Introduction

Agenda 2030 and the Sustainable Development Goals (SDGs) represent the world’s post-2015 agenda for equitable, socially inclusive and environmentally sustainable economic development. Achieving the SDGs will require all sectors and stakeholders to incorporate the SDGs into their own practices and operations. Achieving the SDGs will require substantial and on-going partnership between governments, the private sector, communities and civil society. In this light, the mining industry has an unprecedented opportunity to mobilize significant human, physical, technological and financial resources to advance the SDG.

Global Sustainability Risks and Opportunities for the Mining Industry

Mining is a global industry and is often located in remote and less-developed areas, including many indigenous lands and territories. When managed appropriately, it can create jobs, spur innovation and bring investment and infrastructure at a game-changing scale over long time horizons. If managed poorly, mining can also lead to environmental degradation, displaced populations and increased conflict, among other challenges. These attributes make the industry a major potential contributor to the SDGs.

At the same time, if the mining industry does not participate or if individual companies engage in activities that contradict the goals their achievement will be hindered. Mine development requires access to land and water, presenting significant and broad landscape impacts that must be responsibly managed. To realize the full potential for contributing to the achievement of the goals, mining companies must continue to work to integrate changes into their core business and, along with the mining industry as a whole, bolster collaboration and partnership with government, civil society, communities and other stakeholders.
Chilean Public-Private Partnership for the Adoption of Sustainable Mining Practices

Environmental contamination by road dust and health impacts on local communities are the greatest concerns of the Government in relation to the mining industry in the Atacama region of Chile. A large quantity of airborne particulate matter 10 micrometers or less in diameter (PM_{10}) is produced by mining activities, such as ore transport with high tonnage vehicles. PM_{10} includes inhalable particles that are small enough to penetrate the thoracic region of the respiratory system. The health effects are well documented, and include respiratory and cardiovascular morbidity, such as aggravation of asthma, respiratory symptoms and an increase in hospital admissions; and mortality from cardiovascular and respiratory diseases and from lung cancer. The Corporación para del Desarrollo de la Región de Atacama (CORPROA) is working with the city of Tierra Amarilla, Minera Candelaria (Lundin Mining), Atacama Kozan, and Minera Pucobre to fund innovation in the mining sector, including funding for mining operations that test EA1 microbial dust control technology to control PM_{10} emissions. The product is being locally manufactured in Chile.