Nunavut

Unearthing the potential in Canadian exploration and mining

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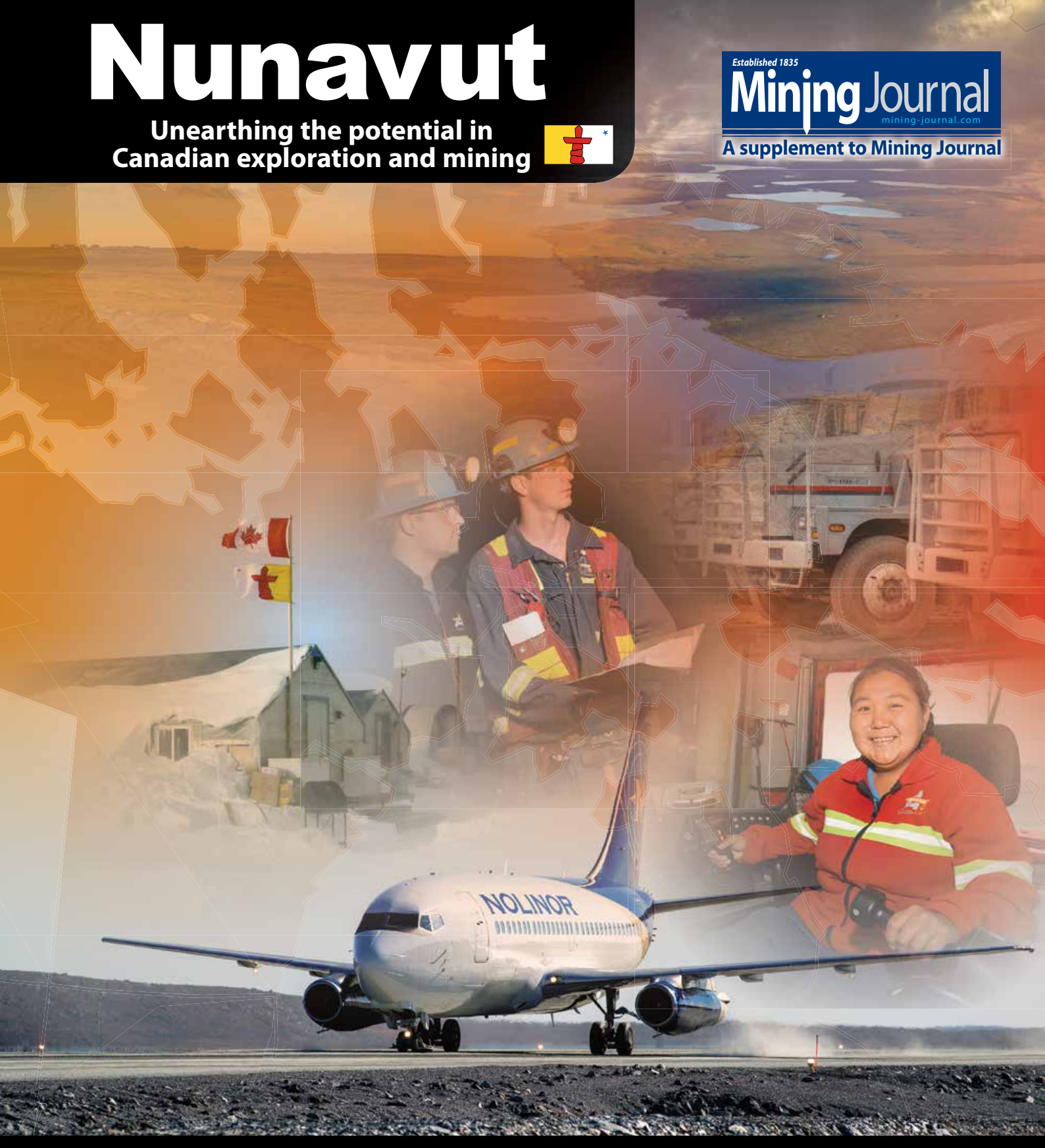


Nunavut mining and exploration continues to progress despite challenging times

A message from Brooke Clements, President of the NWT & Nunavut Chamber of Mines

Welcome to Nunavut and this special *Mining Journal* supplement! The information enclosed illustrates that the mining industry can create long-lasting and important benefits for Nunavut.

There are now two mines in the territory and a number of important advanced projects and earlier-stage exploration projects that we hope to see progress to the mining stage in the coming years. And, given the vast areas of prospective geology, there is great potential to discover new orebodies.

The year 2015 finds our industry in challenging times. As summarised by the Conference Board of Canada, the long-term outlook for Nunavut's mining industry is good. Exploration and deposit appraisal spending, which reached a record high of C$535 million in Nunavut in 2011, dropped to C$148 million last year. Current forecasts are for C$174 million to be invested in 2015.

Gold and iron prices were at or near record highs three years ago, but they have now dropped significantly. That is the nature of the minerals industry, and we continue to press on despite the rise and fall of commodity prices and the ebb and flow of investment dollars.

We are happy to report a number of major milestones in Nunavut this year with a new iron mine operating at Mary River and the federal government approval of the Meliadine gold mine proposal to proceed to permitting and licensing near Rankin Inlet.

These projects will provide much-needed growth opportunities through training, jobs, and business opportunities, building on the solid foundation of success created by the Meadowbank Gold Mine.

