

Summary of the 18th Annual General Meeting of the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development: 8-10 November 2022

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 International Energy Agency (IEA), a concerted effort to reach the goals of the Paris Agreement would require a quadrupling of critical mineral requirements for clean energy technologies by 2040. An even faster transition, to hit net zero globally by 2050, would require six times more mineral inputs in 2040 than today. 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 18th Annual General Meeting (AGM) of the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF) convened with a focus on the theme “Critical Minerals and the Energy Transition.” Meeting in various sessions, the AGM considered important sub-themes, including: government readiness to handle the demand and the resulting transitions; how to change resource taxation to best suit and take advantage of the rising demand for critical minerals; how legacy mines and waste might be re-mined for critical minerals; and how to ensure that local communities fully benefit from the rush to supply minerals for the energy transition.

The AGM also examined the future of mining and how to ensure the industry is ready to meet ongoing challenges and address global trends. For example, sessions explored: the role of women in the mine of the future; the evolution of how the sector responds to environmental, social, and governance (ESG) requirements; how the industry can accelerate decarbonizing its operations to reach a low-carbon future; lessons learned from the application of IGF’s Mining Environmental and Social Impact Assessment (ESIA) Tool (MET); and the sector’s challenges in building resilient supply chains.

The 18th AGM of the IGF took place at the Palais des Nations in Geneva, Switzerland, (and virtually) from 7-10 November 2022.



Group photo of the 2022 AGM participants

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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-governmental and international organizations. The IGF has its origins in the 2002 World Summit on Sustainable Development (WSSD), which took place in Johannesburg, South Africa, and encouraged governments, civil society, and private sector actors to enter into voluntary partnerships focused on sustainable development objectives. The WSSD's [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 80 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 artisanal and small-scale mining (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 (IISD) in Ottawa, Canada.

The IGF AGM first convened in 2005 with 25 member countries. 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 the [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: discussed ways in which companies are starting to reduce greenhouse gas (GHG) emissions from mining operations and adapt to changes in the environment, such as increased water scarcity and other disaster risks, and reviewed draft guidance on ESIA's, prior to its subsequent release;
- in 2020, the 16th AGM, which convened virtually in the midst of the COVID-19 pandemic, focused on 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 to implement the [Global Industry Standard on Tailings Management](#) published in August 2020; and
- in 2021, the 17th AGM convened virtually to: consider a variety of topics on mining sector governance, including critical minerals, ASM, ESIA, community engagement, gender equality, local content, partnerships, taxation, and new technologies; and officially launch the [IGF's Mining ESIA Tool \(MET\)](#), developed to analyze countries' environmental and social legal frameworks, practices, and institutional capacity in relation to ESIA's for the mining industry.

Report of the Meeting

On Tuesday, 8 November, Greg Radford, Director, IGF Secretariat, welcomed delegates to the first in-person AGM since 2019 and thanked the UN Conference on Trade and Development (UNCTAD) for hosting the AGM for the past 18 years. He noted that Togo has joined the IGF, bringing its member countries to 80, and that in 2023 the IGF will launch an online consultation to review and update the MPF.

Janvier Nkurunziza, UNCTAD, noted the theme of the 18th AGM is of relevance to the UN Climate Change Conference currently underway in Sharm El-Sheik, Egypt, since critical minerals will play a key role in ensuring the needed energy transition to reach the net-zero emissions goal.

Maureen Coulas (Canada), Chair, IGF Executive Committee, praised the Secretariat for continuing to deliver quality work during the pandemic. She reported that the Committee had been unanimous in its support of the AGM theme. Coulas said that



Greg Radford, Director, IGF Secretariat

for Canada the clean energy transition represents a generational opportunity for the Canadian mining community to become an integral player in the energy transition, and noted the recent Canadian budget allocates four billion CAD to support its critical minerals strategy. She said the IGF has a unique role to play in convening stakeholders from around the world to share and explore ideas, insights and experiences on the theme from multiple perspectives.

Setting the Scene: Mineral Needs for the Energy Transition

During this session on Tuesday, Nkurunziza suggested commodity-dependent developing countries (CDDCs) that export strategic minerals should consider how they can benefit from increased demand due to the energy transition, rethink the mineral supply chain, and develop related domestic or regional value chains. He discussed “green industrial policy” options CDDCs should consider, with a focus on:

- learning how to produce and export new green products;
- the transfer of green technologies to CDDCs; and
- greater international cooperation in support of CDDC efforts.

Pascal Laffont, IEA, stressed the need for better integrated supply chains, improved international collaboration, and a reduction in environmental and social impacts through tracking and tracing instruments. Regarding policy instruments, he stressed the need to develop differentiated and tailored policies and called for implementing strategies that will improve ESG performance, including through collaboration between industry, governments, and relevant organizations.

International Council on Mining and Metals (ICMM) CEO Rohit Dhawan recalled the societal crisis of confidence in the mining sector that prompted the launch in 1998 of the research and consultative process on mining and sustainable development that eventually led to the creation of the IGF and the ICMM. He urged the industry to take the lead to create a radically different pathway that will benefit both the planet and people, particularly at the local level where minerals are mined. On behalf of



Rohit Dhawan, ICMM Chief Executive Officer

ICMM, he pledged support to address climate change, eliminate tailings disasters, ensure diversity, equity and inclusion in the workplace, and publishing all contracts and tax obligations with governments. Dhawan urged governments to do their part, for example by incorporating into law the [Global Industry Standard on Tailings Management](#).

