





# PDAC-WEF-IGF INTERNATIONAL MINES MINISTERS SUMMIT 2022

# GETTING TO NET ZERO: MINING'S ROLE IN REDUCING GLOBAL EMISSIONS

**Summary Report** 

June 14, 2022
Bank of Montreal
100 King Street West, 68th Floor



#### **Summit Overview**

The seventh annual International Mines Ministers Summit was held on Tuesday, June 14, 2022, at the Bank of Montreal Building in Toronto, Canada. The 2022 International Mines Ministers Summit (IMMS) was held on the margins of the Prospectors and Developers Association of Canada (PDAC) Convention. Twenty government ministers responsible for mining in their countries joined leaders of industry and financial institutions, to take part in the Summit. The Summit was co-hosted by the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development, World Economic Forum and PDAC under the theme *Getting to Net Zero: Mining's role in reducing global emissions*. The meeting convened in person for the first time since the COVID-19 pandemic began and was conducted under following Chatham House Rule.

Representatives at the summit reiterated the importance of minerals and metals as building blocks for the rapidly emerging clean energy technologies required to achieve net zero. For many nations, critical minerals are viewed as a generational mineral economic opportunity. Demand for critical minerals such as cobalt, lithium, and nickel is expected to increase exponentially in the future, hence offering opportunities for developed and developing countries alike to capitalize on the growing global demand for these minerals. However, supply for a net zero transition will require a growing and resilient mineral sector that is sustainably managed and sensitive to environmental concerns while providing economic and social opportunities for communities.

To support the energy transition and getting to net zero, collaboration and partnerships between governments, industry and civil society needs to be at the forefront of the exploration and development of these critical minerals. Modern laws, policies, and incentives will be needed to allow for responsible mineral development. New investments, including public private partnerships, will be required as will global and regional supply chains that create opportunities for value addition. Investment in research and development as well as innovation will be essential to improve efficiency and technological solutions for producing critical minerals.

### A "Just Transition" to Net Zero

Participants asserted that combating climate change and supporting a transition to net zero requires a shared responsibility and collective action. Participants underscored the need for governments and industry leaders to commit realistic efforts to achieving a low-carbon future in line with their own capabilities. Both government and industry representatives empathized the need to promote a "just transition", a transition towards a sustainable, low carbon and equitable energy system which is better for both people and the planet.

There was a consensus from participants that development of critical minerals needed for the energy transition, and the commitment to a low carbon economy, should be approached with principles which should form a "floor not a ceiling" for decarbonization efforts. It was also

recognized that not all countries are starting from the same point. In some regions, the priority remains to close the energy access gap to provide energy resources to those who may not already have reliable access.

### The Need for Collaboration and Partnerships

Government-to-government collaboration and public-private-NGO partnerships were strongly emphasized. If net zero is to be achieved, there is need for governments to create regulatory certainty in which mining companies can confidently invest and are incentivized to implement greener practices. However, it was noted that getting to net zero will be "challenging" because at this time most of the investment in cleaner technologies is taking place in OECD countries, and not in non-OECD where the need is equally urgent. This may be due to the perceived "risk premium" of such investments in non-OECD countries, and the need to make critical minerals development in non-OECD countries more attractive. This includes building trust and confidence between industry and governments and lowering the risks for industry by delivering on promises and commitment.

Collaboration through public-private partnerships is critical not only to decarbonize the economy but also to build reliable energy access including resilience throughout the supply chain from mining, refining, manufacturing, to recycling. An example of collaboration that was highlighted was the new Minerals Security Partnership (MSP) that was announced this year at the PDAC Conference by the United States and other key partners which is an ambitious new global initiative to bolster critical mineral supply chains. The goal of the MSP is to ensure that critical minerals are produced, processed, and recycled in a manner that supports the ability of countries to realize the full economic development benefit of their geological endowments. The MSP aims to catalyze investment from governments and the private sector for strategic opportunities —across the full value chain —that adhere to the highest environmental, social, and governance standards.

