



17th Annual General Meeting of the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development: 19-20 October 2021

The mining industry has a crucial role to play in supplying the minerals and metals that are essential for the ongoing global clean energy transition. According to the World Bank, the production of minerals, such as graphite, lithium, and cobalt, could increase by nearly 500% by 2050, and over three billion tons of minerals and metals will be needed to deploy wind, solar, and geothermal power, to meet the growing demand for clean energy technologies and to address the climate crisis. The mining sector must reposition itself to supply these critical minerals, while ensuring they are extracted and traded in a responsible manner.

Within this context, the 17th Annual General Meeting (AGM) of the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) convened, with a focus on the theme “Building Tomorrow Together: Mining for a Responsible and Inclusive Future.” Meeting in various sessions, the AGM considered issues relating to governance of the sector, including critical minerals, environmental management, environmental and social impact assessments (ESIA), artisanal and small-scale mining (ASM), community engagement, gender equality, local content, partnerships, taxation, and new technologies.

The meeting focused on the future of mining and ensuring the industry is ready to meet upcoming challenges and global trends. For example, the session on “new thinking, different skills and unusual collaborations for the future,” explored what a better tomorrow will look like for the sector. It identified a mining sector where:

- companies’ objectives align with the objectives and aspirations of host governments and communities;
- the materials and minerals crucial for humanity to achieve the necessary energy transition are responsibly and inclusively produced; and
- host communities benefit rather than suffer.

This future must be in line with the global trends expected to shape the mining sector, specifically the low-carbon energy transition and increasing investor pressure for environmental, social and governance (ESG) requirements, as identified by online polls taken during the AGM.

The AGM also featured the official launch of the IGF’s Mining ESIA Tool (MET). The Tool was developed to analyze countries’ environmental and social legal frameworks, practices, and institutional capacity in relation to ESIA’s for the mining

industry, and complements the IGF’s [Guidance for Governments on improving legal frameworks for ESIA and management](#).

The AGM took place virtually from 19-20 October 2021, with over 1,500 registered participants from more than 90 countries.

A Brief History of the IGF

The IGF serves as a global platform for dialogue among its member governments, as well as other stakeholders from mining companies, industry associations, civil society, and non-

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governmental and international organizations. It is an outcome of the 2002 World Summit on Sustainable Development (WSSD), which took place in Johannesburg, South Africa. The WSSD encouraged governments, civil society, and private sector actors to enter into voluntary partnerships focused on sustainable development objectives. Its Johannesburg Plan of Implementation specifically called for efforts to address the environmental, economic, health and social impacts and benefits of mining, minerals, and metals throughout their life cycle, including worker health and safety issues, and to promote transparency and accountability for sustainable mining.

Following the WSSD, the Governments of Canada and South Africa were instrumental in establishing the IGF. It was announced in February 2005 as a voluntary initiative for national governments interested in promoting good governance in the management of mineral resources. The IGF currently has 79 members.

The IGF's work is largely framed by its flagship policy guidance and assessment tool, the [Mining Policy Framework \(MPF\)](#), which was first presented at the 19th session of the UN Commission on Sustainable Development in 2011. The MPF identifies best practices through six pillars of mining policy and law: the legal and policy environment; financial benefit optimization; socio-economic benefit optimization; environmental management; mine closure and post-mining transitions; and ASM.

In 2012, the UN Conference on Sustainable Development (UNCSD or Rio+20) convened to assess global sustainable development policy. Its outcome document, [The Future We Want](#), further boosted the IGF's work. Besides calling on the international community to negotiate a set of Sustainable Development Goals (SDGs), the Rio+20 outcome urged governments and businesses to promote accountability and transparency in the mining sector, as well as improve existing mechanisms to prevent illicit financial flows from mining activities.

In October 2015, the IGF Secretariat moved from its home at the Canadian Department of Foreign Affairs, Trade and Development to the International Institute for Sustainable Development in Ottawa, Canada.

The IGF AGM first convened in 2005 with 25 member countries. The AGMs provide a forum for members to engage with industry, civil society, and one another on best practices, and exchange knowledge and ideas. Previous AGMs have discussed topics relevant to the MPF, including: fiscal and legislative frameworks for investment in the mining sector; revenue sharing; community engagement and benefits; the role of women in mining; and post-mining transitions, including mine closure and rehabilitation of mine sites. AGMs also present draft guidance on various aspects of sustainable mining, before public release. Most recently:

- in 2016, the 12th AGM provided an opportunity for IGF members to consider the SDGs' relevance to the mining sector;
- in 2017, the 13th AGM produced [IGF Guidance for Governments on Managing ASM](#);

- in 2018, the 14th AGM discussed the impacts of increased global lithium demand on mining, and the contribution of ESIA's, tax reform, and community engagement in sustainable mining;
- in 2019, the 15th AGM: focused on "mining in a changing climate," discussing ways companies are starting to reduce emissions from mining operations and adapting to changes in the environment, such as increased water scarcity and disaster risks; and reviewed draft guidance on ESIA's, prior to its subsequent release; and
- in 2020, the 16th AGM, which convened virtually in the midst of the COVID-19 pandemic, focused on the theme, "Mining and COVID-19: From Crisis to Sustainability": addressed how the mining sector is dealing with the pandemic and its impacts, as well as the ways in which governments are responding; and considered measures being adopted to implement the new [Global Industry Standard on Tailings Management](#), published in August 2020.