Government Readiness for Modern Policy and Regulatory Frameworks

On Tuesday, moderator Nathalie Bernasconi-Osterwalder, Executive Director, IISD Europe, said the session would discuss the extent to which governments are prepared with suitable policy and regulatory frameworks that will meet the rising demand for critical minerals.

David Manley, Natural Resource Governance Institute (NRGI), noted how triple-win mining policies can benefit Africa’s citizens, their environment, and the energy transition. He highlighted three mining policy imperatives for Africa, such as the need to expand “no go” zones, better evaluate below-ground risks through better geological data, and maximize the value from mining.

Dione Macedo, Ministry of Mines and Energy, Brazil, discussed Brazilian mining policy, including the revision of the 2050 National Mining Plan, the pro-strategic minerals policy created in 2021, the fair energy transition programme which engages with coal, the lithium decree, and the national fertilizers plan.

Abdelaâli Lefdaoui, Ministry of Energy Transition and Sustainable Development, Morocco, described Morocco’s proactive energy strategy which includes a legal framework and innovation for renewable energy, energy efficiency, and regional integration.

Scott Woodard, Department of State, US, said total mineral demand for clean energy technologies is expected to be six times higher by 2040 than currently. Noting that market forces alone will not drive the necessary changes to ensure high ESG standards compliance, he described the key objectives of the



Scott Woodard, Department of State, US



Michèle Brühlhart, Executive Director, The Copper Mark

multilateral [Minerals Security Partnership](#) launched in June 2022 as: attracting increased public and private investment in critical minerals; increasing transparency; and promoting high ESG standards.

Responding to moderator questions, Woodard suggested recent consultations with developing countries are very positive, with emphasis on getting social buy in and transitioning towards renewable technologies. Macedo described Brazil's geological surveys and focus on minerals as critical for renewable energy technologies, saying there is great potential to reshape the country's mineral industry and related government policies. Lefdaoui mentioned the need to develop the entire value chain of renewable energy minerals within countries, including both critical as well as other strategic minerals. Manley highlighted regional efforts within the Southern African Development Community that provides opportunities for investing in critical minerals and renewable technologies at a greater scale, thereby spreading benefits and costs across countries within the region and expanding venture capital funding opportunities for the region as a whole.

ESG and Responsible Mining: A Game Changer or Old Wine in New Bottles?

On Tuesday, the session moderator, Nicolas Maennling, Deutsche Gesellschaft Für Internationale Zusammenarbeit (GIZ) GmbH, observed significant recent momentum in seeking ESG standards in the mining sector but consensus that much more needs to be done. He also noted push-back from mineral-producing countries about the extraterritorial application of standards promoted by importing countries, and from civil society about voluntary standards perceived to be used to “greenwash” corporate performance.

Michèle Brühlhart, Executive Director, The Copper Mark, described the challenges faced by copper producers in meeting the 40% demand increase needed to meet the Paris Agreement goals. She stressed the need for data-driven, open, and transparent discussions around the impacts of copper mining.

Sanjay Lohiya, Ministry of Mines, India, discussed the various bodies working on ESG standards relevant for mining in his country, and said India welcomes voluntary industry standards.

Louis Maréchal, Organisation for Economic Co-operation and Development (OECD), discussed current OECD concerns about companies “running away” from risks that they have identified in their supply chains under the [Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas](#), rather than mitigating those risks.

Lyydia Kilpi, Extractive Industries Transparency Initiative (EITI), discussed ways EITI and transparency have prompted improved governance in the mining sector of many countries, providing examples involving disclosures of mining contracts, beneficial owners, and allocation of licenses.

Responding to moderator questions, Kilpi stressed the importance of complementarity among standards, revenue forecasting, and addressing the decarbonization divide between the global North and South. Maréchal highlighted the need for enhanced and more qualitative reporting on the risks that companies face and consistency in the monitoring of corrective action measures. Lohiya discussed the importance of national context, noting the overlap of ESG metrics with national regulation. On consolidation of ESG initiatives, Brühlhart suggested that the market will choose which of these voluntary standards and certifications will add value and that over time there will be a natural convergence.

The ensuing discussions addressed the development of the Global Reporting Initiative's mining sector standard, challenges of implementing beneficial ownership transparency, integration of ESG aspects into business models, policy coherence on ensuring security of supply as well as responsible sourcing of minerals, building capacity to implement standards in a phased approach, and the factors needed to enable ESG to go beyond the status quo.

Accelerating Decarbonization: Technology, Innovation, and Partnerships

In this session on Tuesday, moderated by Natascha Nunes da Cunha, Inter-American Development Bank, panelists



Moderator **Natascha Nunes da Cunha**, IDB

considered technological and innovative practices in support of decarbonization strategies, and the extent to which governments and industries are working together to meet climate goals. Nunes da Cunha reminded participants that the scale and challenge of decarbonizing the world cannot be resolved by countries, industries, or local communities individually, but it requires multiple approaches and collaboration among all stakeholders.