### **Focus on Beneficiation and Mid-Stream Opportunities**

Some participants underlined the need for more mineral beneficiation, such as processing minerals to higher value-added products, such as batteries, in the countries where the metals are extracted. Others pointed out that many resource-rich developing countries should focus on "mid-stream" beneficiation opportunities, such as mineral refining, where there is significant opportunity for both wealth creation and energy conservation. Moreover, the mid-stream mineral processing is a key steppingstone for nations looking to develop more advanced beneficiation activities that produce more sophisticated products with mineral inputs. It was noted that the above-mentioned collaboration and partnership models are critical for making progress on beneficiation.

## The Need to Reinforce the "Circular Economy"

Participants recognized that the approach to net zero requires better efforts to create a circular economy, including greater recycling as an opportunity to minimize waste and contribute to sustainable development. The aim of a circular economy is to boost economic growth without

increasing the consumption of resources and the mining industry has a significant role to play in a circular economy. Opportunities exist to design policies and products with circularity in mind to optimize the value of metals to society.

Products that are produced by the mining and metals industry, such as electric vehicles, are essential for a more sustainable, equitable and decarbonized world. Global demand for critical minerals and metals is expected to rise substantially in the coming decades to meet this challenge. But this poses a major challenge for the mining sector – how to reduce emissions while also increasing production of metals, such as lithium, nickel and copper, that are essential to achieve net zero. Equally important is how the mining sector will do all this in an environmentally and socially responsible way.

This challenge is at the heart of the circular economy which advocates reusing, redesigning and recycling in order to consume fewer resources in the first place and using them for longer. It is about creating new ways to promote and incentivise efficiency and decouple growth from resource use. Participants discussed how a circular economy should be integrated into strategies to reduce carbon emissions. They discussed a need for shift from an extractive economy to a regenerative economy and the importance to rethink wastes and tailing as opportunities. To achieve net zero, economies should reinforce the circular economy.

# **Annex 1: List of Delegates**

Argentina	Mr. Matías Kulfas	Minister of Productive Development
Brazil	Pedro Paulo Mesquita	Secretary of Mines
Canada	Hon. Jonathan Wilkinson	Minister of Natural rezources
Chad	M. MAHAMAT ABDELKERIM	Minister of Mines and Geology
Chile	Mr. Willy Kracht	Vice Minister Of Mines
Colombia	Hon. Diego Mesa	Minister of Mines and Energy
Dominican Republic	Mr. Miguel Diaz	Vice minister of Mines
Ecuador	Mr. Xavier Vera	Minister of Energy and Mines
Finland	H.E. Roy Eriksson	Ambassador
Gabon	M. Elvis OSSINDJI	Minister of Mines
Guyana	Hon. Vikram Bharrat	Minister of Natural Resources
Liberia	H.E. Hon. Gesler E. Murray	Minister of Mines and Energy
Mongolia	H.E. Yondon Gelen	Minister of Mining and Heavy Industry
Nigeria	Arc. Hon. Olamilekan Adegbite	Minister of Mines and Steel Development
Peru	Hon. Alessandra Herrera	Minister of Energy and Mines
Senegal	Mr. Ibrahim GUEYE	Secretary General
Sierra Leone	Mr. Timothy Musa Kabba	Minister of Mines and Mineral Resources
Suriname	Dr. David Abiamofo	Minister of Natural Resources
United Kingdom	Hon. Lee Rowley	Under-Secretary of State for Business and Industry

United States of America	Mr. Jose Fernandez	Under-Secretary of State for
		Economic Growth, Energy
		and Environment

### **Annex 2: Invited Guests**

Bank of Montreal	Hon. Brian Tobin	Vice Chair
Bank of Montreal	Ilan Bahar	Co-Head, Global Metals and Mining
Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development	Greg Radford	Director
International Council on Mining and Metals	Rohitesh Dhawan	President and Chief Executive Officer
PDAC	Felix Lee	Past President
B2Gold	Clive Johnson	President and CEO
Eurasian Resources Group	Benedikt Sobotka	CEO
Frontier Lithium	Bora Ugurgel	Investor Relations Manager
Vale Base Metals	Gustavo Garavaglia	CFO
TMX Group	John McKenzie	CEO