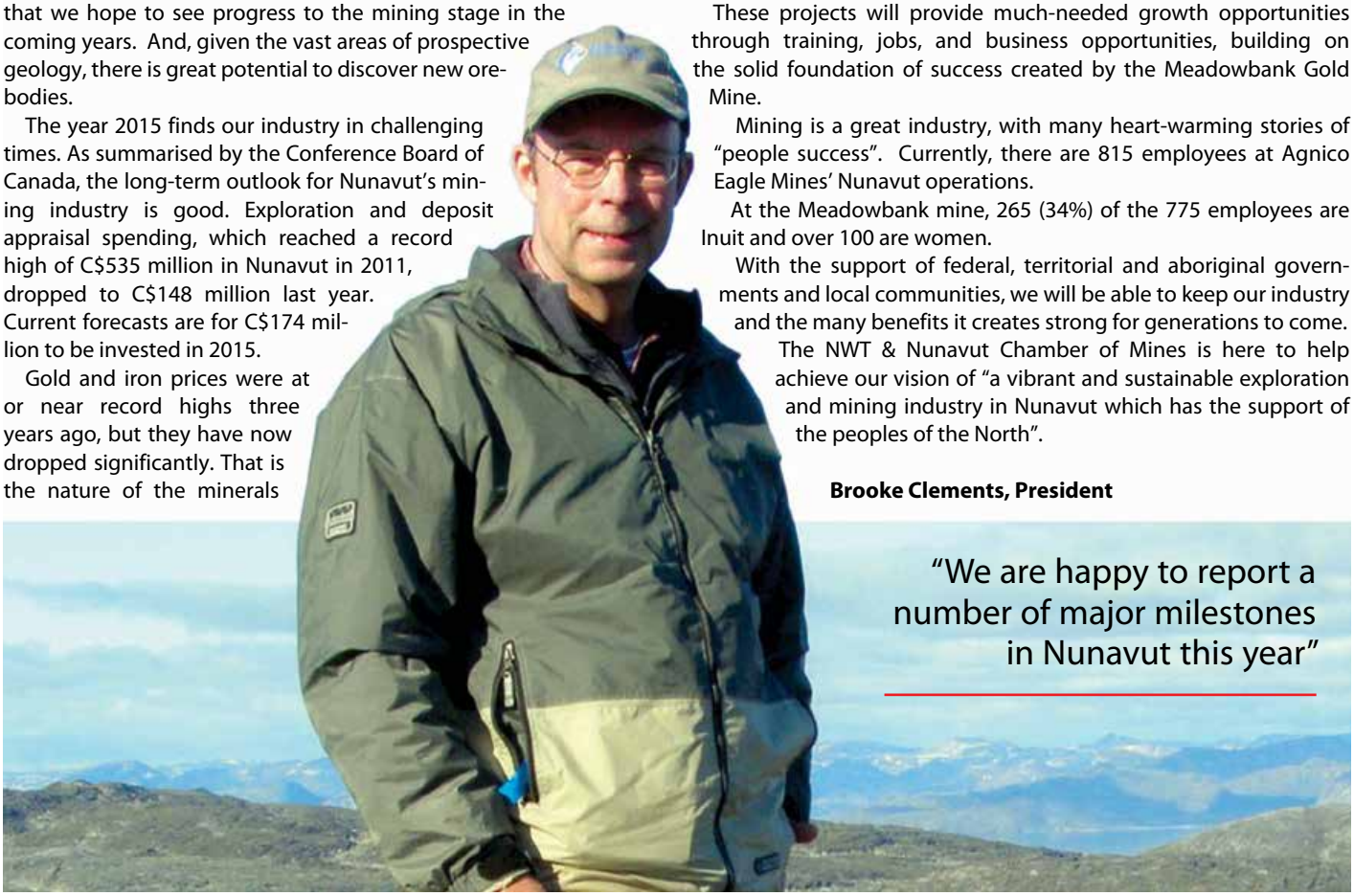
Mining is a great industry, with many heart-warming stories of "people success". Currently, there are 815 employees at Agnico Eagle Mines' Nunavut operations.

At the Meadowbank mine, 265 (34%) of the 775 employees are Inuit and over 100 are women.

With the support of federal, territorial and aboriginal governments and local communities, we will be able to keep our industry and the many benefits it creates strong for generations to come.

The NWT & Nunavut Chamber of Mines is here to help achieve our vision of "a vibrant and sustainable exploration and mining industry in Nunavut which has the support of the peoples of the North".

Brooke Clements, President



"We are happy to report a number of major milestones in Nunavut this year"

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This is 'Our Land'

Optimism is high for mining growth in Nunavut

Canada's remote and sparsely populated Nunavut Territory is on a trajectory to capture global attention as a mining and exploration destination. And with its population explosion, it's also gearing up to put that industry to work by creating jobs and business opportunities for its residents.

With encouraging support for mineral development from both national and local governments and progressive mining policies established by the territory's majority indigenous population (the 'Inuit'), Nunavut is attracting significant mineral investment.

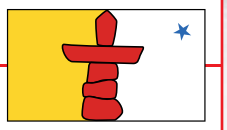
With robust exploration and a wide portfolio of mineral targets including gold, silver, iron, diamonds, copper, zinc and uranium, optimism is high for mining growth in Nunavut. Subject to market conditions and regulatory approvals, mining projects hold the potential to invest nearly C$7 billion in Nunavut over the next 10 years in constructing new mines and associated infrastructure.

Nunavut is young politically and demographically.

Created in 1999, Nunavut was carved out of the Northwest Territories by referendum to create a new autonomous territory, which, in the Inuit language of Inuktitut, means: "Our Land". The territory comprises nearly 20% of Canada's 9,970,610km^2 land mass. Its capital city, Iqaluit (pronounced *ee-kal-oo-weet*) is its largest community, with a population of 7,542. The "place of many fish", Iqaluit is located just south of the Arctic Circle, and approximately 2,000km north of Canada's capital city, Ottawa.

Tufted saxifrage (left): this beautiful high arctic flower is commonly found throughout the Canadian, Russian and Lapland Arctic

Fast facts: Nunavut

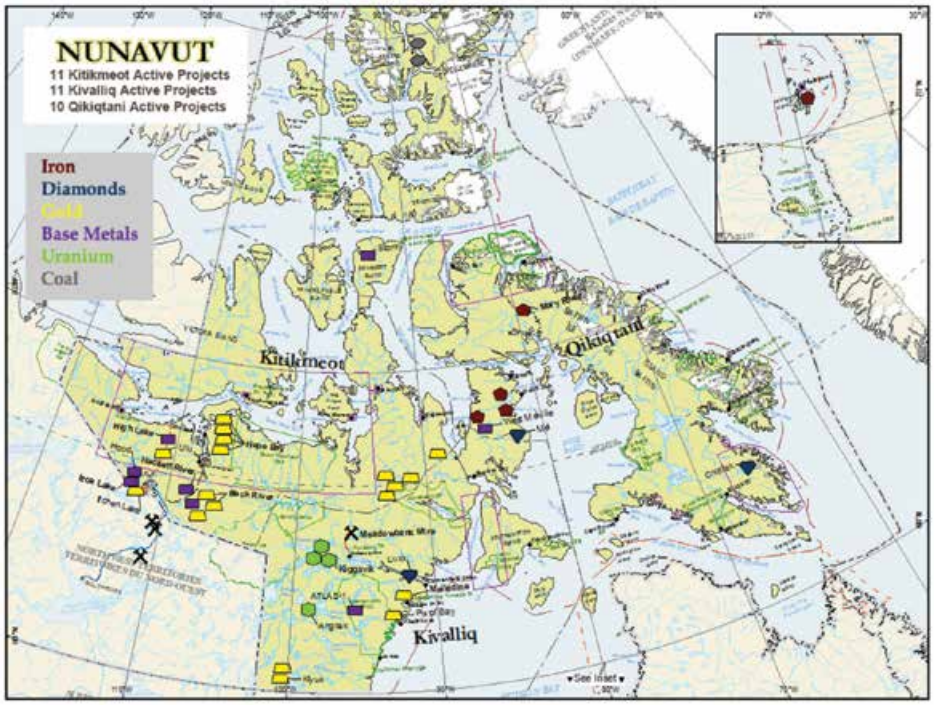


Total area	Nunavut covers 1,877,787km^2 (725,018sq mi) of land and 60,935km^2 (62,137 sq mi) of water in Northern Canada
Neighbours	Northwest Territories; Manitoba; Ontario; Quebec; Greenland
Population	36,687 (2014)
Main towns	Iqaluit, Rankin Inlet, Cambridge Bay
Languages	Inuktitut; English; French; Inuinnaqtun
Created	April 1, 1999 (Nunavut was carved out of the Northwest Territories via the Nunavut Act and the Nunavut Land Claims Agreement).
Government	Parliamentary democracy; Nunavut elects a single member of the Canadian House of Commons. This makes Nunavut the largest parliamentary riding in the world by area; the members of the Legislative Assembly of Nunavut are elected individually; there are no parties and the legislature is consensus-based.
Currency	Canadian dollar (C$100 = US$81.21)
GDP	C$1.96 billion (real value), with C$333.2 million represented by mining, quarrying, and oil & gas extraction.
Unemployment rate	14.9% compared to 7.2% Canada-wide (May 2015)
Demographics	Nunavut has a young population. Estimated 11,389 people under the age of 15, representing a third of the Territory's population (July 2014)
Natural resources	Gold, iron, silver, uranium, diamonds, coal, base metals, rare earths, soapstone
Terrain	Arctic tundra; treeless.
Elevation extremes	Highest point is Barbeau Peak (2,616m; 8,583ft) on Ellesmere Island.
Climate	Large fluctuations in seasonal temperatures, from -30°C in January to 12°C in July, with less than 25cm of precipitation per year, mostly in the form of snow.