Katherine Gosselin, Mining Association of Canada, provided an overview of the [Towards Sustainable Mining](#) (TSM) initiative, noting 200 companies already report to TSM on their operations and that several national mining associations have adopted versions of TSM and made them mandatory for their membership. She said this allows companies to turn high-level environmental and social commitments into action on the ground and provide communities with valuable information on how operations are performing in important areas, such as community outreach, tailings management, and biodiversity.

On the role of Namibia as a renewable energy hub in southern Africa, Harmony Musiyarira, Namibia University of Science and Technology, called for changing the narrative that depicts mines as the “bad guys” and suggested this will require a combination of solutions, including policy recommendations, legislation and regulatory frameworks, and attracting investment through initiatives such as “one-stop shops” instead of engaging multiple ministries.

Harikrishnan Tulsidas, UN Economic Commission for Europe, noted the World Bank estimates that by 2050, minerals will overtake oil and gas as the largest global trade flow. He discussed UN work following up the Secretary-General’s policy brief, [Transforming Extractive Industries for Sustainable Development](#), on how the sector can become an engine to support a just transition to a net-zero, circular, and inclusive global economy. Tulsidas emphasized the need for:

- a social contract on using natural resources at the local level;
- integrated sustainable management of natural resources;
- proper investment frameworks;

- transparency and flexibility towards eliminating child labor and improving human rights; and
- standardizing environmental impact assessments (EIAs) and applying them uniformly across the world.

Responding to moderator questions, Tulsidas highlighted a variety of technologies to decarbonize mining and processing industries such as green hydrogen in steel making and green ammonia in marine transport. He stressed the need to monitor decarbonization progress using key performance indicators such as monitoring and reporting of carbon emissions and intensity. Gosselin highlighted how TSM’s new climate protocol will assess climate risks at the facility level and require implementation of adaptation measures according to the risks that have been identified. Musiyarira stressed the need for government to use the mining sector to achieve climate goals, for example by improving process efficiencies.

Participants then discussed developing and implementing metrics on GHG emissions and environmental impacts, using a circular approach to eliminate waste from mining, and how the TSM protocol on climate change requires reporting at the facility and corporate levels.

Women in the Future of Mining

On Wednesday, moderator Carolina Rojas-Hayes, International Extractives and Energy Consultant, said the large-scale mining sector is at a crossroads, with rising demand for minerals and metals likely to modify demand for labor and skills, providing new opportunities for women and for promoting gender equality amid the sectoral transformation.

Barbara Dischinger, Founder and Director, International Women in Mining (IWIM), outlined the [Women in the Future of Mining](#) project’s key preliminary findings from 12 countries, including:

- mining is highly masculinized;
- women tend to be concentrated in clerical and support roles;



Moderator **Carolina Rojas-Hayes**, International Extractives and Energy Consultant, calls the meeting to order

- most women are not offered technical training or science, technology, engineering, and mathematics (STEM) opportunities; and
- the pay gap and “leaky pipeline” (women departing the workforce early in their careers) are real.

Fernanda Ávila, Mining Secretary, Argentina, noted her country is seriously affected by the rising demand for minerals for the energy transition, highlighting as examples several projects involving lithium. Despite growth in mining employment in her country, she said women still only constitute 10% of the workforce and stereotypes persist. Explaining that under Argentina’s federal system where the provinces control exploitation of their national resources, Ávila said the federal government is seeking to coordinate with the provinces on how to improve women’s participation in the mining sector.

Bolormaa Tumurchudur-Klok, International Labour Organization (ILO), reviewed global drivers that are changing employment, including in the mining sector, such as the green economy, the introduction of new technologies and innovation, demographic shifts, migration, and changes in work organization. She reviewed some of the ideas put forward by the [ILO Global Commission on the Future of Work](#) for a human-centered approach to investing in capabilities and institutions for a fair and inclusive future of work with productive employment for all.

On how women can improve their participation with representative organizations, Dischinger shared examples from IWim organizations in Ecuador, Finland, and Singapore, saying while there is a global data deficit on this topic, some countries tend to gather data about females in the workplace, and others develop indexes with underlying indicators to understand the gender inequality landscape.

In response to a question on how skills development can broaden the role of women, Tumurchudur-Klok highlighted the need for:

- understanding the type of skills necessary;

- working together with industry to develop training programmes; and
- defining the different levels where skills development should be addressed, either through initial education, or through vocational and tertiary education.

Ávila mentioned the linguistic dilemma when companies recruit labor as they use the masculine form in Spanish job descriptions and underscored the importance of having initial baseline analyses within countries to evaluate inequalities so correct measures and policies are defined.

Lamenting that less than 14% of mine employment positions are filled by women, John Lindberg, ICMM, described examples of large-scale mining companies Rio Tinto, BHP, and Anglo American that have recently made significant progress in addressing such issues as gender inequality, gender-based violence, bullying, and gender biases in the supply chain. He referred participants to the expanded [ICMM Mining Principles](#) that include additional actions to eliminate all forms of harassment and unfair discrimination and set out proactive steps to achieve gender equity.