Report of the Meeting

Welcome and Opening Remarks

On Tuesday, 19 October, Greg Radford, Director, IGF Secretariat, opened the AGM. Noting the challenges that governments, mining companies, and host communities have faced since the start of the COVID-19 pandemic, he highlighted the need to look ahead toward promoting the transition to a low-carbon economy. Radford underlined that the required energy transition for such an economy will require a significant amount of minerals and metals. He said this AGM aims to balance addressing today's challenges with the need to promote dialogue on how to build a better future together.

Isabelle Ramdoo, Deputy Director, IGF Secretariat, said this AGM features a diverse set of perspectives on how governments, mining companies, and their partners have navigated through the COVID-19 crisis and the actions they have collectively taken to achieve a more responsible and inclusive future.

Ibrahima Guèye, Secretary General, Ministry of Mines and Geology, SENEGAL, speaking on behalf of Oumar Sarr, Minister of Mines and Geology, SENEGAL, underscored that mining is a driver of growth and economic and social development, and



Greg Radford, Director, IGF Secretariat

should help countries achieve the 2030 Agenda on Sustainable Development. He stressed that dialogue between countries, as resource owners, and mining companies involved in the development of these resources, is essential. Guève said the AGM's reflections on the technologies of the future will influence countries' priorities and require even more collaboration between governments and the private sector.

Jean-François Tremblay, Deputy Minister, Natural Resources CANADA, underlined that the ability to find, extract, process and bring the critical minerals and materials needed to build future technology and innovation to market is central to efforts to build a sustainable, inclusive, and prosperous future in the post-COVID-19 recovery. Noting also that the Canadian mining industry is the country's largest private sector employer of Indigenous Peoples and the leading source of opportunities and jobs in some of the most remote and rural communities, he said Canada supports these efforts and works hard to create opportunities for meaningful public consultation.

New Thinking, Different Skills, Unusual Collaborations for the Future

On Tuesday, Nicky Black, International Council on Mining and Metals (ICMM), moderated this session, which focused on what a better tomorrow should look like for the mining sector. Noting things must be done differently in response to ongoing disruptive forces, such as the health and environmental crises, she underlined the need to consider partnerships with new and different collaborators.

Ngaire Woods, Dean, Blavatnik School of Government, Oxford University, said mining and mineral companies need to partner with local communities, their own employees, other sectors, such as researchers and non-governmental organizations (NGOs), governments, and multilateral organizations.

Luis Fernando de Angulo, Executive Director, Regional Center for Responsible Business and Entrepreneurship, Colombia, said the divide between the mining sector and their host territories must be overcome by addressing the misalignment between the territorial vision of the population in those territories and the sectoral goals of companies and governments. He suggested the mining business be viewed as a "territory transformation business" which goes beyond corporate social responsibility and anything else done so far.

Suneeta Kaimal, President and CEO, Natural Resource Governance Institute, said the mining sector of the future must responsibly and inclusively meet the demand for minerals and metals while not undermining the stability and economic wellbeing of their host territories. She called for, *inter alia*, greater transparency around contracts, responsible taxation, anti-corruption measures, transparent licensing and commodity trading regimes, and active public participation.

On the challenges to, and requirements for, realizing this vision of a better tomorrow, de Angulo identified collaboration for collective action, which cuts through silos such as mining, environmental, and climate adaptation silos, and ensures these different groups communicate with one another. Kaimal called for collaboration around global mining taxation and corruption prevention, stressing that mining taxes must meet the specific needs of resource-rich developing countries. She underscored

beneficial ownership transparency as key to overcoming corruption. Woods called for better global standards with governments on all sides stepping up and creating a more equal playing field for companies that want to "do the right thing." She highlighted the challenge of geo-strategic competition to access resources, stating that, for instance, China and the US are involved in a strategic rivalry, competing for resources, and that this can lead to countries ignoring concerns for good governance.

The session closed with a call to action for mining companies to consider how fit they are for partnering for the future.