> "Mining projects hold the potential to invest nearly C$7 billion in Nunavut over the next 10 years in constructing new mines and associated infrastructure"

Nunavut is flanked to the west by the Northwest Territories, to the east by Greenland, and to the south by the provinces of Manitoba, Ontario and Quebec. The climate is subject to large fluctuations in seasonal temperatures, from average -30° in January to 8° in July, with less than 25cm of precipitation per year, mostly in the form of snow. Parts of the territory experience 24 hours of daylight in June and round-the-clock darkness in December. Nunavut is treeless and mostly uninhabited, although settlements stretch as far north as Ellesmere Island.

As a virtually new political jurisdiction, the economy of Nunavut is, in many respects, still in a development phase. Self-reliance in the economy is a key objective for both the territorial and federal governments, the attainment of which, however, is met with certain challenges. While Nunavut's unemployment rate has gone down from the previous year, it is still more than twice the Canadian average



Map of Nunavut showing the location of active projects by commodity

at 14.9%. Lack of employment opportunities is cited as the main factor.

But Nunavut is young in demographics and hosts the youngest, fastest-growing population in Canada. In July 2014, an estimated 11,389 people were under the age of 15, representing a third of the Territory's population.

> "Nunavut is young in demographics and hosts the youngest, fastest-growing population in Canada"

From 2006 to 2014, the population grew by 5,773 people, or 18.7%. This represents an average annual growth rate of 2.3%. Population growth is attributed, about equally, to a 'baby boom' and to people moving from other provinces to take advantage of growing opportunities in Nunavut.

Mining holds great promise to help pave the way to Nunavut's economic self-reliance. Mineral production from its first mine already accounts for approximately 18% of gross domestic product (GDP). Investments in mining and exploration offer significant training and employment opportunities.

It is estimated several thousand jobs will emerge over the coming years, making the mining industry Nunavut's largest private-sector employer.

As well, government recognises the substantial role that the minerals industry plays in developing Nunavut's infrastructure. With new transportation networks such as roads, port facilities, and airstrips, Nunavut will be able to provide easier and cheaper access to not only support expanding exploration programmes and new mining development, but also lower the cost of living for communities.

Right: trucks waiting to transport staff to Mary River iron mine

Photo: Baffinland

The 'place of many fish', Iqaluit is located just south of the Arctic Circle

Photo: Adam Chamberlain

Nunavut's mining and exploration industry: a deeper look

Below: fish studies at gold exploration site

Photo: Agnico Eagle Mines

Economic outlook

Mining is playing a significant role in the growth of Nunavut's economy. Next to government, it is the largest contributor to northern jobs and development. Mining also contributes to real estate, construction and transportation infrastructure, resulting in even larger benefits not immediately apparent in GDP figures.

Recently, Statistics Canada revised its data for the Nunavut GDP. The mining sector now stands at 18% for 2013. This figure represents production from just one mine – Agnico Eagle's Meadowbank gold mine – and excludes the benefits of exploration and construction of the Baffinland's Mary River iron mine.

Natural Resources Canada's (NRCan's) estimates of 2015 mineral exploration and deposit appraisal expenditures shows increased spending in Nunavut. NRCan's latest semi-annual report, 'Exploration and Deposit Appraisal Expenditures, by Province and Territory'* indicates an expenditure of C$174.3 million in Nunavut, an increase of C$29.7 million (21%) from C$144.6 million in 2014. Most of that spending will be earmarked for precious metals such as gold and silver, as well as diamonds.

But for Canada, total expenditure estimates for 2015 decreased to C$1.86 billion, down 3% from their preliminary estimates of C$1.93 billion for 2014. As a share of projected Canadian investment, Nunavut lies in fifth place.

Despite the positive spending projections for this year, Nunavut's minerals industry continues to face investment challenges along with much of the rest of the world. Globally, deposit appraisal spending is generally down, and for Canada, government forecasts a drop of over 3%. Nunavut is not immune to this reality.

In addition, the territory is still seeing a lack of grassroots exploration, but hopefully its rich and diverse geology will help the industry rebound in the near future.

On the mining side, things are brighter, with the opening of Mary River iron mine. But other large advancing projects still face financing challenges due to global markets.

NRCan does not provide any explanations for its figures, but they are likely due to a number of things:

- First, Nunavut is getting less exploration money than in previous years as more countries are competing for fewer dollars.
- Second, some projects are running up against huge infrastructure challenges such as MMG Resources' Izok Corridor (base metal) project, which has currently curtailed exploration.
- Third, several advancing projects like Doris North (gold), Kiggavik (uranium), and Back River (gold) have shifted spending from field work to feasibility studies and regulatory approval activities.
- And, with Mary River now a mine, its spending on exploration and deposit appraisal is no longer significant in these statistics.

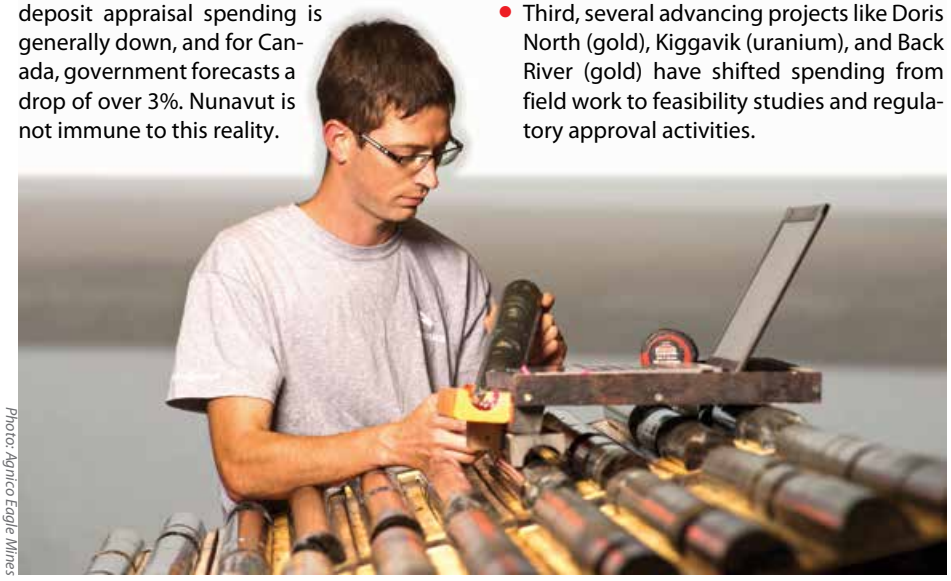


Photo: Agnico Eagle Mines

Examining core

"The introduction of a new iron mine this past year will contribute significantly to Nunavut's economy, and having several projects advancing through the approval processes bodes well for the near term"

Overall, Nunavut's mining industry is pretty solid. The introduction of a new iron mine this past year will contribute significantly to Nunavut's economy, and having several projects advancing through the approval processes bodes well for the near term.

