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Background

How Do Two Pipelines Stack Up?

Reviewing the Review Processes for the Mackenzie Gas Project and the Enbridge Northern Gateway Pipeline

By Karen Campbell

One project stands to open Canada's North to unprecedented development, while the other could open B.C.'s coast to crude oil tankers. Both will have monumental impacts on the environment and society for decades to come – so why then are the review processes for these two projects incredibly different?

In the following chart we compare the Mackenzie Gas Project and the Enbridge Northern Gateway Pipeline, along with the review processes required for their approval.

Issue	Mackenzie Gas Project	Enbridge Northern Gateway Pipeline
ABOUT THE PIPELINES		
General description of project	Proposes an underground pipeline through the Mackenzie Valley to northern Alberta. Includes natural gas development on the Mackenzie River Delta in the Northwest Territories, as well as gathering lines and processing. Additionally, Nova Gas Transmission Ltd. intends to apply to build facilities in northern Alberta required to allow the natural gas to enter the market in Alberta (the Northern Inventory Transfer).	Proposes to transport oil sands petroleum and condensate between Alberta's oil sands and the B.C. coast, by building twin pipelines connecting a terminal near Edmonton to a marine terminal near Kitimat to transfer petroleum products and condensate into and out of large crude oil tankers.
Length of pipeline	1,300 km	Two 1,170 km pipelines, for a total of 2,340 km of pipeline
Number of pipelines	1	2

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Content of Pipeline	Natural gas	Oil sands petroleum products and condensate
Landscape at issue	One-third of the pipeline is in continuous permafrost, two-thirds in discontinuous permafrost. ¹ To date, no major pipeline has ever been buried in permafrost, and impacts are unknown.	Pipeline crosses Rocky Mountains, Coast Mountains, terrain prone to avalanches, landslides and river flooding. Mining, forestry, agriculture and natural gas pipelines already exist in certain portions of this land base.
How will the pipeline be filled?	Gas from three new onshore fields in the Mackenzie delta (Taglu, Niglintgak and Parsons Lake).	Oil sands petroleum would travel west and condensate, a petroleum based thinner, would travel east.
Start and End Points	Start: outlet of the Natural Gas Liquids (NGL) facility near Inuvik. End: pipeline facilities approximately 15 metres south of the Northwest Territories-Alberta border.	Start: Near Edmonton, Alta. End: Kitimat, on the B.C. coast.
GHG emissions	Approximately 365 megatonnes of greenhouse gases would be emitted over the expected 28-year life of the project, based on upstream and downstream emissions. Annually, the combined upstream and downstream emissions are estimated at 11.5 megatonnes, or the equivalent of an additional 2.8 million cars on the road.	Approximately 892 megatonnes of greenhouse gases would be emitted over the 40-year life of the project, based upon upstream and downstream emissions. Annually, the combined upstream and downstream emissions are estimated at 22.3 megatonnes, or the equivalent of an additional 5.4 million cars on the road.
Community benefits (e.g., number of jobs)	5,707 direct short-term construction jobs per year during construction phase. Most direct construction jobs would be seasonal and may last from several weeks to a few months, on average about 84 days. There would be 150 long-term jobs in the operational phase. ²	1,850 direct short-term construction jobs per year during construction phase ³ . No more than 15% of the construction positions will be available to local workers because Enbridge will require skilled workers from other jurisdictions. ⁴ Approximately 215 long-term full-time jobs across the entire 1,170-km route once the project is in operation, including the marine terminal operations. ⁵

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<p>Number of Aboriginal jurisdictions/governments whose territories the pipeline affects</p>	<p>Four modern land claims agreements have been concluded along the pipeline route (Gwich'in, Sahtu-Dene/ Métis, and Tlicho in the Mackenzie Valley and the Inuvialuit in the Mackenzie Delta).</p> <p>11 Aboriginal communities exist along the Mackenzie River, 35 communities in the Mackenzie Valley.</p> <p>Some of these communities have ratified modern land claims agreements, establishing co-management boards for different aboriginal governments. The Deh Cho First Nations land claim is being negotiated.</p>	<p>At least 64 different First Nation communities.</p> <p>In British Columbia, only the Nisga'a have concluded a modern land claims agreement.</p>
<p>ABOUT THE PIPELINE REVIEW PROCESSES</p>		
<p>Community engagement before the review process</p>	<p>The Berger Pipeline Inquiry in 1970s was a comprehensive review of the potential impacts of a pipeline. The inquiry visited 35 communities in the Mackenzie Valley, as well as other cities in Canada from coast to coast, laying the groundwork for the Joint Review Panel.</p>	<p>No significant government engagement with communities. Initial engagement primarily led by Enbridge with First Nations as part of initial outreach in 2005/2006.</p>
<p>Type of review process</p>	<p>Joint Review Panel being overseen by the Canadian Environmental Assessment Agency and the National Energy Board.</p>	<p>Joint Review Panel being overseen by the Canadian Environmental Assessment Agency and the National Energy Board.</p>
<p>Decision-Making Authority</p>	<p>There are two legal decision makers. The federal Minister of the Environment decides whether to grant the environmental assessment approval and Cabinet decides whether to grant the National Energy Board approval.</p> <p>The National Energy Board is holding separate hearings to review the recommendations of the Joint Review Panel that pertain to its role.</p>	<p>There are two legal decision makers. The federal Minister of the Environment decides whether to grant environmental assessment approval and Cabinet decides whether to grant the National Energy Board approval.</p> <p>Unlike the Mackenzie Gas Project, there is no separate hearing process for the National Energy Board requirements.</p>