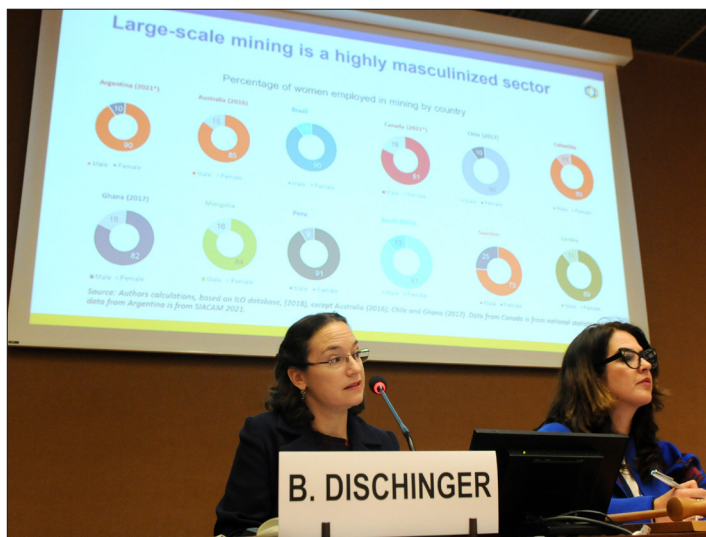
During subsequent comments from the floor, participants highlighted cultural legacies and country contexts that take time to address, and the need to promote STEM education access to young girls.

Building Resilient Supply Chains

On Wednesday, moderator Casper Edmonds, ILO, introduced the session, noting that supply chains are only as strong as their weakest link.

Abdulrahman AlBelushi, Ministry of Industry and Mineral Resources, Saudi Arabia, outlined the importance of unlocking exploration and development of minerals through, for example, revising mineral codes, accelerating exploration licenses, and making geological data public.

Jerry Ahadjie, African Development Bank (AfDB), discussed several key obstacles for the implementation of resilient supply



Barbara Dischinger, Founder and Director, IWim



Barbara Dischinger, Founder and Director, IWim

chains in Africa, including the need for: African critical mineral strategies; policy predictability; investment in research and development so Africa is not always at the “receiving end” of technologies; and improved infrastructure to overcome the challenges of economies of scale.

On scaling sustainable battery value chains, Inga Petersen, Executive Director, Global Battery Alliance (GBA), highlighted several challenges, such as: raw materials scarcity and supply given increasing demand; harmonizing the policy landscape; localizing supply chains to ensure host country benefits; and recycling and circularity of batteries and electric vehicles.

Peter Buchholz, Head, Mineral Resources Agency, Federal Institute for Geosciences and Natural Resources, German Mineral Resources Agency, outlined how the EU and Germany are addressing supply chain risks, such as through the EU’s proposals for a Corporate Sustainability Due Diligence Directive and an EU Critical Raw Materials Act. For Germany, Buchholz noted efforts to update their raw materials strategy, a proposed investment fund to support mining, processing and recycling, and supporting measures for stockpiling at industrial sites.

In response to questions from the moderator, Al Belushi said mineral supply chains are at the heart of Saudi plans to diversify their energy mix away from oil and gas and into renewables, noting investments by the country’s sovereign wealth fund to increase electric vehicle fleets and set up a battery chemicals complex.

Ahadjie explained that the AfDB has studied the implications of building battery production facilities for electric vehicles in Africa, observing that it clearly implies several environmental impacts, including greater GHG emissions. He said the AfDB has enhanced its:

- environmental safeguards framework to address such issues;
- safeguards regarding legal compliance, bribery, corruption, and transparency; and
- financial modelling frameworks to analyze how best to benefit from the energy transition.



Inga Petersen, Executive Director, GBA

Petersen discussed the GBA’s “[battery passport](#)” that will provide three reporting elements: technical data; tracking and tracing of materials flows; and sustainability, based on consistent and comparable indicators. She noted the recent publication of the GBA’s [Greenhouse Gas Rulebook](#) setting harmonized rules for battery carbon footprints.

Ensuing discussions with the audience covered:

- how to prompt needed changes on the ground when conflict minerals legislation like the US Dodd-Frank Act have led to many buyers and traders to simply stop dealing with the Democratic Republic of Congo (DRC);
- whether multiple human rights standards should be combined to make compliance and reporting easier;
- what opportunities growing global demand for critical minerals might offer Africa to dictate terms for more downstream, value-added production; and
- possible funding sources for more exploration to discover further reserves of needed minerals.

Re-Mining for Critical Minerals and Land Restoration

On Wednesday, moderator Steve D’Esposito, Founder and CEO, Regeneration Enterprises, and President and CEO, RESOLVE, opened the session by suggesting that tailings are not just waste, but provide ecological and community development opportunities as well.

Coulas explored the reasons for the recent changes in how mining companies regard mine waste, highlighting several catastrophic tailings dam collapses over the past few years, the circular economy agenda, and the dramatic rise in demand for critical minerals.

On the motivation for re-mining developments, Mark Davies, Rio Tinto, mentioned having significant closure obligations, which drive the compulsion to extract any potential remaining minerals. Regarding the need to grow the restoration component of his company, he said the energy transition is fundamental to their strategy, since the 26 million megawatts of renewable



Maureen Coulas, Natural Resources Canada

energy needed within the next decade will require a significant increase in critical mineral extraction.