Mining approvals

Nunavut has a robust and integrated regulatory system established by the Nunavut Land Claims Agreement and further defined by the Nunavut Planning and Project Assessment Act and the Nunavut Waters and Nunavut Surface Rights Tribunal Act.

One of the key benefits to the territory is a single, settled land claim agreement between the Inuit (represented by Nunavut Tunngavik Inc.) and the Crown (represented by Aboriginal Affairs and Northern Development Canada).

The agreement was established in 1993 and provides for certainty and clarity of (Inuit) rights with regard to ownership and use of

*as at March, 2015

Photo: Baffinland

Above: aerial view of the Mary River iron mine

Photo: Agnico Eagle Mines

Above: the Meadowbank gold mine

lands and resources and financial compensation and a means of participating in economic opportunities.

The Nunavut Impact Review Board (NIRB) forms part of an integrated land and resource management regime through the Land Claim Agreement, which includes land use planning, environment impact assessment, and water licensing.

The NIRB is a central player in the regulatory system. Its mandate is to:

- Screen project proposals;
- Gauge and define the extent of regional impacts;
- Review eco-systemic and socioeconomic impacts of project proposals and determine whether they should proceed and under what conditions; and
- Monitor projects once they have been approved.

Impact assessment, environmental review and monitoring

Environmental Reviews are comprehensive assessments generally reserved for major development projects or projects that may cause significant public concern.

Reviews require the development of an Environmental Impact Statement by the Proponent, and participation in technical meetings, hearings and regulatory workshops.

Projects that are approved following a Review by the NIRB are issued a Project Certificate and may be monitored by the NIRB.

Monitoring programmes measure the relevant effects of projects on the eco-systemic and socio-economic environments of the Nunavut Settlement Area; determine whether and to what extent the land or resource use in question is carried out within the predetermined terms and conditions; provide the information base necessary for agencies to enforce terms and conditions of land or resource use approvals; and assess the accuracy of the predictions contained in project impact statements.

Nunavut's mining outlook remains strong despite sluggish world economy

According to the Conference Board of Canada, while the current environment is not conducive to a rapid expansion of mining assets in Nunavut, prospects for the longer term are generally positive. The business case for many of the mining projects in the North remains good.

While the near-term outlook is still clouded by low base-metal prices, demand prospects for base metals and gold over the long term are positive and will lead to the active development of several more mines over the next decade.

Growth prospects are strong in Nunavut. Some large mining projects are already under way, and that will help growth in Nunavut. Overall economic growth is expected to be 3.3% in 2015, and 0.2% in 2016.

The mineral exploration industry is important to Nunavut. It is the necessary first step toward developing a producing mine, and the activities associated with exploration and deposit appraisal bring important economic benefits.

While Nunavut has an abundance of minerals, the amount spent on exploration in any given year will depend on a number of factors, including commodity prices, access to infrastructure, regulatory decisions, and the stage of development of major projects.

There are a number of junior and senior companies with projects at various stages of development in all three regions of Nunavut.

Taxation and royalties

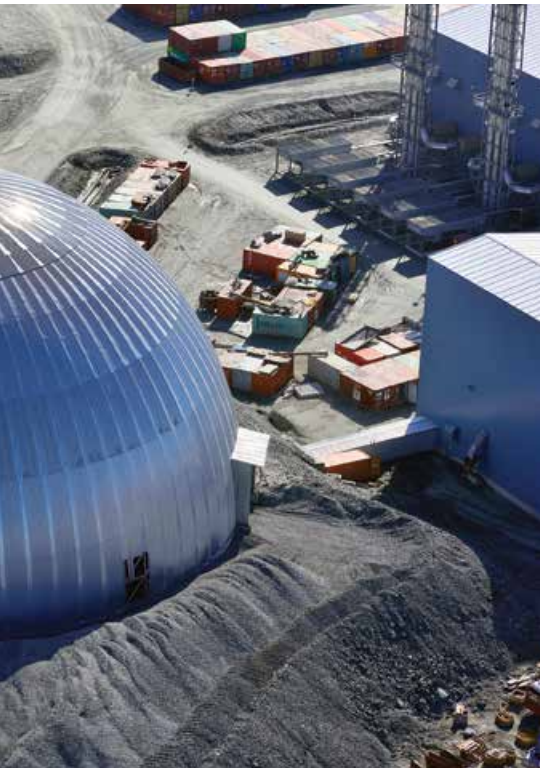
Mining regulations

Mineral royalties are payable under the Nunavut Mining Regulations provided for under the Territorial Lands Act. Taxes on corporate profits in the mining and other sectors are payable pursuant to the Income Tax Act and relevant territorial legislation and regulations.

Nunavut benefits from Canada's Mineral Exploration Tax Credit, which helps companies raise capital for mining and exploration by providing a tax incentive to individuals who invest in 'flow-through' shares issued to finance exploration.

To help make Nunavut's tax regime more competitive, the Government of Nunavut provides a tax incentive to mining and exploration to offset higher energy costs through the Nunavut Fuel Tax rebate.

Should a mine be developed, Nunavut



mining companies can recover most of their initial capital investment before paying a significant amount of taxes.

The income tax regime also provides rules to help mitigate the negative financial aspects of fluctuating prices. Tax and royalty regimes are also principally based on net production profits rather than on the net smelter return royalties commonly found in other countries.

Recently, the federal government has brought a sharper focus to economic development in Canada's North.

The federal budget 2015, for example, proposes to increase the borrowing limit for the Government of Nunavut to C$650 million, while the extension of Canadian Exploration Expenses to include community consultation expenses will reduce exploration costs. The intent of the former is to give the territory greater flexibility in exploring future investments, including in infrastructure to support resource development and economic growth.

NTI Resource Revenue Policy

As a result of Inuit receiving royalty revenues for the first time from mining on their private lands, Nunavut Tunngavik Inc. (NTI) created and approved a Resource Revenue Policy, the objective of which is to establish a clear, efficient and consensus-based policy to govern the use of a portion of the economic benefits derived from mineral resource development in Nunavut.

The policy covers royalties from mines on Inuit Owned Lands, and includes royalties negotiated directly between NTI and mining companies. The minimum for the negotiated royalty is a 12% net profit interest royalty.

Minerals administration and policy

Public and private lands

Nunavut became its own territory in 1999 via the Nunavut Act and the Nunavut Land Claims Agreement Act. Major land owners are the federal and territorial governments, which hold Crown lands in trust for the public, and private lands owned by the Inuit, through their land claims organisation NTI.

