Energy Sector Case Studies

Evaluating opportunities to integrate adaptation and mitigation programs into the energy sector

CONTEXT
The energy sector is one of the largest contributors to greenhouse gas (GHG) emissions in Canada. While all economic sectors will be affected by climate change, the energy sector will need to adapt significantly to the anticipated shift in demand coupled with stresses on generating infrastructure. Integrating adaptation and mitigation can increase resilience in the energy sector while decreasing GHG emissions. The conservation of resources, including cost savings, is also possible.

APPROACH
Investigate and compile case studies that illustrate the opportunities and benefits derived from combining activities that reduce greenhouse gas emissions and actions that help adapt to the impacts of climate change. The project highlighted key lessons from provincial programs in Ontario, Saskatchewan, Alberta, British Columbia, Newfoundland and Yukon. International case studies were used to supplement the Canadian studies.

RESULTS
The case studies successfully identified four co-benefits that can be derived from the integration of adaptation and mitigation:

- Reduced competition for resources both within the sector and with other land-users;
- Reduced influence of uncertainty on policy development and project design;
- Increased harmonization of project outcomes that achieves multiple objectives; and
- Improved social license for energy project implementation.

By demonstrating the benefits of integration in energy policies and in the early stages of energy project development, this analysis provides useful guidance for energy sector agencies seeking to achieve improved resource conservation, cost savings, and reduced opposition to energy projects.

Significance
Promoting integration of adaptation and mitigation will contribute to the ability of Canada’s energy sector to take meaningful action towards enhancing effectiveness and cost efficiency.

Project Leads

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