



Natural Gas in the North

You may know that large amounts of natural gas have been found in the area north of Inuvik, NWT. You have probably heard there may be a pipeline built – the Mackenzie Gas Project (or MGP) – to bring this gas to southern markets. But did you know that if the pipeline is built it could bring natural gas to some northern communities? If this happens, there will be new choices for home heating and electricity. These choices will be less expensive and better for the environment than diesel and home heating fuel.

The Government of the Northwest Territories (GNWT) has hired companies to find out if it is possible to bring natural gas from the pipeline to our communities to heat and power homes and if it would be cheaper for people than using oil and diesel gas. The studies looked at what benefits and problems there might be if gas was brought to NWT communities.



These studies have been completed and the facts and advice they contain are available to everyone. This brochure covers some basic facts about natural gas and includes some of the information that was contained in the most recent report, *The Mackenzie Valley Gas Conversion Feasibility Study*, written by Encor International. The full report can be found at: <http://www.iti.gov.nt.ca/Publications/2010/miningoilgas/Encorreport.pdf>

What is Natural Gas?

Natural gas is a fossil fuel that is found in the ground. It can be used for heating homes, fueling gas stoves and generating electricity. It is also good for the environment because it burns cleaner than diesel fuel and oil. Natural gas is used in many places and is very safe. If the Mackenzie pipeline is built it will bring natural gas from north of Inuvik to Alberta. As the gas travels through the pipeline it will pass close to some northern communities.



Is it possible to use natural gas in the North?

The main goal of the Encor study was to find out if it might be possible to bring natural gas to

Fort Good Hope, Tulita and Fort Simpson, and, if it were possible, would the use of natural gas in these communities help residents save money. The study found that bringing natural gas to these communities is possible. We have the tools, skills and knowledge to build pipelines to communities. We also can switch these communities to natural gas for home heating and electricity generation.

Projects to switch communities from diesel to natural gas have already worked in the NWT. In Inuvik, a similar project was finished in 1999. Since then, the community has reduced pollution and saved money compared to burning diesel fuel. Some people in Norman Wells also use gas to heat their homes, and natural gas supplies the electricity there.

THE ENCOR REPORT What did it say?

The Mackenzie Valley Gas Conversion Feasibility Study by Encor International found that it is technically possible to bring natural gas to the communities of Tulita, Fort Good Hope and Fort Simpson.

The Encor study also found that switching to natural gas would be a good deal for the communities of Tulita, Fort Good Hope and Fort Simpson.

If these communities switch to natural gas, the savings can be big over time.

Community members who choose to switch from oil to natural gas will need to replace hot water tanks and furnaces. Residents will have to cover some of the costs up-front. But the savings from switching would eventually pay for the conversion. In fact, the study found that if all three communities switched to natural gas they could see a combined

savings of over **\$19 million** *over 20 years.*



Switching to Natural Gas Savings

Community	Savings over 20 years
Tulita	\$ 3.5 million
Fort Good Hope	\$ 5.8 million
Fort Simpson	\$ 9.8 million
TOTAL SAVINGS	\$19.1 million

How does it affect the cost of heating water?

Compare the approximate cost of heating a 40-gallon hot water tank for a family of four over an entire year:

Estimated heating costs in the year 2015	
Boiler Type	\$
Oil-fired boiler	\$ 564
Natural gas-fired boiler	\$ 323
Natural Gas Savings	\$ 241

As oil prices rise, so will the cost of heating your water. Gas prices are not expected to go up as much as oil and that means the cost savings of using natural gas instead of oil will grow.

Estimated heating costs in year 2034



Cost Savings for Residents

While the Encor report says switching to natural gas can be done and will be cheaper for Fort Good Hope, Tulita and Fort Simpson, more information and studies are required about the potential and costs of switching to natural gas before anything is done.



Fast Facts

1. It is technically possible to send natural gas to Fort Good Hope, Tulita and Fort Simpson from the MGP.
2. The combined cost of electricity and home heat would go down if the communities of Tulita, Fort Good Hope and Fort Simpson switch to natural gas.
3. If the three communities switch to natural gas, they could see a combined savings of over \$19 million over a 20 year period.



Contact Information

Government of the Northwest Territories
 Department of Industry, Tourism and Investment
 Mackenzie Valley Pipeline Office
 #201 - 77 Woodland Drive
 Hay River, NT X0E 1G1
 Phone: (867) 874-5400
 Fax: (867) 875-4078
 E-mail: mvp0@gov.nt.ca

Natural Gas Conversion

A SUMMARY OF
 THE 2008 ENCOR REPORT