Both the territorial and federal governments, as well as NTI realise that the minerals industry has great potential to grow Nunavut's economy. To date, they have maintained a supportive policy framework, intended to welcome investment to the territory. NTI established a positive mining policy in 1997 followed by the Government of Nunavut in 2003. In combination with strong commodity prices and high mineral potential, Nunavut grew to become the fifth-largest investment destination in Canada in 2014.

Land tenure for minerals is administered by the federal government on public lands and by NTI on Inuit lands. Both government and the Inuit share resource management responsibilities which sanction exploration, provide regulatory approvals, and issue relevant permits and licences for exploration and mining.

Land Claims Agreement

The Nunavut Land Claims Agreement (between the Inuit of the Nunavut Settlement Area and the Government of Canada) is the largest Aboriginal land settlement in Canadian history. The Agreement gives Inuit fee simple title to 356,000km^2 of land. There are 944 parcels of Inuit Owned Lands (IOL) where Inuit hold surface title only. The Government of Canada or 'the Crown' retains the mineral rights to these lands. Inuit also hold fee simple title – including mineral rights – to 150 parcels of subsurface IOL, which total 38,000km^2 and represent around 2% of the territory.

Photo: John Main

A 'Yield' sign in Gjoa Haven, which reads 'nautsiqturit' ('Be careful…')

In essence, the Nunavut Land Claims Agreement provides Inuit with a combination of surface and subsurface rights, cash, and the right to participate in the management and regulation of [land and water] surface rights, wildlife, land and water use, and environmental impact reviews.

Inuit also receive a high level of certainty through the legal requirement of the land claim for major project developers to negotiate with them Inuit Impact & Benefit Agreements (IIBAs) which address such benefits as training, employment and business for all major projects. When combined with clarification of title and guaranteed participation in resource management and development, IIBAs have helped encourage many native peoples to support and get involved with mining development.

Devolution

In October 2014, the federal government began the negotiation process that will transfer province-like responsibilities for land and resource management to the Government of Nunavut. Devolution is an important step in the political and economic development of Nunavut. Giving Nunavut greater control over its lands and resources ensures that northerners participate in realising the economic potential of the region and that Nunavut remains an attractive place to live, work, and invest.

Fraser Institute survey shows Nunavut is friendly to the mining business

The Fraser Institute recently published its annual perception survey results from mining and exploration companies in 122 jurisdictions around the world.

The survey covers public policy topics that can encourage or discourage investment such as political stability, trade barriers, environmental regulations, infrastructure, socio-economic and community development conditions, labour and skills availability, and legal and taxation regimes.

Nunavut ranks relatively high on the global list when compared to other jurisdictions around the world at 29th place overall. Canadian jurisdictions tend to do quite well, but of the areas perceived to be a major challenge in Nunavut is the lack of infrastructure, such as roads and access to electrical power. However, the Institute points out that, taken in its totality, conditions in Nunavut are improving over time.

Photo: Agnico Eagle Mines

Environmental testing at Meadowbank gold mine

Photo: Baffinland

Top of deposit 1 at Mary River iron mine

Infrastructure and geology

"Nunavut's diverse geology makes it prospective for gold, silver, iron, diamonds, uranium and base metals"

Diverse geology enhances mineral potential

Nunavut's diverse geology makes it prospective for gold, silver, iron, diamonds, uranium and base metals. The territory encompasses a significant portion of the Canadian Shield, with ancient rocks more than 1.7 billion years old. The region is divided into three geological provinces: the Archean; the Proterozoic; and the Phanerozoic.

Archean

Rocks of Archean age are exposed throughout Nunavut, and without doubt underlie much of the territory that is covered by younger rocks. They are characterised by granite-greenstone terranes, similar in most respects to Archean cratons globally. Migmatitic gneisses, which range from granodiorite to quartz monzonite, are among the oldest rocks in Nunavut and exposed in parts of northern Baffin Island, the Melville Peninsula, and southwest across the mainland.

Late Archean supracrustal rocks comprise the greenstone belts that host much of the gold and base-metal endowment of Nunavut. Western Nunavut's Slave Geological Province hosts numerous gold vein deposits – such as Ulu, George Lake and Boston – and iron-formation hosted gold as at the former Lupin Gold Mine. A number of volcanogenic massive sulphide deposits are known including Izok and High Lake.

The Slave Province also hosts younger kimberlite intrusions, some of which are significantly diamond-bearing, like at Nunavut's Jericho diamond deposit and just across the Nunavut boundary in the Northwest Territories where three diamond mines have helped establish Canada as the third-largest producer of diamonds by value in the world.

Archean rocks in south-central Nunavut in the western Churchill Geological Province host many of the same deposit types, including those at Victory Lake, Noomut, Heninga Lake, and the Meliadine gold deposits.

In the northern part of the Churchill Province, ultramafic volcanic rocks, quartzite and iron formation characterise the Woodburn and Prince Albert groups. While the former hosts the Meadowbank gold deposits, the

Photo: Agnico Eagle Mines

Around the Meliadine gold project: underground (above) and a site near Rankin Inlet (main photo)

Right: Milne Camp at Mary River iron mine. Below right: the Meadowbank gold mine

Photo: Baffinland

Photo: Agnico Eagle Mines

less-explored Prince Albert group also holds significant potential for gold mineralisation, such as the Three Bluffs deposit.

Rocks of the Prince Albert Group continue northeastwards across the Melville Peninsula and onto northern Baffin Island, where they are represented by the Mary River Group. Some of the richest iron deposits in the world are found in these rocks at Mary River and Roche Bay.

Proterozoic

Much of the Churchill Province was covered by extensive siliciclastic deposits in the earliest Proterozoic. Younger siliciclastic and carbonate rocks of the Penrhyn Group on the southern Melville Peninsula, and their along-strike correlatives of the Piling Group (central Baffin Island) represent a continental margin succession deposited on Archean crust. These rocks are revealing elevated base-metal and gold mineralisation.

On southern Baffin Island, similar contemporaneous stratigraphy (the Lake Harbour Group) contains ultramafic sills that have recently been investigated for their nickel potential. In southernmost Nunavut, basal clastic rocks and overlying volcanic and carbonate units are well exposed on the Belcher Islands in southern Hudson Bay, as are Superior type banded iron formations.

Phanerozoic

Paleozoic rocks cover approximately one-third of Nunavut. Strata lying to the west and northwest of Fury and Hecla Strait form part of the Arctic Platform that continues northward onto Ellesmere Island, whereas those to the southeast underlie the Foxe Basin and represent the northern continuation of the Hudson Platform.

During the Caledonian orogeny, uplift and erosion led to the deposition of a thick orogenic clastic wedge, with elevated potential for red-bed type copper deposits.

In the late Devonian, east-west compression (Ellesmerian orogeny) may have been the driving force behind Mississippi-Valley type mineralising events that gave rise to the Polaris district zinc-lead deposits that were mined at the Polaris Mine in the central Arctic archipelago.