Managing the Environmental Impacts of ASM

On Tuesday, Estelle Levin-Nally, Founder and CEO, Levin Sources, moderated this session, which focused principally on challenges and solutions in reclaiming lands affected by ASM.

Yoko Watanabe, Global Manager, Global Environment Facility (GEF) Small Grants Programme (SGP), outlined the June 2021 launch of the [UN Decade on Ecosystem Restoration](#) and its aim to halt land degradation by 2030, and discussed what this means for ASM. She highlighted the SGP's efforts to support communities and civil society organizations to restore ecosystems, as well as its efforts to test alternatives to mercury use in gold ASM in 10 countries.

Bolormaa Purevjav, University of British Columbia, Canada, discussed an Asia Foundation project in Mongolia that brought local communities together with small-scale miners to reclaim abandoned mines and transform them into productive crop land, through "frugal rehabilitation" using mostly local manual labor, seeds, and organic matter.

Ruby Stocklin-Weinberg, Programme Manager, GemFair, outlined her organization's approach to promoting good environmental standards among the small and artisanal miners from whom De Beers purchases gems. She discussed a project in Sierra Leone to backfill 200 gold ASM sites and a spinoff project to enable local communities to cultivate the reclaimed land, emphasizing consultations with miners on possible reclamation solutions.

Panelists discussed the importance of a human rights approach that involves, rather than demonizes, small-scale miners, uses local labor and inputs, and provides alternative livelihoods for the local community. Purevjav also urged emphasizing how



Ruby Stocklin-Weinberg, GemFair



Tracey Cooper, Mining Dialogues 360

reclamation creates green jobs and the importance of involving women in reclamation efforts.

Panelists agreed that costs are the principal barrier to getting small-scale miners to adopt environmental standards and close mine sites in a responsible manner. They discussed the need to attract capital to overcome this barrier and highlighted the possible use of payment for ecosystem services and voluntary carbon markets.

Thinking Forward: Building Gender Equality in the Mine of the Future

Tracey Cooper, Executive Director, Mining Dialogues 360, moderated the session on Tuesday. Ege Tekinbas, Gender Equality Advisor, IGF, announced that IGF has launched the “Women and the Mine of the Future” project in collaboration with the International Labour Organization (ILO), International Women in Mining (IWIM), the Environmental Governance Programme of the UN Development Programme (UNDP), and the Swedish Environmental Protection Agency, to uncover what the future holds for women in mining. In an online poll among participants, the majority felt the impacts of new technologies in mining would be in favor of women.

Jenny Greberg, Director, Swedish Mining Innovation, Swedish Energy Agency, discussed the [Swedish Mining Innovation](#) programme, which, *inter alia*, aims for gender integration in the mining industry, focusing on innovation. She said several projects have been launched to increase women’s leadership and role in innovation in mining, and that the programme aims to provide at least 40% of direct funding to projects led by women. Greberg said the challenge is to ensure these innovation projects produce benefits for both men and women. Greberg further noted the need to attract more women to the mining industry by creating the right environment for them and showcasing women in management positions, highlighting companies’ responsibility to provide role models for women.

Alette van Leur, ILO, underscored the importance of data in developing and supporting gender-positive policies for governments and the private sector. While noting more opportunities for women now exist, she stressed this is not enough, saying women also need to be equipped with the skills to participate in the sector. Van Leur called for lifelong learning, reform of countries’ vocational, education and training systems, and school-to-work schemes.

Barbara Dischinger, Director and Founder, IWIM, said more data on women in mining is essential to understand where we are today, measure progress over time, and see where we want to go in the future. She noted the “Women and the Mine of the Future” project was launched to meet this need. Stressing that the fastest pace of data collection can come from the industry itself, she underscored the need for granular disaggregated data that provides enough specificity and insight to make required actions clear.

Time to Transform: Tax Incentives in Mining’s New Era

On Tuesday, Alexandra Readhead, IGF Secretariat, moderated this session on lessons learned from past tax incentives offered to the mining sector, changes underway, and what these may mean for the future of mining.

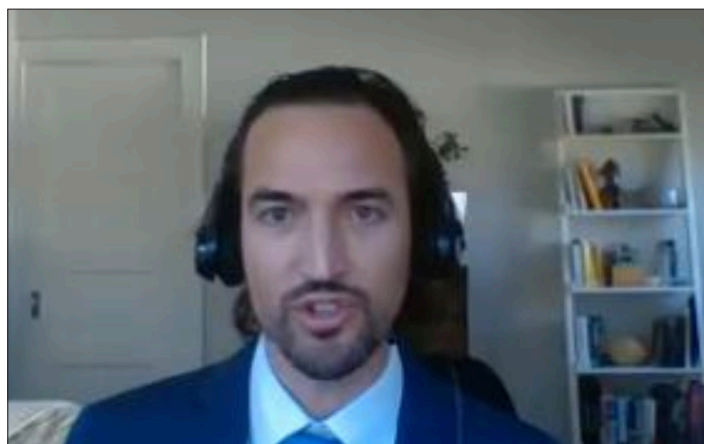
Juvy Danofrata, Assistant Secretary, Department of Finance, the PHILIPPINES, discussed her country’s recent tax incentive reform legislation. She said history shows that only a few tax incentives provide concrete economic benefits that outweigh the cost to national revenues.

