

Climate Change and Canadian Mining: Opportunities for Adaptation

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The scientific evidence that climate change is occurring is overwhelming. Increases in temperature, more extreme weather events, changes in precipitation, and altered weather patterns have been documented across Canada and these changes are projected to continue in the future with implications for business, industry, and communities. For the mining sector, climate change is a pressing environmental threat and a significant business risk. This presentation reports on the results of a two year, Canada-wide research project that assessed the vulnerability of Canadian mining operations to climate change. It draws on a series of case studies from Ontario, Yukon, Northwest Territories, Saskatchewan, Quebec, and Labrador, two industry practitioner surveys, and a review of the scientific and trade journal literature. Results indicate that mining operations across Canada are already being impacted by climate events with the distinctive fingerprint of climate change; these events are also expected to become more intense and frequent in the future. Those regions depending on transportation networks that are sensitive to climatic conditions (especially in northern Canada) are particularly susceptible. Other key findings are discussed, as are potential adaptation actions, and research and policy needs for the future.