From the Carboniferous to the Cretaceous, renewed rifting led to the formation of the Sverdrup Basin in northernmost Nunavut characterised by the deposition of a thick clastic and carbonate succession. These strata host significant reserves of gas and oil, including the past-producing Bent Horn light crude field.

> "Rocks of Archean age are exposed throughout Nunavut, and undoubtedly underlie much of the territory that is covered by younger rocks"

In eastern Nunavut, a cluster of kimberlite pipes is centred on Somerset Island, with exposures on the northern Brodeur Peninsula and northwestern Baffin Island.

Several of these pipes are known to be diamondiferous. The Chidliak diamondiferous kimberlites found much further south on Baffin Island's Hall Peninsula, are composed of magmatic or volcaniclastic rock and can contain abundant country rock and mantle xenoliths.

In western Nunavut, diamondiferous pipes such as Jericho occur in the northern Slave Province. Numerous other pipes have been identified on Victoria Island as well.

Right: workers on site at Mary River

Photo: Agnico Eagle Mines

Infrastructure

Supplying infrastructure to the vast, remote territory of Nunavut is costly. In other northern jurisdictions, significant infrastructure has come about as a direct result of mining. The mining sector can contribute not only to horizontal and vertical assets such as roads, bridges, buildings and even recreational facilities through community relations initiatives, but also has begun development of broader asset classes such as power, telecommunications and data transfer stations, ports, airstrips and railways.

Shipping

The Canadian Coast Guard has several 'heavy' and 'medium' ice breakers in its fleet which are capable of year-round operation in the high Arctic.

Service covers the entire Canadian Arctic archipelago from 60°N latitude, toward the North Pole and those waters of Ungava Bay and Hudson Bay, south of the parallel of 60° N latitude. These ships also provide ice-breaking assistance to the Sealift 'dry cargo' ships which move general merchandise on behalf of Nunavummiut and ensure that transportation requirements of private and all federal government agencies are met. Canada's (and the world's) only ice-breaking ore-carrying ship, the *MV Arctic*, was built to service the Nanisivik and Polaris mines. Ongoing hydrographic surveys, combined with experience gained at these sites, confirm that marine shipping is now both economically and environmentally viable throughout most of the Arctic Islands.

Roads

Though most of the communities in Nunavut have a local network of unpaved roads, there are currently no existing highways connecting communities to one another or to southern Canada. This is due to the enormous distances between communities, their remoteness, and the existence of permafrost, which makes construction of roads difficult and expensive.

Photo: Agnico Eagle Mines

Gourmet meals are served daily at the Meadowbank camp

The largest and most promising road development is the proposed Manitoba-Nunavut Highway. The proposed 1,475km route – from Churchill, Manitoba to Rankin Inlet – includes as many as 63 bridges, and has an estimated cost of C$1.3 billion, with C$7 million in annual maintenance costs.

The development of road networks is seen as key to fostering mineral production and would bring long-term economic benefit to Nunavut on the whole.

Airports

While shipping remains one of the most important means of transportation, particularly for cargo, air travel is viewed as the most expedient.

While a number of exploration sites lie quite near government-owned, community airports, most mining sites have developed their own airstrips. These sites vary in length and surface-type, but can accommodate various sizes of aircraft from helicopters to Twin Otter STOL (Short Takeoff and Landing) utility aircraft and Dash 8 twin-engined, medium-range, turboprop airliners to larger Hercules transport aircraft and Boeing 737 jets.

The government clearly recognises the substantial role that the minerals industry can play in Nunavut's development. Nor has this fact been lost on the Inuit. With new and improved infrastructure, Nunavut will be able to provider easier and cheaper access to support expanding exploration programmes and to assist in bringing new mines into production.

Geoscience support for minerals industry

Geological mapping of the remote and large territory does lag that of most of southern

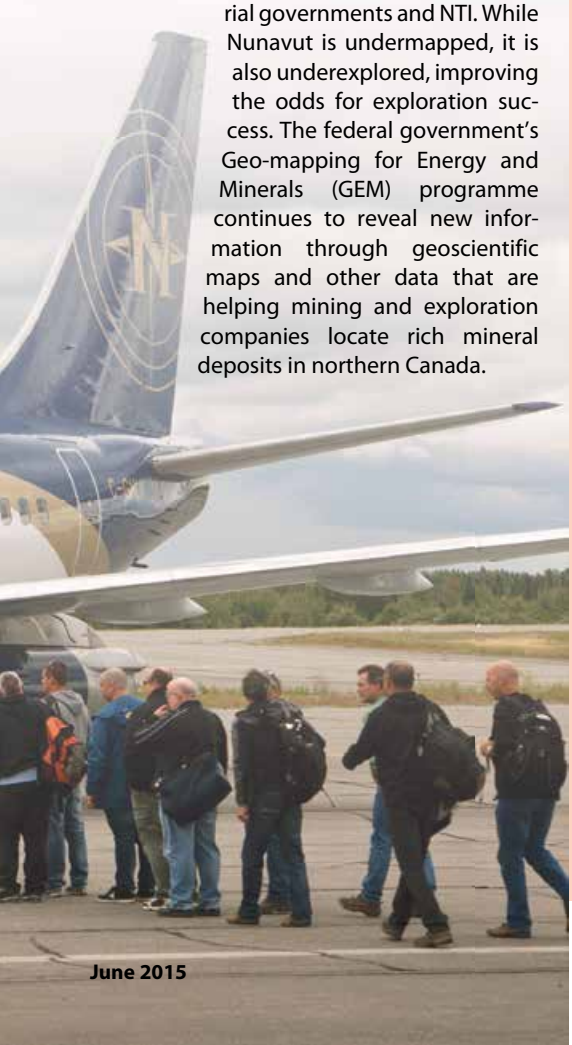
Mighty Plane – Nolinor's 737-200 flies employees and cargo to Agnico Eagle's Nunavut operations. For Meadowbank, the aircraft is a lifeline, delivering precious food, cargo and workers to the mine four days a week

Photo: Agnico Eagle Mines

Photo: Peregrine Diamonds

A helicopter conducts airborne geophysics at the Chidliak site in the Baffin Region

Canada. This is being addressed through geological surveys conducted by the Geological Survey of Canada and by the Canada-Nunavut Geoscience Office – a co-operative partnership between the federal and territorial governments and NTI. While Nunavut is undermapped, it is also underexplored, improving the odds for exploration success. The federal government's Geo-mapping for Energy and Minerals (GEM) programme continues to reveal new information through geoscientific maps and other data that are helping mining and exploration companies locate rich mineral deposits in northern Canada.



Fednav: pioneering presence in Canada's Arctic for 60 years

As a pioneering presence in Canada's Arctic for 60 years, Fednav's Arctic Operations and Projects is responsible for managing Fednav's mining and resupply transportation activities in the Arctic. Today, Fednav transports more than 2Mt/y from remote northern mines.

Fednav has participated in every major shipping project in the Canadian Arctic. The company owns and operates:

- the 28,400t MV *Arctic*, an oil-bulk-ore ice-breaking vessel;
- the 31,500t MV *Umiak I*; and
- the 31,500t MV *Nunavik*.

