

Commentary

## The Arctic in Future Energy and Resource Security

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**Abstract:** The closure of oil production in Norman Wells marks the end of a historic chapter in Canadian Arctic resource development and underscores the economic realities shaping the region's future. While debates about Arctic oil and gas have often centred on climate policy and environmental opposition, the primary driver of development has always been global commodity prices and project economics. Arctic projects typically cost two to three times more than comparable developments in southern jurisdictions due to infrastructure gaps, high labour and transportation costs, and complex regulatory processes. Despite these challenges, the Arctic hosts world-class deposits of gold, diamonds, nickel, and iron ore, and currently supports several operating mines across the three territories. Large-scale Arctic oil and gas development is unlikely in the medium term, due to competition from other, cheaper sources. The near-term future of Arctic energy is therefore less about megaproject exports and more about strengthening local energy systems that can power communities and unlock the next generation of northern resource development.

## Commentaire

# L'Arctique dans la sécurité énergétique et des ressources futures

Heather Exner-Pirot\*

Résumé : La clôture de la production pétrolière à Norman Wells marque la fin d'un chapitre historique dans le développement des ressources arctiques canadiennes et souligne les réalités économiques qui façonneront l'avenir de la région. Alors que les débats sur le pétrole et le gaz arctiques portent souvent sur les politiques climatiques et l'opposition environnementale, le principal moteur du développement demeure le prix mondial des produits et la rentabilité des projets. Les projets arctiques coûtent généralement deux à trois fois plus cher que les projets sudistes de même échelle, en raison du manque d'infrastructures, des coûts élevés de la main-d'œuvre et du transport, ainsi que des procédures réglementaires complexes. Malgré ces défis, l'Arctique abrite des réserves exceptionnelles d'or, de diamants, de nickel et de minerai de fer, et soutient actuellement plusieurs mines en exploitation dans les trois territoires. Un développement pétrolier et gazier arctique d'envergure serait improbable à moyen terme en raison de la concurrence provenant de sources moins coûteuses. L'avenir énergétique arctique à court terme ne réside pas dans les exportations de mégaprojets, mais plutôt dans le renforcement des systèmes énergétiques locaux pour alimenter les communautés et libérer la prochaine génération de développement des ressources nordiques.

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The end of an era is upon us. In fall 2026, Imperial Oil will shut down its production in Norman Wells, a small town in the Northwest Territories (NWT) where oil has been produced since 1920.

There is often an assumption that there are proponents lining up to extract minerals and oil and gas in the Canadian Arctic and that, if anything, their efforts must be slowed or stymied. Some of this perception surely arises from the last commodities boom, between 2006 and 2014, when oil hit a record US\$147 per barrel. This prompted Shell to explore in the Alaskan Arctic offshore, and much conflict followed over whether or not the Arctic National Wildlife Refuge should be developed.

In Canada, exploration in the Beaufort Sea intensified, and the Inuvik Tuktoyaktuk Highway was approved in 2013 under the Harper government, primarily to facilitate natural gas development. Arctic oil and gas development became a wedge issue, and it was clear where progressives stood on the issue. In December 2016 then President Obama and Prime Minister Trudeau jointly announced moratoriums on new offshore oil and gas leasing in Arctic waters.

While that prevented further offshore oil and gas development in the Arctic, an activity that many conservationists found particularly galling since the impacts of fossil fuels are most blatant in the region, it wasn't climate policy that dealt the fatal blow. It was the price of oil and gas, which had fallen to levels that made new Arctic exploration and production uneconomical.

This served a lesson that we too often forget: the main driver for Arctic energy and resource development is not climate change or government policy; it is commodity prices. And for Arctic development to be attractive for proponents and investors, those prices must be very high.

That is because Arctic resource development costs in the neighbourhood of two to three times what equivalent deposits or reserves in southern jurisdictions would require to get to production and market. All things considered, investors will usually allocate their capital to the places that give them the highest returns in the shortest amount of time.

The Canadian Arctic cannot compete on labour costs, transportation, or energy infrastructure. It is far from consumer markets. Its regulation and governance, including overlapping local, Indigenous, territorial, and federal processes, is slow and complicated, and often risky.

Where the Canadian Arctic can compete is in the quality of its resources. The region is obviously vast and its resources are largely untapped. There are world-class deposits of copper, diamonds, gold, silver, iron, natural gas, and nickel. There are additional critical minerals required for defence supply chains, and some initial federal and American government funding has been allocated to the NICO cobalt-gold-bismuth-copper project in the Northwest Territories and the Mactung tungsten project in the Yukon near the NWT border. But turning that potential from elements and molecules in the ground to exportable commodities requires capital—lots of it.

We have spent the better part of a decade protecting the Arctic from resource development. Now, amidst a tariff war, a diamond commodity slump, aging infrastructure, and out-of-control public sector spending, many are starting to work on attracting it.

