers Canada Inc. Greg Smyth, Knight Piésold Ltd. Michelle Velez, Syncrude Canada Ltd. Pawel Zielinski, KGHM International

SCIENCE COMMITTEE

Chair: Kent England, Cameco Corporation Raj Anand, Imperial Metals Corporation Nicola Banton, KGHM International Tim Bekhuys, New Gold Inc. Debbie Berthelot, BHP Billiton Valerie Bertrand, Golder Associates Martin Boucher, Stornoway Diamonds Canada Marc Butler, Glencore Canada Gilles Couture, ArcelorMittal Exploitation Minière Canada s.e.n.c. Oliver Curran, Baffinland Iron Mines Corporation Sheila Daniel, AMEC Foster Wheeler David Derosa, Teck Resources Limited Mike Dutton, Vale Vaness Felix, KGHM International Art Frye, Imperial Metals Corporation Joe Fyfe, Glencore Canada Katherine Gizikoff, Taseko Mines Limited Julie Gravel, ArcelorMittal Exploitation Minière Canada s.e.n.c. Carolyn Hunt, Vale Lesley Hymers, Ontario Mining Association Anthony Lambert, BHP Billiton Martin Larose, WSP Group Patrick Lauzière, Iron Ore Company of Canada Gordon Macdonald, Diavik Diamond Mines Inc. Erik Madsen, Baffinland Iron Mines Corporation Christy McDonough, BHP Billiton Christine Moore, Intrinsik Environmental Sciences Inc. Gaston Morin, ArcelorMittal Exploitation Minière Canada s.e.n.c. Mike Murchie, Cameco Corporation Shirley Neault, HudBay Minerals Inc. Steve Pelletier, Glencore Canada

Lee Preziosi, Iron Ore Company of Canada David Putnam, De Beers Canada Inc. Stephane Robert, Agnico Eagle Mines Limited John Roberts, Aurora Energy Resources Inc. Erin Robertson, Cameco Corporation Mark Ruthven, AMEC Foster Wheeler Walter Sencza, Newmont Canada Corporation Brad Sigurdson, Saskatchewan Mining Association Helga Sonnenberg, Stantec Adrianna Stech, Ontario Mining Association Mark Tinholt, Teck Resources Limited Glen Watson, Vale Kelly Wells, Canada North Environmental Services

TAXATION COMMITTEE

Brian Abraham, Fraser Milner Casgrain Eric Bretsen, Ernst & Young LLP Thomas Cheung, Teck Resources Limited Alexander Coombes, Dentons Robert De Biasio, Vale Ron Gagle, Prospectors and Developers Association of Canada Philip Hopwood, Deloitte & Touche LLP Nadim Kara, Prospectors and Developers Association of Canada Tom King, KPMG LLP Jacob Kulinski, ArcelorMittal Exploitation Minière Canada s.e.n.c. Pat MacNamara, Agnico Eagle Mines Limited Louis Martin, Glencore Canada Maurice McClure, Iron Ore Company of Canada Julie Morier, Rio Tinto Canada Angelo Nikolakakis, Ernst & Young LLP Jocelin Paradis, Rio Tinto Canada Susanne Playford, HudBay Minerals Inc. Sahba Safavi, MMG Resources Inc. Audrey Sinkevicius, De Beers Canada Inc. Bruce F. Sprague, Ernst & Young LLP Steve Suarez, Borden Ladner Gervais LLP Travis Temple, HudBay Minerals Inc. John Turner, Fasken Martineau David Watson, IAMGOLD Corporation



TRANSPORTATION COMMITTEE

Chair: Vacant

Ron Annesley, Barrick Gold Corporation Peter Bianchini, Iron Ore Company of Canada Francois Brisson, Iron Ore Company of Canada Marc Butler, Glencore Canada Marc-Andre Charette, Cameco Corporation Jay Cooper, HudBay Minerals Inc. Steven Douville, Vale Bev Godson, Cameco Corporation Paul Graham, Vale Thomas Hobbs, Norfalco Inc., A Glencore Company Scott Iredale, Shell Canada Energy Inc. Brad Johnston, Teck Resources Limited Paul Kolisnyk, Teck Resources Limited Eric Kuraitis, NorFalco Inc., A Glencore Company Brian Kurczaba, HudBay Minerals Inc. Jacky Larocque, Suncor Energy Inc. Melinda Mamer, Suncor Energy Inc. Gordon Mattson, Teck Resources Limited Benoit Méthot, Iron Ore Company of Canada Pat Murphy, Glencore Canada Stephen Nelson, Suncor Energy Inc. Shannon Nicholson, Norfalco Inc., A Glencore Company Martin Pede, Glencore Canada Frank Petrolo, Vale Kathy Piersanti, HudBay Minerals Inc. Amelie Rouleau, Glencore David Rouleau, Taseko Mines Limited Lyle Safronetz, Vale Daniel Sauve, Glencore Canada Mikael Schauman, Lundin Mining Corporation Leigh Scrivens, BHP Billiton Canada Inc. Don Smith, Teck Resources Limited Jamie Veilleux, Glencore Canada Patrick Walker, Rio Tinto Robert Winton, HudBay Minerals Inc. Alexa Young, Teck Resources Limited John Zaidan, Cameco Corporation

