

CLIMATE CHANGE AND IMPLICATIONS FOR THE PROPOSED CANADIAN NORTHERN CORRIDOR

Tristan Pearce, James D. Ford and David Fawcett

KEY MESSAGES

The key findings and recommendations of this review are:

Climate change is already impacting Northern Canada and infrastructure in the region. This includes infrastructure that is similar to what would exist in the proposed Canadian Northern Corridor, or other infrastructure that is a part of industries that drive the demand for expanded transportation through a corridor.

Based on future climate change projections, current impacts are expected to continue and intensify in the future. This means that existing and new infrastructure in Northern Canada will be at greater risk of damage.

Climate change impacts are likely to affect the construction of transportation infrastructure in the corridor. Future climate change projections must be integrated into regulations, codes and standards, design and route planning.

Maintenance of infrastructure in the corridor would need to be more robust to mitigate expected climate change impacts. This will likely increase the costs of maintenance, and maintenance procedures will need to be responsive to dynamic conditions over time.

Climate change could adversely impact and even halt the continuous operation of the corridor. Climate change could accelerate the deterioration of, and in some instances severely damage, corridor infrastructure. How changing climate conditions could affect “chokepoints” within the corridor system will be an important consideration.

The corridor will need to be responsive to the political economy of climate change. This includes the global movement to reduce greenhouse gas emissions and implications for the global economy that the movement of resources through the corridor depends on.

Local communities and Indigenous Peoples must be meaningfully consulted early and often. Early and ongoing communication is necessary to identify if a corridor is desirable and relevant and how it might be impacted by climate change.