Looking at what we already produce is instructive for understanding how to develop a business case. Right now, the three territories collectively host eight mines: one silver mine in the Yukon (Keno Hill); three diamond mines in the Northwest Territories (Diavik, Ekati, and Gahcho Kué); and three gold mines (Meadowbank, Meliadine, and Goose) and an iron ore mine (Mary River) in Nunavut. In addition, Nunavik hosts two large mines (Raglan and Nunavik Nickel) and Nunatsiavut hosts one (Voisey's Bay), all nickel-copper-cobalt mines.

Gold and diamonds are attractive options for Arctic development because they don't require a lot of transportation infrastructure. The commodity has a low weight and high value ratio, and the product is literally flown out. Record prices mean gold is leading Arctic resource development right now, with one mine (Goose) opened in the West Kitikmeot in 2025, and Agnico planning for its third gold mine in Nunavut, Hope Bay. In addition, the Yukon is experiencing a modern gold rush, with a \$400 million placer gold mining industry (small scale, alluvial), and planning underway for the Snowline deposit in the Selwyn Basin.

The opposite is true for diamonds, which are facing a historic slump. At their peak they comprised a quarter of the NWT's GDP, with much of the remainder coming from the public sector. Persistent poor prices mean Diavik closed March 2026, and the other two mines have shut down some production and are unlikely to make it to the end of the decade without a rebound in prices. This will cause a financial crisis for the NWT, and it is counting on the billions to be spent on remediation projects for the former Giant Mine and diamond mine closures, as well as federal major projects spending, to buy it time until new projects start to develop.

Baffinland's Mary River mine produces a high-grade iron ore that is in demand. After a decade of proposals and planning, it was finally approved for a multi-billion-dollar expansion. Baffinland will build a railway and deep-water port south to Steensby Inlet, rather than use the current haul truck road to Milne Inlet, a move that will allow it to quintuple production.

What Mary River, Raglan, Nunavik Nickel, and Voisey's Bay have in common is they are all world-class deposits within about 100 km of tidewater. Those kinds of deposits further inland are generally prohibitively expensive, as the cost of building and maintaining roads or railroads over hundreds of kilometres, often on muskeg or melting permafrost, and mitigating their impact on migratory species such as caribou, make them uneconomic.

And what of oil and gas development? The Canadian Arctic does have rich deposits, primarily in the Mackenzie Delta and Beaufort Sea in the NWT. Potential projects in the 1970s never received social approval, following the aptly named Mackenzie Valley Pipeline Inquiry, also known as the Berger Inquiry. And the boom in the 2000s met its demise when the shale revolution—the technological combination of hydraulic fracturing and horizontal drilling—unleashed copious amounts of new oil and gas production in the United States, and the oilsands were capitalized and started producing in Canada. Arctic oil and gas cannot compete with shale and oilsands production and, at least in the medium term, it is basins in Alberta and British Columbia that are likely to receive the vast majority of Canadian oil and gas investment.

Arctic oil and gas is complicated by the fact that it must be moved either by an extremely long and expensive pipeline south—an unlikely venture in modern Canada—or moved to a seasonal, ice-choked port. While there is renewed optimism that the Port of Churchill, Manitoba, for example, might be developed for exporting LNG or oil, the economics of seasonal ports make this unlikely. Consider Alaska, which has excellent resources in its North Slope Borough. Most of its production takes place very close to shoreline. But rather than deal with a seasonal port, it built the 1,300 km Trans-Alaska Pipeline System south to Valdez, near Anchorage, to benefit from year-round open water.

While minerals can be mined and stockpiled all year while they wait for the short shipping season to start, natural gas and oil must be stored in tanks. The costs of this preclude the use of seasonal ports, and that's before getting to the challenges of insuring oil tankers in the Arctic or commissioning sufficient ice-strengthened LNG carriers and tankers. Russia does it because it has enormous oil and natural gas deposits close to shore in its Arctic. But Russia ships its product west in the winter rather than going east through the Northern Sea Route, which is as yet unfeasible even with its world-leading nuclear icebreakers.

In the Canadian Arctic the opportunity is much likelier in supplying local energy needs. We have tended to focus on energy security in Canada through a lens of exporting large volumes of oil, natural gas, and uranium to trade partners in an era of heightened geopolitical tension. But residents of the Canadian Arctic face acute energy insecurity, burdened by dependence on importing diesel or building long transmission lines. Electricity prices are skyrocketing and energy availability is a major inhibitor to attracting new mines.

The future for Arctic oil and gas is therefore about projects like the Inuvialuit Energy Security Project, locally producing natural gas for Tuktoyaktuk, Aklavik, and Inuvik, rather than megaprojects that will show up in territorial GDP.

For some, this dearth of major Canadian Arctic oil and gas development may be welcomed. For others, it is a missed opportunity that will come at the expense of public services and jobs.