On drivers of the restoration agenda, Gillian Davidson, Chair, Board of Directors, GBA, and Chair, Leadership Council, RESOLVE, highlighted the scale and demand for batteries, which are expected to increase 17 times by 2030. Due to the immense scale envisioned, she stressed the critical need to increase supply, predicting a 40% increase in copper and a 16-fold increase for lithium. In addition to these needs, she expanded on the time lag to develop new mines which constitutes an average of 17 years for copper mining due to policy and licensing constraints, perverse environmental subsidies, and local supply chains protecting their own networks.

Following a video showing a restoration project in the Jack Wade Creek tributary of the Fortymile River in Alaska, panelists considered motivations and driving factors of pursuing re-mining and regeneration activities. Coulas described two Natural Resources Canada programmes with the long-term vision for mining to leave behind only clean water, healthy ecosystems, and restored nature, emphasizing Indigenous participation as the most desirable element. Stressing the need to transition from a fuel-based to an energy-based economy, Davies identified decarbonization as a major driver, and looking at waste assets differently, such as extracting tellurium and scandium from their sludge waste. Davidson said restoration reframes problems as opportunities and stressed the importance of the business model as a fundamental component given it becomes a public benefit model with the goal of benefitting nature and communities through re-investment.

In a further interactive discussion among the panelists, Coulas stressed the importance of ensuring there are no regulatory impediments to reclamation and restoration activities. Davies highlighted that a co-management approach is needed with communities to ensure that mine closure leaves a positive societal legacy, new technologies are needed for mine reclamation and restoration, and timing is critical given the increasing demand for

materials. Davidson noted that determining how re-mining fits into broader voluntary ESG standards is a “wide open space.” D’Esposito said that while the current management approach to tailings and waste is risk-based, it should also be opportunity-based.

In ensuing discussion with the audience, participants discussed the viability of re-mining at existing mines, the importance of working together with mine operators and government to explore the risk and opportunity of re-mining, the need to consider the utility of tailings and the policy and regulatory context for re-mining from the start of a mining project, and the importance of partnerships to research and reduce the risk of tailings failure.

Integrating Social and Community Considerations in Mine Closure and Post-Mining Transition

On Wednesday, moderator Rob Stevens, IGF consultant, provided an overview of the role of government in the social aspects of mine closure, including policies and regulations, requiring ESIA’s, ensuring international agreements and leading practices are followed, requiring the formation of closure committees, and setting standards for a just workforce and community transition.

In a video presentation, Sarah Mackenzie, Sustainable Minerals Institute, University of Queensland, Australia, discussed what the Institute’s Centre for Social Responsibility in Mining has found in its work on participatory processes in mine closure planning. She observed that the conversation around mine closure is far reaching and should involve participation of all stakeholders to understand all potential issues. Mackenzie stressed that “it’s not so much what you do, but how you do it.”

Jennifer Adams, Canadian Executive Service Organization (CESO), discussed the Salkhit Gold and Silver Mine Closure Plan Pilot Project, which will set standards for industry in Mongolia and identify any updates needed in that country’s mining regulations. She described the process of involving the public in the development of the closure plan, stressing the



Moderator **Steve D’Esposito**, Founder and CEO, Regeneration Enterprises, and President and CEO, RESOLVE



Jennifer Adams, CESO

importance of mapping all potentially impacted stakeholders, building capacity development into all stages, and respectfully and transparently engaging the stakeholders.

Presenting his country's first mine closure event involving the Gora gold mine in the eastern Kédougou region, Ibrahima Guèye, Secretary General, Ministry of Mines and Geology, Senegal, said key recommendations for the closure process were developed jointly with the local communities and were then further developed into an action plan. Guèye highlighted that an environmental and social audit was included in the closure plan. He identified monitoring measures that would minimize post-mining impacts and concluded by saying this first experience will inform future mine closures in Senegal and assist with the development of a national mine closure and rehabilitation framework.

In the ensuing discussion, participants raised the challenges of regulating the legacy issues of old mine sites, ASM access to closed mines, the need for adequate regulatory frameworks and funds for mine closure and rehabilitation, and how strategic environmental assessment (SEA) could support planning for mine closure.

Managing Artisanal and Small-Scale Gold Mining

On Thursday, moderator Boukje Theeuwes, Solidaridad Europe, noted ASM generally employs around 40 million miners worldwide and is the second largest employer after agriculture. Gold, she said, is the largest segment of ASM miners, who produce about 20% of the global volume of newly mined gold. "ASM miners won't go away," she said, "so instead of marginalizing it, we should work on formalizing it over the long term."

Holger Grundel, Managing Director, Levin Sources, outlined key findings and recommendations from a [recent study with IGF](#) on illicit financial flows (IFFs) related to artisanal and small-scale gold mining (ASGM) in Burkina Faso, Mali, and Niger. He noted four drivers: informal buying and trading; smuggling; corruption, extortion and informal taxation; money laundering; and convergence with other illegal activities.

Fatoumata Moumouni Dady, Ministry of Mines, Niger, discussed his country's experience in trying to exercise more

control, oversight, and stewardship of ASGM through new ordinances and the creation of a special interagency committee.

Distinguishing between informal and illicit activities as related to ASGM, Carlotta Schuster, UNCTAD, noted that "informal" usually means "unobserved" and operates in an environment where it is very challenging to implement regulations and business facilitation strategies. She highlighted that informal trade is not always illicit and very often is an essential pillar of livelihoods for vulnerable groups, and that activities, such as tax avoidance, human trafficking and money laundering, should be curbed through law enforcement.