Yakama Manty Jones, Ministry of Finance, SIERRA LEONE, summarized her country’s regime, stressing that the overall enabling environment is usually more important for attracting mining investments than specific tax incentives. Danofrata suggested that if incentives are granted at all, they should be time-bound, performance-linked, transparent, and balanced against their costs.

Thomas Lassourd, IGF Secretariat, explained the recent global accord on tax reform and suggested it will likely prompt reviews in most countries of existing tax incentive regimes for mining. Manty Jones observed that the impact of the global tax reform will depend on the details of its operationalization. She suggested it might spark competition in tax types not covered by the agreement, such as taxes on goods and services. Manty Jones cautioned that much work still remains to ensure developing countries do not lose out as the global agreement is implemented.

Responding to audience questions:

- Danofrata agreed that linking incentives to performance requires coordination at the government level;
- Lassourd said incentives might be justified if the investor needs to improve the infrastructure of mining sites or faces particularly difficult environmental challenges;



Thomas Lassourd, IGF Secretariat

- Lassourd suggested incentives involving critical minerals must be weighed carefully country by country and mineral by mineral, but in many cases are not needed to get the desired investment; and
- Manty Jones said Sierra Leone does not provide tax incentives for skills development and transfer, but rather builds provisions on this into mining lease agreements.

Opening Up Mining Governance Through National Dialogues

Tracey Cooper moderated this session on Tuesday. Martin Kwaku Ayisi, Acting CEO, Minerals Commission, GHANA, described national and regional consultations launched by his country in April 2021. The consultations were called for by the President to address the “national disaster” caused by mercury use in widespread gold ASM that has severely damaged the local environment, particularly rivers.

Álvaro García Hurtado, President, AGH Strategic Consulting, discussed lessons learned from national dialogues conducted in Latin America with support from the Inter-American Development Bank. Noting that most dialogues have lasted between one and two years, Garcia stressed the elements for successful dialogues, including:

- full commitment by the convening party at the highest level, usually a national government;
- common, evidence-based information to start talks;
- effective representation by all interested parties, which sometimes requires capacity building for stakeholders;
- a participant-driven agenda;
- well-defined rules of the process;
- taking time to create trust among stakeholders; and
- an early focus on finding “low-hanging fruit” and practical, scalable solutions.

He also described Chile’s use of a “live memory” of the dialogue that is constantly updated by participants, which he suggested promotes deeper discussion and increases participant buy-in.

Gabriela Flores Zavala, International Institute for Environment and Development, described the national dialogue process in Tanzania. She said while dialogues are almost always productive, they usually come with challenges, such as:

- a legacy of mistrust among stakeholders;
- ensuring meaningful participation of the poorest stakeholders; and
- creating participant ownership of the process and its outcome.

Flores urged three components for all dialogues: conducting prior research into problems and their potential solutions; engaging with all stakeholders in their preferred spaces; and adopting communication strategies to ensure regular information flow among stakeholders.

Subsequent discussions agreed on the need to:

- identify “low hanging fruit” early to build trust and momentum;
- avoid “dialogue fatigue” caused by convening many dialogues that do not prompt significant change; and



Álvaro García Hurtado, AGH Strategic Consulting

- focus on follow-up and monitoring of implementation of dialogue recommendations.

Mining for Sustainable Development: A New ESIA Diagnostic Tool for the Mining Sector

Clémence Naré, IGF Secretariat, moderated this session on Tuesday, which featured the official launch of the IGF’s Mining ESIA Tool (MET). Participants watched a video describing the MET as a tool to help governments identify gaps in their legal and institutional capacity for ESIA in mining.

Jenifer Hill, Senior Consultant, IGF, further discussed the process for developing the tool, noting it is based on the format and some of the questions of the ESY-MAP diagnostic tool for assessing the quality of national ESIA systems, which was developed jointly by the Netherlands Commission for Environmental Assessment (NCEA) and the Southern African Institute for Environmental Assessment (SAIEA).

Hill said the MET, which was piloted in Ethiopia in May 2021 and Lesotho in July 2021, is intended to be carried out in a workshop setting with multiple stakeholders, including groups from government, industry, and civil society. She said it promotes discussion among stakeholders, which is critical for ESIA performance, and works through all the processes and stages of mining from exploration to closure.