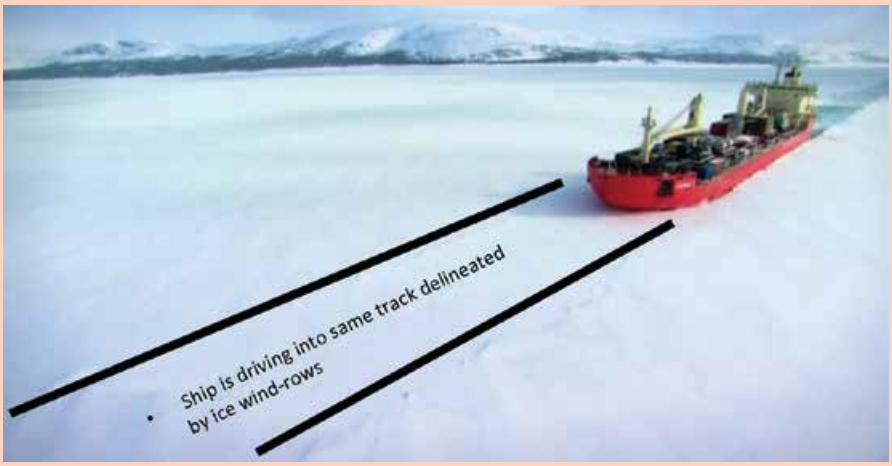
The latter two are the most powerful ice-breaking bulk carriers in the world.

The vessels operate independently in the harsh polar environment and provide total transportation solutions to Canada's northern mines.

In September 2014, Fednav's Nunavik was the first commercial vessel to completely transit the Northwest Passage unescorted, with an Arctic cargo and Canadian expertise.

Above: driving over ice track bridge

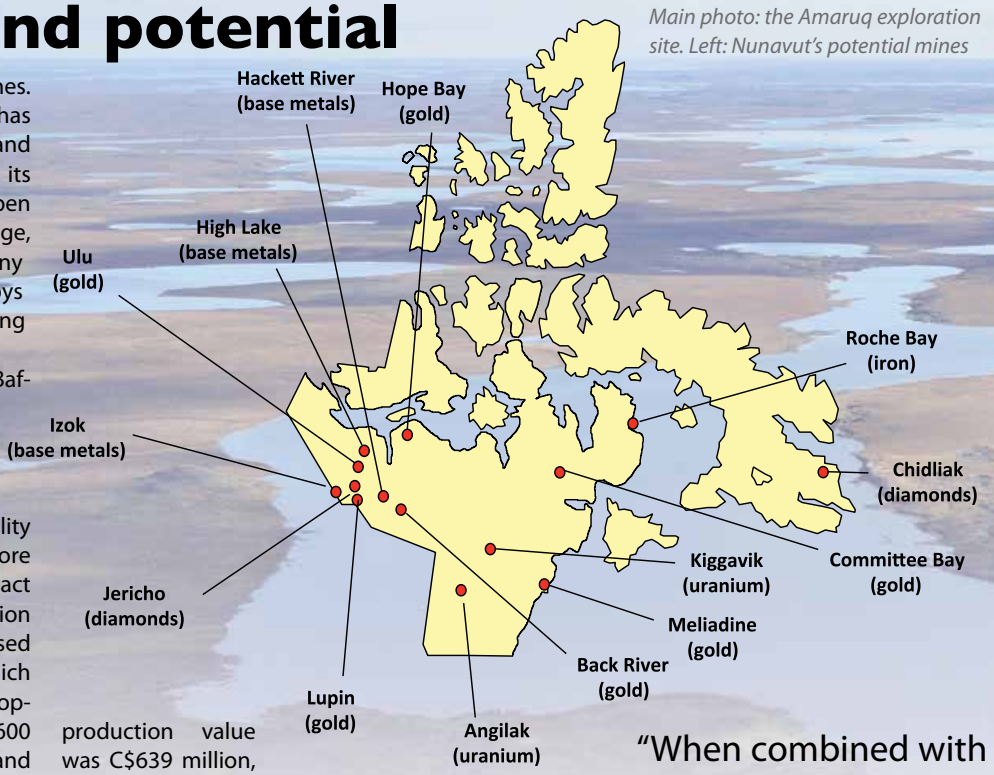
Bridging ice track



Fednav demonstrates how it breaks ice, following its old tracks, therefore making it predictable and easier for communities to place their 'ice bridges' to allow snowmobiles to safely cross

Production and potential

Main photo: the Amaruq exploration site. Left: Nunavut's potential mines



Nunavut has two operating mines. The Meadowbank gold mine has been in production since 2010 and is a major contributor to the success of its owner, Agnico Eagle Mines Ltd. Three open pits are currently in operation (Portage, Goose, Vault) at the site, and the company mined 425,000oz in 2014. The mine employs 775 staff, including 265 Inuit, representing 34% of the workforce.

The Mary River iron project, owned by Baffinland Iron Mines Corp, is located on northern Baffin Island. The project is currently in development and Baffinland is on track to ship first iron ore during the 2015 open water season. Due to the quality of the ore, no processing is required before shipping it to market, reducing overall impact to the environment and keeping production costs low. Baffinland has adopted a phased development strategy for this resource which is critical to prudent, reduced-risk development. The company employs just over 600 people between the port at Milne Inlet and the mine site itself.

The total value of mining production has increased in Nunavut to C$642 million, up 2% from C$629 million in 2014. Of this, gold production value was C$639 million, up 2% from C$627 million in 2014; and silver production value was up 8% to C$2.6 million from C$2.4 million last year.

The revenue and benefits produced from mining contribute greatly to the economic well-being of Nunavut. When combined with mineral exploration, mining production provides the largest single private-sector contribution to the territorial economy.

Photo: Agnico Eagle Mines

Photo: Agnico Eagle Mines

Left and below: on the job at Meadowbank. Of the 775 employees working at the mine, more than 100 are women

Key exploration projects

Despite Nunavut's vast size and remote location, the territory is experiencing a boom of exploration revealing many mineral deposits.

> "When combined with mineral exploration, mining production provides the largest single private-sector contribution to the territorial economy"

Gold

Significant gold exploration includes the Meliadine project, also owned by Agnico Eagle Mines Ltd. This project is favourably located on the coast of Hudson Bay, 20km northeast of the jet-serviced community of Rankin Inlet. There are five known deposits, the largest of which is the Tiriganiaq deposit.

Another key exploration project, Amaruq ('large wolf') is also owned by Agnico Eagle and is located 50km north of Meadowbank mine. The company is completing a C$20-plus million drilling programme in 2015 and the project includes a proposed satellite deposit to supply ore to the Meadowbank mill. The Amaruq deposit may be viable because existing Meadowbank infrastructure and workforce can be leveraged (maintenance shops, mill, camp and airstrip). The current Amaruq schedule would begin production in Q3, 2019.