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Principles guiding Terms of Reference for Project	Five overarching principles: ⁶ 1) contribution to sustainability; 2) use and respect for traditional knowledge; 3) recognition of land claims and treaties; 4) recognition of diversity; and 5) the precautionary approach	Three overarching principles: ⁷ 1) community knowledge and aboriginal traditional knowledge; 2) sustainable development; and 3) the precautionary approach
Length of review process	The Agreement for the Joint Review Panel was finalized in August 2004. At the time, the expected time frame for the review was 10 months. ⁸ In September 2009, the agreement was amended to request that the Panel submit recommendations by December 2009, which it did, and the National Energy Board is expected to make its final recommendations by September 2010. In the Joint Review Panel portion of the process, there were 115 days of hearings at 26 centres and communities with 558 presenters.	Enbridge estimates the review process will be concluded by the end of 2012.
Number of panel members	7	3
Appointment of Panel	The Inuvialuit Game Council, the Mackenzie Valley Environmental Impact Review Board and the Federal Minister of the Environment.	Two appointed by Chair of the National Energy Board. Third selected by the Minister of the Environment.
Composition of Joint Review Panel	Four panel members are residents of the Northwest Territories, three of whom are aboriginal. Another three are from southern Canada.	Two are from Calgary and one is an aboriginal person from northern Ontario.
Panel Recommendations	The Joint Review Panel made 176 recommendations required to make the project sustainable. Recommendations include measures to manage cumulative effects, social/environmental impacts, and how the end product should be used. The Panel emphasized that its recommendations were “designed as a package and are meant to be mutually supporting.”	

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Final NEB response	The NEB has separated the NEB hearing from the Joint Review Panel. The NEB's final recommendations on the Mackenzie Gas Project will be made in September, but their initial response has been to disregard many of the key recommendations to manage cumulative impacts and wise use of the end products.	There will be no comparable NEB review of the Joint Review Panel process. The NEB recommendations will be included in the Panel report.

¹ The Mackenzie Gas Project, *Environmental Impact Statement for the Mackenzie Gas Project*, Volume 3: Biophysical Baseline, Part D – Terrestrial Resources: Soils, Landforms, Permafrost and Vegetation. <http://www.mackenziegasproject.com/theProject/regulatoryProcess/applicationSubmission/Applicationscope/EIS.html>

² Joint Review Panel for the Mackenzie Gas Project, *Foundation for a Sustainable Northern Future*, Chapter 15: Economic Impacts (Dec. 2009). <http://www.ngps.nt.ca/report.html> Direct jobs were calculated based on the percentage of direct NWT jobs from total number of jobs.

³ Enbridge Northern Gateway Pipelines, *Regulatory Application*, Volume 6C: Environmental and Socio-Economic Assessment (ESA) – Human Environment, section 4.1.6.1. (May 2010). <http://www.northerngateway.ca/public-review/application>

⁴ Enbridge Northern Gateway Pipelines, *Preliminary Information Package*, Section 1.13: Project Benefits (Oct. 2005). <http://www.northerngateway.ca/public-review/regulatory-process/reference-documents>

⁵ Enbridge Northern Gateway Pipelines, *Regulatory Application*, Volume 6C, Section 4.1.4.1.

⁶ The Inuvialuit Game Council, the Mackenzie Valley Environmental Impact Review Board, and the Minister of the Environment, *Environmental Impact Statement Terms of Reference for the Mackenzie Gas Project* (2004). http://www.ngps.nt.ca/documents/tor_final_e.pdf

⁷ Canadian Environmental Assessment Agency, *Scope of Factors – Northern Gateway Pipeline Project* (August 2009), 2. <http://www.ceaa-acee.gc.ca/050/documents/41307/41307E.pdf>

⁸ The Inuvialuit Game Council, the Mackenzie Valley Environmental Impact Review Board, and the Minister of the Environment, “Agreement for an Environmental Impact Review of the Mackenzie Gas Project” (2004). http://www.ngps.nt.ca/jrp/jrpa_final_e.html