Rob Verheem, Director International, NCEA, said the MET is a step forward in the mining sector and that NCEA is proud to have been part of the process. He provided more information about the ESY-MAP, highlighting it brings together all ESIA stakeholders and engages them in discussions of what needs to be done, which is then translated to an action plan owned by all stakeholders.

Bryony Walmsley, Director, SAIEA, further discussed the ESY-MAP, underscoring it is adaptable to different sectors. She noted it originated as a diagnostic tool for the environmental sector but was found to be useful to the mining sector, saying this opens up opportunities for it to also be adapted to other sectors.

Mammeli Makhate, Ministry of Tourism, Environment and Culture, LESOTHO, said the MET was useful for bringing together the private sector, government, and NGOs to assess how the country is performing in the ESIA process and determine how well their legislation addresses environmental management in the mining sector. She highlighted the need for miners to be involved

in collaboration following the diagnostic exercise, to ensure they understand the importance of issues like rehabilitation and mine closure plans.

Resetting Partnerships: Building on Post-COVID Emergency Responses to Strengthen Public-Private Collaboration

This session, which took place on Wednesday, featured a discussion with Mark Slade, Highgrade Media, asking questions of Froydis Cameron-Johansson, Group Head of International Government and Sustainability Relations, Anglo American. The discussion addressed: Anglo American's experience during the COVID-19 pandemic; some of the actions taken to safeguard its workforce and the communities hosting its mining operations; and lessons learned.

Regarding the impact of the lockdown on Anglo American's operations in developing countries such as Peru and South Africa, Cameron-Johansson said as the pandemic response progressed, it became apparent the mines and the infrastructure they support were crucial to their host communities, as shutting down the mines would also potentially shut down electricity, water, and supply lines to the communities. She explained the company took a holistic approach to ensure the physical and mental well-being of its employees, and as a result, decided to keep some operations going with minimal staff.

Cameron-Johansson noted her company's decisions to continue to pay all workers, contribute to their pensions and support them in the best way possible, regardless of what happened. She underlined the importance of having open and honest conversations with host governments and communities to understand the impacts of lockdowns on them, listen to their employees, and work in partnership with them to find solutions to problems. Cameron-Johansson described the company's "WeCare" programme, a health awareness and support programme designed to help protect the health and well-being of Anglo American's employees and host communities.

Cameron-Johansson said another lesson was the need to work with host governments and contribute to the pandemic response and recovery in countries. She identified actions such as making her company's hospitals and testing laboratories available to governments and healthcare providers, and providing private protective equipment and oxygen, as well as data and privacy protection services, as examples of the company's contribution.

Cameron-Johansson noted that technological advances played an important role in coping with the pandemic response and that some of measures put in place, such as the use of Microsoft Teams and reduced travel, will be permanent. She highlighted her company's purposeful innovation programme, which she said is about harnessing technology to ensure sustainability for "future smart" to, for instance, create a mine that is safe, has a lower carbon footprint, and has hardly any noise or dust. Cameron-Johansson reported the company is already having conversations with governments and unions to ensure people are at the center of their decisions, emphasizing the need to be transparent, collaborate, and invest in skills for the future.

Cameron-Johansson underlined the importance of partnerships and building long-term relationships, as well as ensuring the mining sector remains agile, technology-innovative, and flexible.



From L-R: **Andrew Rollo**, Chief Auditor of Mines and Executive Director, Audit and Effectiveness, British Columbia Ministry of Energy, Mines and Petroleum Resources; **Åsa Borssén**, Highgrade Media; and **Alan Young**, Director, Materials Efficiency Research Group

She concluded that these lessons can be applied to other societal challenges such as climate change, showing countries the need to, and benefits of, working together and "pulling in the same direction."

Mine Tailings Governance: Lessons Learned Through Inclusive Stakeholder Engagement

Moderated by Åsa Borssén, Highgrade Media, on Wednesday, this session featured Andrew Rollo, Chief Auditor of Mines, British Columbia Ministry of Energy, Mines and Petroleum Resources, and Alan Young, Director, Materials Efficiency Research Group, who discussed the issue of mine tailings governance, identifying lessons learned from British Columbia's policy and regulatory reforms, as well as good practices for effective tailings dam management.

Young said tailings dam failures are usually caused by a combination of factors such as problems with design, construction, monitoring, maintenance, and, ultimately, tension between the cost of construction and operation and investment in safety. He underscored that the bottom line must be a commitment to safety by both government and industry. Young identified features of good tailings governance, including:

- dam strength and location;
- meaningful engagement with affected communities, with their participation and consent;
- transparency through annual reporting;
- contingency and disaster planning, with emergency and evacuation drills held annually; and
- allocation of liability.