On how actors along the value chain can contribute to ASGM formalization efforts, Edward Bickham, World Gold Council, emphasized introducing the right incentives, improving market access, establishing due diligence controls, and formalizing business and ESG policies. On options for improving the interface between large-scale mining and responsible ASGM, he cited a ["lessons learned" report](#) that can provide the legal underpinning for co-existence models such through, for example:

- ASGM corridors;
- technical support or capacity building in areas like safety and the environment;
- development of holistic approaches to alternative livelihoods;
- factoring ASGM opportunities into closure planning; and
- respect for human rights and upholding the law.

Jane Dennison, Department of State, US, discussed challenges in reclaiming tailings from ASGM, including local tailings governance, establishing ownership of the tailings, determining environmental liability, and identifying the responsible government ministry.

In the ensuing discussions, participants highlighted the traceability of ASGM through implementation of fingerprinting and blockchain technologies, opportunities to differentiate ASGM through jewelry and premium products with strong due diligence to avoid illicit financial flows generated by ASGM, and the potential linkages between ASGM and jihadist movements and terrorism.



Holger Grundel, Managing Director, Levin Sources



Jane Dennison, Department of State, US

Moderator **Mary Baine**, ATAF

Critical Minerals and The Future of Resource Taxation

On Thursday, moderator Mary Baine, African Tax Administration Forum (ATAF), introduced the session noting that in the developing world, the countries best endowed with natural resources are the ones that benefit least.

Viola Tarus, IGF Secretariat, presented on [The Future of Resource Taxation project](#) outputs, led by IGF and ATAF, which included a variety of innovative fiscal measures crowdsourced from governments, civil society, industry, and academia. The key themes that emerged included:

- the need for simple taxation methods and fiscal regimes;
- participation of multiple stakeholders, including state mining companies;
- the importance of a fair fiscal regime such as through variable rate royalties and competitive bidding; and
- compensation for externalities through, for example, carbon taxes.

She urged all stakeholders to provide feedback on the ideas featured on the project webpage and noted that policy proposals will be launched in 2023 after considering the feedback received.

Jerry Garry, Mineral Resources Authority, Papua New Guinea, stressed how minerals and metals are critical for Papua New Guinea's development and the importance of simple and transparent taxation regimes. Garry outlined several measures to improve governance of the sector, including:

- the introduction of production-sharing arrangements;
- competitive bidding for mining licenses;
- the establishment of state mining companies; and
- the potential for a flexible royalty regime.

Mukupu Nsenduluka, Tax Justice Network Africa, stressed the need to connect discussions around the future of resource taxation with the “reality on the ground” in host communities.

She highlighted the importance of:

- mineral revenue-sharing mechanisms with local authorities;
- political will and government commitment to enable community benefits;
- stakeholder engagement to push for laws that benefit communities;

- adequate geological data to model the right fiscal regimes;
- contract transparency to enable accountability; and
- integrating mining into the local economy.

A representative from Togo agreed, noting that it had a special fund to benefit local communities, but found that local management of funds is often inadequate. He suggested investing in capacity building to help communities acquire the necessary fund management skills.

Asked about installing mechanisms to ensure companies contribute all they are supposed to, and that local communities receive what they are due, Nsenduluka noted several challenges, including political will to impose revenue sharing, ensuring clarity and transparency about the process, and deciding how best to roll it out.

David Spencer, Anglo American, cautioned against thinking of tax in isolation, saying there are a variety of economic factors that need to be considered when determining a tax regime. He encouraged governments to find the right balance between short-versus long-term tax revenues and stressed: the importance of tax certainty; keeping tax laws as simple and clear as possible; the need for well-designed and transparent incentives; good principles of environmental taxation; and the importance of broad consultation to provide insight into the practical application of new tax regimes.

An audience member cautioned against relying too heavily on lessons from taxation of the oil and gas sector, noting several key differences between the exploration, exploitation, and value chains of oil and gas versus minerals mining.

Asked how he would advise incentivizing local content through taxation, and how best to deal with transfer pricing to stop tax evasion, Spencer stressed that while some targeted but transparent tax incentives can help, the more important aspect for most companies is “certainty about the rules of the game over the long term.” As for transfer pricing, he said contrary to popular belief, most companies focus more on complying with transfer-pricing rules imposed on them rather than picking and choosing with the aim of avoiding taxes.

**Mukupu Nsenduluka**, Tax Justice Network Africa



The dais during the session on ESIA Policy Diagnostics from Exploration to Mine Closure

ESIA Policy Diagnostics from Exploration to Mine Closure

On Thursday, moderator Clémence Naré, IGF Secretariat, stressed the need for ESIA governance in the mining sector, particularly as it relates to critical minerals. She said the MET developed by the IGF would allow governments to craft and implement ESIA so policymakers have the knowledge and tools to analyze how proposed mining projects will be carried out. This, she noted, will ensure they support environmental, social, and economic interests and priorities of governments and communities alike.