The Hope Bay Project has proposed gold mines located 170km southwest of Cambridge Bay and covers the majority of the Hope Bay Greenstone Belt area (northeast Slave structural province). Significant gold deposits on this property include the Doris, Madrid and Boston deposits. Sabina Gold & Silver Corp's Back River Project, also located in the Kitikmeot Region, lies adjacent to the Wishbone Greenstone Belt and consists of

Mines and promising Nunavut mine projects

The following table describes a number of leading mineral development projects in Nunavut

Project	Owner(s)	Commodity	Description	Status
Meadowbank Gold Mine	Agnico Eagle Mines	Gold	In operation since 2010. Open-pit mine located 300km W of Hudson Bay and 70km N of Baker Lake. **Mine jobs:** 736 Exploring potential satellite deposit called Amaruq, 30km from mine site.	Strong operational performance drives record gold production and low costs: Amaruq and Kittila drill programmes yield positive results
Mary River Iron Mine	Baffinland Iron Mines	Iron	In operation since September 2014; open-pit mine located 936km N of Iqaluit with five known deposits. **Estimated construction jobs:** 3,500- 5,000. **Estimated mine jobs:** 715	Production from Early Revenue Phase (ERP) began September 8, 2014. First marine shipment of ore to markets anticipated May 2015.
Doris North/ Hope Bay	TMAC Resources	Gold	Proposed gold mines 130km S of Cambridge Bay; covers the majority of the Hope Bay Greenstone Belt. **Estimated mine jobs:** 485 Plans to begin production by late 2016.	The company signs landmark land tenure agreements with KIA and NTI for the Hope Bay Belt, Nunavut. Robust Pre-Feasibility Study completed on the Hope Bay Gold Project, with a projected 20-year mine life.
Meliadine Gold	Agnico Eagle Mines	Gold	Proposed open-pit and underground gold mine, 25km NE of Rankin Inlet. The company's largest development project based on reserves and resources. **Estimated construction jobs:** 1,000 **Estimated Mine jobs:** 700	The company completed update on NI 43-101 technical report on the Meliadine gold project in Nunavut.
Back River	Sabina Gold & Silver Corp	Gold	Approximately 60km from Hackett River; adjacent to the Wishbone Greenstone belt. Consists of the George and Goose Lake deposits and holds significant gold resources. **Estimated construction jobs:** 1,600 **Estimated mine jobs:** 900	The company announced positive Feasibility Study on Back River Gold Project.
Chidliak	Peregrine Diamonds Ltd	Diamonds	Located 120km NE of Iqaluit, the capital of Nunavut, and 180km S of Pangnirtung. 71 kimberlites have been discovered to date; eight are potentially economic.	In 2015, the company announced an 8.7Mct inferred resource for the CH-6 kimberlite at Chidliak and the completion of the bulk-sampling component of its ongoing Resource Development Program.
Angilak	Kivalliq Energy Corp	Uranium	340,268-acre property located SW of Baker Lake; Hosts the high-grade Lac 50 Trend deposit; 13 new uranium zones discovered; inferred resource 43.3Mlb. U_3O_8 in 2.8Mt grading 0.69% at 0.02% cut-off.	The company announced fully funded 2015 exploration programmes at Angilak and Hatchet Lake
Qilalugak	North Arrow Minerals / Stornoway Diamonds	Diamonds	7km from tidewater; 9km from Repulse Bay, Melville Peninsula; 7,143ha of contiguous mineral claims. Largest kimberlite in Nunavut.	The company reports final diamond recoveries from the Qilalugaq Bulk Sample

"The majority of kimberlites on Chidliak are associated with magnetic high anomalies. There have been 71 kimberlites discovered to date, with eight being potentially economic"

the George and Goose Lake deposits. Both of these sites hold significant gold resources.

The Lupin gold deposit, acquired by Mandalay Resources Corp in September 2014, was in production from 1982 to 1998 and then again from 2000 to 2005. Its past pro-

Photo: Peregrine Diamonds

Chidliak Discovery Camp

duction is estimated at more than 3.7Moz of gold at an average grade of 0.259oz/t. Several of the Lupin zones have not yet been mined, with at least five additional zones warranting follow-up exploration.

Diamonds

In the eastern Arctic, Peregrine Diamonds Ltd's Chidliak project is located on the Hall Peninsula of Baffin Island, 120km north-northeast of Iqaluit. The majority of kimberlites on Chidliak are associated with magnetic high anomalies. There have been 71 kimberlites discovered to date, with eight being potentially economic.

The Qilalugaq ('*kill-a-loo-gah-ck*', meaning 'beluga whale' in Inuktitut) property is located on the Melville Peninsula, 9km from the community of Repulse Bay (Naujaat) and only 7km from tidewater. In 2013, North Arrow Minerals acquired the right to earn an 80% interest in the property from Stornoway Diamond Corp. The project contains the largest kimberlite in Nunavut.

Base metals

Base-metal mining has been made possible due to the availability of transportation. Originally, production had come from the Polaris and Nanisivik mines, both MVT deposits.

Exploration in the northern Slave Province has identified several Archaean volcanogenic massive sulphide (VMS) deposits, although the remoteness of these deposits has impeded their development. Experience

> "Base-metal mining has been made possible due to the availability of transportation"

Photo: Agnico Eagle Mines

Site near Rankin Inlet, Meliadine gold project

gained in operating the world's only ice-breaking ore-carrier to the Polaris and Nanisivik mines, complemented with new hydrographic surveys, has revealed that commercial marine shipping from the North Slave coast is viable. The implications of this are enormous for the long-term development of the region's base-metal deposits.

The Izok deposit, discovered in 1974, is the largest known undeveloped zinc-copper deposit in North America. Located 90km west of the Lupin mine, it is owned by MMG Resources Inc.

Exploration has revealed at least 18.5Mt of polymetallic reserves, including the newly discovered Inukshuk deposit with grades of 14.6% zinc, 2.5% copper, 1.6% lead, and 77.7g/t silver. The 1,710ha High Lake base-metal deposit, which is situated 190km south-southeast of Kugluktuk, includes 21 potential polymetallic zones adjacent to the site.

One of the largest undeveloped VMS deposits in the world is the one at Hackett River, located 104km south-southwest of Bathurst Inlet in the Kitikmeot region. The project was recently bought by Xstrata Zinc, and includes four potential open-pit mine zones.

> "The Izok deposit, discovered in 1974, is the largest known undeveloped zinc-copper deposit in North America"

Photo: Agnico Eagle Mines

Photo: Baffinland

Caterpillar operating at Mary River

Uranium

The Kivalliq Region has seen unprecedented growth in mineral exploration activity over the past few years. Although much of this is directed at gold, the discovery of deposits of uranium 80km west of Baker Lake are thought to have significant potential.

The Proterozoic Thelon Basin is considered to have the potential to host uranium deposit similar to those in the Athabasca Basin. AREVA Resources Canada Inc's proposed project components include three mine sites (Kiggavik, End, and Andrew), milling facilities, an access road from site to Baker Lake, and a dock site at Baker Lake.

Kivalliq Energy's Angilak Project includes the Lac 50 trend, Dipole and RIB prospects. The company announced fully funded 2015 exploration programmes at the 340,268-acre property located southwest of Baker Lake. Since acquiring the property, Kivalliq Energy has spent more than C$55 million on geophysics, mapping, sampling programmes and more than 89,500m of drilling.



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