Rollo described some of the actions undertaken by the British Columbia Government following the Mount Polley tailings dam collapse in 2014, including amending the tailings storage facility-related provisions of the Health, Safety and Reclamation Code for Mines in British Columbia. He identified improvements since the changes were introduced, including:

- restructuring two mining divisions with a CAD 20 million investment, ensuring that each regulatory function is properly resourced with key priorities identified and actioned; and
- amending the Mines Act to create two new statutory decision makers—the Chief Permitting Officer and Chief Inspector of Mines—to ensure the main regulatory functions of compliance, enforcement, and permitting have their own clear authorities and responsibilities.



Anna Shpitsberg, US Department of State

Rollo further stated that with regards to taking account of the views and concerns of Indigenous communities, engagement is key. He said British Columbia is committed to reconciliation with Indigenous Peoples and, in 2019, passed the UN Declaration on the Rights of Indigenous Peoples Act into law. Rollo explained this Act establishes the UN Declaration on the Rights of Indigenous Peoples as the province's framework for reconciliation and sets up a process to allow British Columbia to align its laws with the UN Declaration.

Regarding whom should have the ultimate responsibility for tailings dam governance, Young said both governments and the industry have their roles to play. He said governments are responsible for permitting, monitoring, and operations to ensure accountability to the public, and companies are responsible to shareholders, employees, and affected communities, to make decisions around cost and safety. He underlined that the industry cannot self-regulate.

On key lessons, Rollo underlined commitment, engagement, and transparency, stating that mining regulatory frameworks must keep pace with the evolving field and support robust economies and worker health and safety. Young said a systems approach to management of tailings dams is key, considering safety at every stage of the process, from design to permit, monitoring, and maintenance. He also noted changes to cost accounting, as the industry, their investors, and buyers, now increasingly request metals that are safer and more responsibly sourced. Young concluded that risk is going down but not going away.

Critical Minerals: Opportunities and Challenges in the Race to Zero

Alec Crawford, IGF Secretariat, moderated this session on Wednesday. In an online poll, the majority of participants said their countries are prioritizing the exploration and extraction of critical minerals for the green energy transition.

K.C. Michaels, International Energy Agency (IEA), presented the IEA report on [The Role of Critical Minerals in Clean Energy Transitions](#). He noted that concerted effort to meet global climate goals will require four to six times more mineral inputs in 2040 than today, primarily due to increased mineral demand for electric vehicles and battery storage. He outlined the IEA's six-point plan of action to ensure availability of critical minerals, including mainstreaming higher ESG standards and strengthening international collaboration between producers and consumers. On the role of international and regional coordination, Michaels suggested a high-level forum for coordination to help standardize environmental and social standards for mining, while also

ensuring security of supply for consumers and predictable output for producers.

Anna Shpitsberg, US Department of State, discussed the [Energy Resource Governance Initiative \(ERGI\)](#) spearheaded by her department. She said it was created to ensure the clean energy mineral supply chain is diverse and resilient and adheres to the highest ESG standards. She said ERGI works with both source and demand countries worldwide, with the aim of building the capacity of countries with significant critical energy mineral resources to ensure the sustainable development of their mining sectors and increase private investment. Stressing that ERGI is a partnership, rather than a membership-based group, she said it is open to all countries. Shpitsberg highlighted challenges in meeting the world's mineral needs for the energy transition, including supply constraints creating price volatility. She called for a clear demand signal by countries setting ambitious climate goals and backing up these goals with the necessary policies.

Jerry Kwame Ahadjie, AFRICAN DEVELOPMENT BANK, presented on Africa's critical minerals opportunities and the Bank's efforts to promote them. He said in response to Africa's challenges in the natural resources sector, the Bank established a department for natural resource management, which generates knowledge to advise African governments on policy options to manage critical minerals. Ahadjie reported on a recent Bank study which examined the lithium and cobalt value chain and concluded that Africa has a comparative advantage in this area. He said to take advantage of this while ensuring ESG integrity, the Bank is partnering with institutions, such as the African Union, the UN Economic Commission for Africa and UNDP, to develop an African green mineral strategy to serve as a blueprint for optimizing opportunities presented by the low-carbon transition, with sustainability at its heart.

In the subsequent discussion, participants considered the role of recycling, market-distorting measures like state investment and guaranteed prices, and due diligence regulations.

Local Content and Regional Supply Chains

This session, which took place on Wednesday, was moderated by Daniela Desormeaux, Board Member, Centre for Studies on Copper and Mining, Chile. She asked the two speakers how COVID-19 affected mining operations in their regions and lessons learned. Sulemanu Koney, CEO, Ghana Chamber of Mines, responded that the impact on the sector in his country has been mixed, depending on the project. He said the two key lessons learned are the importance of: developing deep relationships with the government and host communities before crises emerge, and diversifying suppliers instead of relying heavily on a single country such as China.