NORTHERN AFFAIRS COMMITTEE

Chair: Vacant

Rebecca Alty, Diavik Diamond Mines Inc. Brad Armstrong, Lawson Lundell LLP Mark Ayranto, Victoria Gold Corp. Charles Birchall, Willms & Shier Larry Connell, Agnico Eagle Mines Limited Richard Cook, Knight Piésold Ltd. Dominique Girard, Agnico Eagle Mines Limited Sandra Gogal, Miller Thomson LLP John Kearney, Canadian Zinc Corporation Christine Kowbel, Lawson Lundell LLP Reg Labelle, Atlas Copco Construction and Mining John McConnell, Victoria Gold Corporation Ryan McEachern, Canadian Association of Mining Equipment and Services for Export Bill Mercer, Avalon Rare Metals Inc. Greg Missal, Baffinland Iron Mines Corporation Bob Overvold, Dominion Diamond Corporation Vic Pakalnis, MIRARCO Mining Innovation Brad Ryder, Glencore Canada Bruce F. Sprague, Ernst & Young LLP Scott Trusler, MMG Resources Inc. Jean Vavrek, Canadian Institute of Mining, Metallurgy and Petroleum Paul West-Sells, Western Copper and Gold Corporation Mark Wiseman, Avalon Rare Metals Inc. Laura Worsley-Brown, Dominion Diamond Corporation



MEMBER COMPANIES

Agnico Eagle Mines Limited ArcelorMittal Exploitation Minière Canada s.e.n.c. Baffinland Iron Mines Corporation Barrick Gold Corporation **BHP** Billiton Cameco Corporation Canadian Zinc Corporation De Beers Canada Inc. Dominion Diamond Corporation Eldorado Gold Corporation Excellon Resources Inc. First Quantum Minerals Glencore Canada Goldcorp Inc. HD Mining International Ltd. HudBay Minerals Inc. IAMGOLD Corporation Imperial Metals Corporation Kaminak Gold Corporation KGHM International Kinross Gold Corporation Lundin Mining Corporation New Gold Inc. Newmont Canada Corporation Noront Resources Ltd. Nyrstar Rio Tinto Canada Royal Canadian Mint Shell Canada Energy Inc. Shore Gold Inc. Suncor Energy Inc. Syncrude Canada Ltd. Taseko Mines Limited Teck Resources Limited Vale Victoria Gold Corporation Western Copper and Gold Corporation

ASSOCIATE MEMBERS

Alexander Proudfoot Atlas Copco Construction and Mining Ausenco Avalon Rare Metals Inc. Barr Engineering and Environmental BGC Engineering Inc. CAMIRO Canada North Environmental Services Cementation Canada Inc. Centerra Gold Inc. Chamber of Marine Commerce Charles Tennant & Company (Canada) Ltd. **CIBC World Markets Convergint Technologies** COREM Deloitte & Touche LLP

ÉEM Inc. ERM Canada Corporation Ernst & Young LLP Fasken Martineau Gabriel Resources Ltd. Golder Associates Hatch & Associates Inc. Intrinsik Environmental Sciences Inc. Klohn Crippen Berger Ltd. Knight Piésold Ltd. Lawson Lundell LLP Major Drilling Group International Inc. McGill University Miller Thomson LLP **MIRARCO** Mining Innovation MMG Resources Inc. Norwest Corporation Orica Canada Inc. Oxygen Capital Corp. Partners in Performance PearTree Securities Inc. Quadra Chemicals Ltd. Rueter Scargall Bennett LLP RWDI Sandvik Mining and Construction SGS Minerals Services SMS Equipment Inc. SNC-Lavalin Inc. Stantec Stornoway Diamond Corporation Thorsteinssons Willms & Shier Environmental Lawyers LLP WSP Group

NON-VOTING MEMBERS

Alberta Chamber of Resources L'Association minière du Québec Canada Mining Innovation Council Canadian Association of Mining Equipment and Services for Export Canadian Institute of Mining, Metallurgy and Petroleum Mining Association of British Columbia Mining Association of Manitoba Mining Association of Nova Scotia Mining Industry Human Resources Council Mining Industry NL New Brunswick Mining Association NWT and Nunavut Chamber of Mines Ontario Mining Association Prospectors and Developers Association of Canada Saskatchewan Mining Association Yukon Chamber of Mines



MAC STAFF

Pierre Gratton President and Chief Executive Officer

Monique Laflèche Executive Assistant

Ben Chalmers Vice President, Sustainable Development

Charles Dumaresq Vice President, Science and Environmental Management

Justyna Laurie-Lean Vice President, Environment and Regulatory Affairs

Johanne Senécal Vice President, Government Relations, Aboriginal Affairs and Communications

Brendan Marshall Vice President, Economic and Northern Affairs

Jessica Draker Director, Communications

Marilyn Fortin Director, Corporate Services

Tara Shea Director, Towards Sustainable Mining

Justin Laframboise Finance Officer

Danielle Poitras Receptionist



275 Slater Street, Suite 1100, Ottawa, ON, K1P 5H9 T - (613) 233-9391 F - (613) 233-8897

WWW.MINING.CA