

SCEK Project Profile

Project Name:	Survey of Climate Change Impacts to the Oil and Gas Sector
Project Number:	CC-2014-01
Proponent:	Resources North Association (RNA)
SCEK Funding Envelope:	Collaboration and Communication
Timeframe:	October 1, 2013 to December 31, 2014

Project objectives

This project aims to:

- assess the collective awareness and preparedness of the oil and gas sector for climate change;
- identify potential opportunities to improve awareness and preparedness, and
- identify opportunities for coordinated efforts for climate change adaptation strategies.

The project objectives are to create increased knowledge of:

- 1) The current level of awareness within the oil and gas sector of the potential impacts of climate change on their activities and infrastructure;
- 2) The potential or existing threats to the oil and gas sector;
- 3) The types of adaptation actions that should be, or are currently being planned and/or implemented; and
- 4) The opportunities to improve awareness, and the actions that could be taken to harness synergies for climate change adaptation in the oil and gas sector if needed.

Project background

Climate change is expected to impact several factors that affect the full range of upstream oil and gas sector activities including exploration, production and transport. Adaptation strategies will become increasingly important to ensure that the sector continues to meet its environmental obligations and continue to supply markets into the future.

The extent of the oil and gas sector's awareness of the full range of possible climate change impacts to the industry, and their level of preparedness to address these impacts is currently unknown. Some key potential climate change impacts that are expected to affect the oil and gas sector include:

- 1) Changes to the frequency and severity of natural disturbance events such as forest fires, landslides, and storms. These events can cause physical damage to production infrastructure

- (well sites, power supply, equipment), and access infrastructure (washed out or blocked roads due to fires, wind storms, etc.);
- 2) Changes to the diversity and extent of plant species distribution. This will subsequently impact the success of site reclamation under the new climatic conditions;
 - 3) Changes to the average temperatures and precipitation levels that can affect ground access and operational timing; and
 - 4) Reductions in the effectiveness of existing strategies and techniques used by industry to meet government regulatory and policy requirements, such as those employed to mitigate habitat loss for species at risk, or managing invasive plant species.

The intent of this project is to provide information back the industry, provincial and federal governments, other project partners, and their networks that will ultimately lead to improvements in the industry's level of awareness and state of preparedness for potential climate change impacts.

Project approach

The project is led by Resources North Association with support from Trout Creek Collaborative Solutions. Experts in surveys for the natural resource sector assist with survey development, deployment and statistical analysis. A project steering committee reviews and comments on the project plan and provides direction on the development of the survey questions.

The project involves the following six phases:

1. Project plan—drafting the project plan.
2. Survey development and deployment—drafting the survey questions, identifying potential respondents and deploying the survey.
3. Interview process—conducting one-on-one interviews to address any gaps or areas requiring more information as identified through a review of survey results.
4. Results analysis—compiling and analyzing the results from the survey.
5. Reporting—documenting the findings and drafting recommendations.
6. Technology transfer—disseminating the findings to survey participants, stakeholders, and other interested parties.

Project deliverables

The major deliverables from this project include the following:

1. Project report—documenting the survey process, results, interpretation and recommendations for best adaptation strategies.
2. Online webinar/e-lecture—to share the survey results with stakeholders and other interested parties.