Nick Maennling, Senior Advisor, Regional Cooperation for the Sustainable Management of Mining Resources in the Andean Countries, GIZ, said the short-term impacts on Andean countries were quite dramatic, especially for mining-dependent countries, such as Chile and Peru. He said the pandemic accelerated automation/digitalization of mining, forced diversification of suppliers, and made companies and governments realize the potential for further cooperation between them after the pandemic.

Both panelists agreed that true regional or sub-regional cooperation on local content rules is a long way off. Maennling suggested the possibility of bilateral or trilateral cooperation among Andean countries on issues such as skills promotion

related to increased mining automation/digitalization, common challenges such as water supply, or the development of supply clusters. Koney discussed the Chambers initiative, launched pre-pandemic, to make Ghana a subregional hub for mining and related services in West Africa, and called for the government to support this initiative. He urged more cooperation and partnerships to develop supply chains “closer to our operations,” saying companies should “think global, but act local.” Koney also highlighted efforts underway in the Economic Community of West African States to improve trade infrastructure, which would benefit the mining sector.

In response to audience questions, Koney outlined current efforts in the Ghanaian mining sector to promote gender mainstreaming.

Global Trends that Will Shape the Future of Mining

On Wednesday, Isabelle Ramdoo introduced this session, which focused on global trends such as the COVID-19 pandemic, climate change and the low-carbon transition, and what different stakeholders are considering in order to navigate through them. Gillian Davidson, Executive Sustainability, ESG, Responsible Supply Chain Advisor, and Chair, IWIM Board, moderated the session. In online polls, participants identified the key trends they expected to shape the mining sector in 2022, including: the low-carbon transition, for governments; investor pressure for ESG requirements, for the mining industry; and governance challenges and human rights risks, for civil society.

James Cust, WORLD BANK, noted that although the world is recovering from the COVID-19 pandemic, the recovery is stilted and uneven. He said the latest estimates for 2021 show 5.2% global growth for advanced economies, while, for instance, indebtedness has grown by about 30% in sub-Saharan Africa. He said many resource-rich countries will look to their mining sector to raise funds to deal with this crisis.

Cust further discussed the Bank’s “Changing Wealth of Nations” project, noting it aims to provide measurements of countries’ wealth beyond gross domestic product, including by measuring countries’ natural and human capital. He explained this would have environmental impacts, such as correcting the mispricing and underpricing of fossil fuels, and reflecting the value of renewable resources. On the role of minerals in the low-carbon transition, he noted that many countries have both fossil fuel and extensive mineral reserves, and must decide which resources to focus on and develop. He stressed that countries need to make themselves responsive and attractive to the mining

industry by, *inter alia*, improving their regulatory environment and ensuring stability of the operating environment.

Charles Dumaresq, Vice President, Science and Environmental Management, Mining Association of Canada, noted many short-term operational changes in the mining sector as a result of the pandemic. However, he said many of these changes are an acceleration of pre-COVID-19 trends, for instance the increased use of remote technologies such as drones for surveillance. He said in terms of larger and longer-term investments by the industry, the primary driver will be increased demand for key metals needed for the energy and low-carbon transition, rather than the pandemic.

Dumaresq also discussed how mining companies are adapting to the demands of climate change, highlighting efforts to reduce their greenhouse gas emissions through, for instance, moving from diesel power generation to renewable energy use, and increased use of electric vehicles.

Building Relationships to Improve Environmental Governance in Mining

This session, which took place on Wednesday, was moderated by Jenifer Hill, who underscored linkage with IGF’s recently published guidance on environmental governance, which covers water management, biodiversity protection, mine waste management, and emergency preparedness and response in the mining sector. She said the IGF will soon release case studies on water and waste management.

Galbadrakh Davaa and Bruce McKenney, The Nature Conservancy, discussed lessons learned from their involvement in national landscape-level conservation planning in Mongolia. They identified key elements for a successful conservation planning exercise, including:

- an inclusive and participatory process to build buy-in;
- proactive communication of results;
- having government champions and cooperation across ministries;
- involvement of local academics and government experts in technical support work to ensure results are translated into practice;
- integration of conservation planning tools into national and regional land use planning;
- active mining industry engagement and support;
- factoring in local community livelihoods and empowering communities to follow-up on protection of their lands; and
- involving women and youth at all stages.

Both stressed identifying and protecting key biodiversity areas early, mitigating impacts that cannot be avoided, and using biodiversity offsets when mitigation is not possible.

