



SUMMARY | Proceedings

Sustainable Mining for a Healthy Planet

July 2026

A report based on a discussion and information sharing workshop held with various stakeholders in Quebec's mining sector

Canada's rich mineral deposits have been mined by Indigenous peoples for millennia. The first industrial mining operations began in the 18th century and gradually expanded as the territory was explored and railroads were built. Over the decades, mineral resources were often mined without regard for the consequences on human health or the environment. Canada thus bears the heavy legacy of mining practices that frequently neglected to protect ecosystems and public health. Many abandoned mines scattered throughout the country remain significant sources of contamination and are having significant environmental impacts, underscoring the need to adopt responsible mining practices. Although notable progress has been made in environmental protection, the historical effects of some mining activities carried out in the absence of regulations have been considerable and are still being felt today.

Nevertheless, the Canadian mining industry generates large revenues, supports many high-quality jobs, and plays a vital role in the country's economic safety and development. It is against this backdrop that the Centre de recherche en écotoxicologie du Québec (EcotoQ) held a multidisciplinary co-creation workshop titled "Le développement minier durable pour une planète en santé" (Sustainable Mining Development for a Healthy Planet). The goal was to strengthen engagement among the various stakeholders in mining development and to foster a lasting, positive, and more spontaneous collaboration. This workshop brought together 41 individuals from a diverse range of backgrounds: specialists in environment, health, the humanities, and politics; representatives of citizen and Indigenous organizations; members of the research community, industry, community colleges, and technology transfer centers; as well as university students. Together, the participants discussed issues related to sustainable mining in the Quebec context during the meeting held in Montreal. This document summarizes the main issues discussed during the workshop, as well as the resulting recommendations and findings.

First, several major and timely challenges were raised by the participants, with the aim of promoting a significant, but sustainable development of the mining sector. Most particularly, it was deemed crucial that all industry stakeholders work together toward the genuine, meaningful, and sustainable inclusion of the affected Indigenous communities. The need for more adequate, accessible, and transparent environmental data covering all mining operations was also identified as a key challenge to be addressed. Furthermore, increased investment in new technologies to minimize waste, optimize mineral extraction and recovery, reduce the environmental footprint, and support the refining of these minerals was viewed as a critical need. During the workshop, particular attention was given to actions, solutions, and initiatives likely to encourage the mining sector to adopt practices more respectful of the environment, public health, and society. Among the approaches examined were the systematic collaboration with Indigenous communities as essential partners; the promotion of multidisciplinary approaches inspired by the "One Health" concept; the fostering of the creation of data "lakes" to centralize and share information; and a

greater commitment to transparency to foster social acceptance of these economic activities. A key part of the discussions was dedicated to collectively envisioning the mining industry of the future. With this in mind, several recommendations were made: the development of more robust environmental standards; the adoption of a circular approach by the mining sector; improved land-use planning for mining activities; an integrated approach and the creation of decision-making forums at every stage of the mining cycle; a greater involvement of local stakeholders; and a strengthened legal framework for these activities.

We conclude that the mining industry must adopt a forward-looking vision and adapt its practices in order to balance economic, environmental, and social considerations. This report highlights several aspects that we hope will help guide the provincial government in implementing measures that will better align the economic goals of mining activities with the protection of the environment. Other Canadian provinces and territories can also draw inspiration from these initiatives to develop significant and effective measures that will ensure mining activities are conducted in a more sustainable manner.