What are Petroleum Products Used For?

- Electricity/Power generation
- Heating
- Cooking fuel
- Gas for cars, snowmobiles, ATV, boats, etc...
- Jet fuel
- Petrochemical Industry
- Construction materials and tools
- Paints and solvents
- Preservatives in food
- Clothes (polymers, GoreTex, etc.)
- Outdoor gear (runners, skis)
- Medical industry
- Beauty products (Vaseline, creams and body lotions, etc.)
- And much more

Strategic Environmental Assessment (SEA)

Oil and gas activity could bring great revenue to the territory and benefit Nunavummiut, but some risks exist as well. There are important challenges when it comes to Arctic Offshore Oil and Gas activity, notably the remoteness and harsh climate, and the risk of an oil spill that could damage the environment.

The SEA will help identify and document potential issues related to oil and gas development in the region before any parcels are opened for licences to petroleum companies.

The Nunavut Impact Review Board was appointed by Indigenous and Northern Affairs Canada with the task of leading this important study and writing a report. NIRB’s report will inform the INAC minister’s decision regarding the oil and gas moratorium in Canadian Arctic waters to be reviewed in 2021.

The Government of Nunavut is one of the official partners for the study, along with NTI, QIA, and INAC. Based on your feedback, the GN will provide Nunavummiut with information to help everyone better understand the industry, as well as the impacts and benefits of developing Nunavut’s petroleum potential.

Get involved, participate, and give feedback!
Estimates of undiscovered and discovered conventional resources range from 18 to 267 billion barrels of oil and 180 to 1228 trillion cubic feet of gas. Nunavut remains vastly under-explored.

Petroleum exploration began in 1962 and occurred throughout the territory until the last exploration well was drilled in 1986. This map shows the different areas in Canada’s North and their petroleum potential. The fields’ colors indicate the different potential for petroleum resources, with dark green representing high, dark yellow medium, and pale yellow low potentials. Source: Indigenous and Northern Affairs Canada.


Oil coated rock sampled from the bottom of Scott Inlet, Nunavut. Source: P.N. Noir et al., 2011, Natural Oil seeps on the Baffin Shelf, Nunavut, Canada: Geology and Geochemistry of the Scott Inlet Seep, poster presentation.

Nunavut Petroleum Potential and Interesting Facts

- Estimates of undiscovered and discovered conventional resources range from 18 to 267 billion barrels of oil and 180 to 1228 trillion cubic feet of gas.
- Nunavut remains vastly under-explored.
- Petroleum exploration began in 1962 and occurred throughout the territory until the last exploration well was drilled in 1986.

Active Petroleum System in the Baffin Bay/Davis Strait Area

- Natural oil seeps exist in several locations throughout Nunavut waters and the most prominent seep is located in Scott Inlet.
- Oil seeps indicate the presence of an active petroleum system in an area.
- Preliminary studies have identified large slicks in Scott Inlet (near Clyde River) exceeding 250 square kilometers in size.
- The Geological Survey of Canada is studying seep occurrences in the region.
- The GN will study the seeps from the oil slicks seen from satellite images.
- More research is needed on the petroleum systems of the Davis Strait/Baffin Bay area, as well as in the whole territory to better understand the oil and gas systems present.

History of Nunavut Oil and Gas Production

- Bent Horn oil field, on Cameron Island, began producing oil in 1986 and was capable of producing 1000 barrels per day. Bent Horn is estimated to hold another 3 million barrels or more.
- Three million barrels from the Bent Horn field were shipped on the icebreaker M/V Arctic until production ended in 1996.
- Changes in the petroleum market forced the closure of the Bent Horn field in 1996.

How Does Natural Seepage Work?

- Oil droplets and methane bubbles migrate up through the water column.
- About half the methane dissolves in the water column.
- Prevailing current.
- Oil reservoir.
- Petroleum and methane gas flow upwards through faults and cracks in sedimentary rocks to the seafloor and may be partially biodegraded en route.
- Oil slick on surface.
- Oil in the water column.
- Light petroleum hydrocarbons evaporate to the atmosphere.
- Methane release to the atmosphere.
- Fallout plume.
- ~5-30 kilometers.
- ~80 meters.
- Seep conduit.