Peruvian consultant Nancy Bahamonde Quinteros discussed participatory environmental monitoring committees in Latin American mining, with a detailed look at Peru. She recommended the UNDP guide on lessons learned from the use of such committees in Argentina, Bolivia, Panama, and Peru. Bahamonde identified key challenges facing participatory environmental monitoring committees in mining, including: ensuring follow-up; limited technical understanding of committee members; financial sustainability of committee work; and inclusion. Among the solutions she suggested was allocating a portion of mining royalties to support committee work and capacity building, or asking mining companies to create a trust fund for that purpose.



Isabelle Ramdoo, Deputy Director, IGF Secretariat



Rohitesh Dhawan, President and CEO, International Council on Mining and Metals

Closing Remarks

During the closing session on Wednesday, Greg Radford noted recent challenges have given rise to many new partnerships that would otherwise not have been formed. He stressed many more opportunities exist for government, industry, and communities to partner together to build a better future.

Kitty van der Heijden, Director General for International Cooperation, Ministry of Foreign Affairs, the NETHERLANDS, underscored that the planet's metal and mineral resources are the backbone of the green energy transition, and are required to reach the goals of the Paris Agreement on climate change. She stressed the need to work towards an improved mining sector worldwide. She called for: climate-smart mining policies; gender-responsive policies and practices; and practices that address the unequal distribution of mining costs and benefits. Issuing a call to action, van der Heijden said the world is suffering an unprecedented economic and health crisis triggered by an unbalanced relationship with nature, and urged responsible mining that respects planetary boundaries and mining communities.

Rohitesh Dhawan, President and CEO, ICMM, said the IGF AGM addressed current issues of importance, such as tailings dam management, mining governance, local content, and regional supply chains, ASM, and the importance of ensuring host communities and countries enjoy the benefits of mining. He added the AGM also looked towards the future, considering the new thinking and skills that will be essential for future challenges. Dhawan underlined that the world is going through an energy transition and the mining sector is at the heart of it.

Thanking everyone for their participation and contribution, Isabelle Ramdoo closed the AGM at 10.57am EDT.

Upcoming Meetings

Tailings and Mine Waste 2021: This Conference will provide opportunities for participants to present ideas, learn of new developments and technologies, make professional contacts, and discuss issues related to the impact of mine wastes on the environment. **dates:** 6-10 November 2021 **location:** Alberta, Canada **www:** web.cvent.com/event/33994a33-3331-4bcb-8c3f-706a3ccdfb5d/summary

International Mining and Resources Conference+Expo: This Conference will cover all aspects of the mining supply chain, from exploration, investment, production and optimization, to new technologies and global opportunities, alongside discussions on health and safety, renewable energy, critical minerals, and sustainability. **dates:** 31 January to 2 February 2022 **location:** Melbourne, Australia and online **www:** imarglobal.com/

Electric Mine 2022 Conference: This event will gather leaders in the mine electrification space, with the programme offering a platform for mining companies, original equipment manufacturers, service providers and research institutes to exchange ideas on best practice within this sector. **dates:** 17-18 February 2022 **location:** Stockholm, Sweden **www:** www.theelectricmine.com/event/43b430e6-9fdd-49b2-83a4-66e21ec9a8b5/summary

Investing in African Mining Indaba: The Investing in African Mining Indaba is solely dedicated to the successful capitalization and development of mining interests in Africa. **dates:** 9-12 May 2022 **location:** Cape Town, South Africa **www:** www.miningindaba.com/Home

Third Copper Cobalt Africa Conference: This event aims to: promote dialogue among operators, vendors, and service providers on common metallurgical challenges facing the industry; enhance understanding of new and existing technologies that can lead to safe and optimal resource utilization; and encourage participation and build capacity amongst young and emerging professionals from the Copper Belt region. **dates:** 14-16 June 2022 **location:** Livingstone, Zambia **www:** www.saimm.co.za/saimm-events/upcoming-events/copper-cobalt-africa#background

7th International Symposium on Sustainable Minerals: This conference will discuss all aspects of material and metal usage. **dates:** 11-14 July 2022 **location:** virtual **www:** mei.eventsair.com/sustainable-minerals-22/

For additional upcoming events, see sdg.iisd.org/

Glossary

AGM	Annual General Meeting
ASM	Artisanal and small-scale mining
ESG	Environmental, social and governance
ESIA	Environmental and social impact assessment
ICMM	International Council on Mining and Metals
IGF	Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
ILO	International Labour Organization
IWiM	International Women in Mining
MET	Mining ESIA Tool
MPF	Mining Policy Framework
NGO	Non-governmental organization
SDGs	Sustainable Development Goals
UNDP	UN Development Programme
UNEP	UN Environment Programme
WSSD	World Summit on Sustainable Development