Rebecca She Zidouemba, Ministry of Mines, Petroleum and Energy, Côte d'Ivoire, and Kaisa Toroskainen, GIZ, jointly presented a case study of how the MET was used in Côte d'Ivoire as a monitoring tool to assess mine closures. Zidouemba shared the efforts to bring together all relevant ministries as they had been working in silos. She noted several gaps in the current policy and legislative frameworks, including that the country lacks the experience to rehabilitate open-cast mines. Toroskainen said the tool was designed to auto-diagnose gaps and develop an action plan as an outcome.

Stephen Teeuwen, Netherlands Commission for Environmental Assessment (NCEA), discussed a variety of activities the NCEA undertakes to strengthen environmental assessment systems in Dutch partner countries, such as reviewing mine closure plans and samples of ESIA as well as advising on SEA for the mining sector. He discussed an example in Burkina Faso of utilizing a MET quick scan to assess how ESIA works in the mining sector. He highlighted the need to continue working on incorporating gender and security into the assessment of social impacts, ensuring the mining code covers all phases of ESIA sufficiently, the development of review mechanisms for mine closure, and more legal requirements for grievance mechanisms.

Noting that women are disproportionately affected by the social and environmental costs of mining, Marion Provencher Langois, IGF Secretariat, presented the results of a [global](#)

[review of integrating gender into mining impact assessments](#).

To address the gendered impacts of mining, she outlined three strategies, namely to: incorporate gender into ESIA processes; conduct standalone gender impact assessments; and include gender in human rights impact assessments. She stressed the need to implement the findings of gender impact assessments, reflect gender impact assessment in a range of documents and agreements such as community-benefit agreements and mine resettlement action plans, collect disaggregated gender data to be used throughout the mining lifecycle, and engage and tap into the expertise of women through grassroots organizations.

Participants discussed: the utilization of SEA to designate “no-go zones” and to align mining activities with other national policies for example on biodiversity; and the need to build government capacity to ensure all mining companies follow international standards, and to ensure inter-ministerial cooperation and coordination.

Community Resilience in a Just Transition

On Thursday, moderator Marina Ruete, IGF Secretariat, said this session would discuss how local communities can benefit from the high demand for critical minerals and ensure resilient communities are built as part of a just energy transition.

Swasti Raizada, IISD, noted there is no single accepted definition of “just transition,” but suggested some common features, including:

- balancing the interests of diverse stakeholders;
- ensuring benefits actually reach mining communities;
- addressing structural changes, and not just job losses; and
- bringing communities to the front-and-center of discussions.

Tom Moerenhout, IISD and Columbia University Center on Global Energy Policy, offered lessons about working with local communities learned from the energy sector, using an example involving a proposal for an offshore wind project. He stressed:

- taking time to learn and understand the objectives of local communities;



Moderator **Marina Ruete**, IGF Secretariat



Tom Moerenhout, IISD and Columbia University Center on Global Energy Policy

- being upfront and explicit with local communities about possible environmental impacts of the proposed project, and what steps the companies involved plan to take to address and mitigate those impacts and move the project toward a net-positive impact; and
- ensuring that project benefits are actually shared with the local community.

William Davis, NRGI, discussed ways to ensure that, in the rush for critical minerals, communities do not get treated by the mining sector as they have in the past, including through:

- improving the allocation of mining revenues by governments;
- tackling corruption in the activities where it occurs most;
- increasing transparency, including of the beneficial owners of mines;
- improving management of national mining companies;
- promoting more local content and compelling large companies to engage in joint ventures with, for example, state-owned enterprises;
- measuring progress and publishing updates;
- requiring disclosure of environmental plans to civil society; and
- coordinating at regional levels, perhaps to create regional value chains.

In a video, Noel Alonso Murray, Executive Director, Directorio Legislativo, described experiences in Argentina where communities participate in decision making with respect to mine operations.

Luke Danielson, President, Sustainable Development Strategies Group, advised looking at examples of failure to ensure a just transition, citing examples from Ukraine and Central America. He warned against rushing towards energy transition without laying a proper social foundation and consulting with communities. To avoid conflict and production delays, Danielson said adverse impacts must be acknowledged and managed effectively, affected communities must share in the benefits, and local stakeholders must participate in decision making.



Noel Alonso Murray, Directorio Legislativo, addresses participants via a video message

On whether the lithium market could crash due to an over-supply, Moerenhout suggested these expectations are exaggerated. He explained the two types of lithium combinations in batteries and where the use of these is most prevalent and said that the fear of hydrogen use overtaking lithium batteries in cars is unfounded. Davis said the 2018 crash in the cobalt market was due to a flurry of investment in companies that used less cobalt in batteries, creating an oversupply of cobalt. He mentioned the need to address cobalt mining governance concerns in the DRC, including child labor and corruption.

India called for mining to reduce its carbon footprint, resist “window-dressing” with regards to corporate social responsibility approaches, mitigate environmental impacts, and consult with communities.

Danielson called for a generosity of spirit in dealing with communities instead of regarding them as risk factors and warned against elite capture, which could be addressed through making public the government’s agreements with mining companies.

Davis suggested that old geological surveys can reveal sufficient deposits and advised companies to investigate old records and share information with neighboring countries.

Closing

Thanking all participants for an interesting and successful AGM, IGF Secretariat Director Greg Radford pledged that the IGF will continue to ensure that the mining sector optimizes the social, economic and financial benefits of mining and promote “responsible mining and mining in an environmentally responsible way.” He closed the meeting Thursday at 17:56 pm.

Upcoming Meetings

International Anti-Corruption Conference 2022: The International Anti-Corruption Conference (IACC) is the world’s premier global forum for bringing together heads of state, civil society, the private sector, and others to tackle the increasingly sophisticated challenges posed by corruption. The IACC advances the anti-corruption agenda and fosters networking, cross-fertil-

isation, and the global exchange of experience that are indispensable for effective advocacy and action, on a global and national level. **dates:** 6-10 December 2022 **location:** Washington DC, United States **www:** iaccseries.org/

World Circular Economy Forum 2022 (WCEF2022): The WCEF brings together forward-looking thinkers and doers and presents the game-changers in the circular economy for the first time in Africa. WCEF2022 is co-organised by the African Circular Economy Alliance, of the Government of Rwanda, the African Circular Economy Network, and the Finnish Innovation Fund Sitra, with international partners. ICMM will host an accelerator session on the role of mining and metals in a global circular economy as part of WCEF2022. **dates:** 6-8 December 2022 **location:** Kigali, Rwanda **www:** www.wcef2022.com/

CBD COP 15: This Conference comprises the 15th meeting of the Conference of the Parties (COP 15) to the Convention on Biological Diversity (CBD), the tenth Meeting of the Parties to the Cartagena Protocol on Biosafety, and the fourth Meeting of the Parties to the Nagoya Protocol on Access and Benefit-sharing. The meetings will be preceded by the fifth meeting of the Open-ended Working Group on the Post-2020 Global Biodiversity Framework from 3-5 December 2022. The meetings will review the achievement and delivery of the CBD's Strategic Plan for Biodiversity 2011- 2020 and take a final decision on the post-2020 global biodiversity framework, among other matters. **dates:** 7-19 December 2022 **location:** Montreal, Canada **www:** www.cbd.int/meetings/

Future Minerals Forum 2023: Saudi Arabia will host the second Future Minerals Forum, which was founded to provide a platform for promoting mineral extraction and development across the region, while also creating world-class ESG structures and ensuring resilience in mineral value chains. Topics to be discussed include: the region's mineral development in a global context; the outlook for critical minerals supply and demand; decarbonizing supply chains; digital and new technology; and community relations and the future mining workforce. **dates:** 10-12 January 2023 **location:** Riyadh, Saudi Arabia **www:** www.futuremineralsforum.com/

Mining Indaba 2023: The Investing in African Mining Indaba (Mining Indaba) is dedicated to the successful capitalization and development of mining interests in Africa. The 2023 theme is "Unlocking African Mining Investment: Stability, Security, and Supply," which will explore integral economic empowerment strategies, supporting supply chain security for the energy transition, and seizing investment opportunities capitalizing on the commodities super cycle. **dates:** 6-9 February 2023 **location:** Cape Town, South Africa **www:** miningindaba.com/Home

World Mining Congress 2023: Hosted by Australia's national science agency, the Commonwealth Scientific and Industrial Research Organisation (CSIRO), the 26th World Mining Congress has three overarching themes: digital transformation, zero harm

and emissions, and the circular economy. Three special symposia will also take place on: mine closure and post-mining transitions; sustainable construction materials; and minerals policy and governance for the new economy. **dates:** 26-29 June 2023 **location:** Brisbane, Australia **www:** wmc2023.org/

EITI Global Conference 2023: EITI's 9th Global Conference will be held in Senegal in June 2023. Further detail on the Conference will be agreed in coming months. **dates:** June 2023 **location:** Senegal **www:** eiti.org/events

UN High-Level Political Forum on Sustainable Development (HLPF): The 2023 session of the HLPF under the auspices of ECOSOC will take place on the theme "Accelerating the recovery from the coronavirus disease (COVID-19) and the full implementation of the 2030 Agenda for Sustainable Development at all levels." It will include an in-depth review of SDGs 6 (clean water and sanitation), 7 (affordable and clean energy), 9 (industry, innovation and infrastructure), 11 (sustainable cities and communities), and 17 (partnerships for the Goals). **dates:** 10-19 July 2023 **location:** UN Headquarters, New York, US **www:** hlpf.un.org/2023

IGF AGM 19: The theme for the 19th AGM has not yet been set. **dates:** November 2023 (TBA) **location:** Geneva, Switzerland **www:** www.igfmining.org/annual-general-meeting/

For additional meetings, see sdg.iisd.org/

Glossary

AfDB	African Development Bank
AGM	Annual General Meeting
ASGM	Artisanal and small-scale gold mining
ASM	Artisanal and small-scale mining
DRC	Democratic Republic of Congo
ESG	Environment, social and governance
ESIA	Environmental and social impact assessment
GBA	Global Battery Alliance
GHG	Greenhouse gas
ICMM	International Council on Mining and Metals
IEA	International Energy Agency
IGF	Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
IISD	International Institute for Sustainable Development
ILO	International Labour Organization
IWiM	International Women in Mining
MET	Mining ESIA Tool
MPF	Mining Policy Framework
SDGs	Sustainable Development Goals
SEA	strategic environmental assessment
UNCTAD	UN Conference on Trade and Development
UNEP	UN Environment Programme