



February 28, 2018

Hon. Carolyn Bennett, M.D., P.C., M.P.  
Minister of Crown-Indigenous Relations and Northern Affairs  
10 Wellington Street, North Tower  
Gatineau, Québec K1A 0H4

Dear Minister Bennett,

**Re: Northern Minerals Industry Submission on the Arctic Policy Framework**

On behalf of the northern minerals industry, the NWT & Nunavut Chamber of Mines is pleased to submit the attached northern mineral industry's response to the Federal Government's call for comments on the Arctic Policy Framework. Our Chamber represents the minerals industry, those companies that directly explore for and mine minerals, and the many associated businesses and individuals – Indigenous and non-Indigenous – that support, rely on, and make up the northern minerals industry.

We are pleased to provide responses to questions put forward by Canada to help guide the creation of a new Arctic Policy Framework and have provided additional information on the growing importance of our industry to Indigenous and non-Indigenous northerners and their governments.

While our industry faces significant challenges in the north, so too do all the people of the North. We suggest Canada take an innovative approach and formally declare the North a 'special economic zone' within which to focus more efforts to lift the North and its communities to increased economic and personal self-reliance, and to make it an even stronger contributor to the overall well-being of Canada. The North has tremendous potential to do just that.

Yours truly,

**NWT & NUNAVUT CHAMBER OF MINES**

  
Gary Vivian  
President

c.c.: Hon. Bob McLeod, Premier of the Northwest Territories  
Hon. Paul Quassa, Premier of Nunavut  
Stephen van Dine, ADM North, Crown-Indigenous Relations and Northern Affairs  
Arctic Policy Framework Secretariat





**SUBMISSION TO THE GOVERNMENT OF CANADA,  
CROWN-INDIGENOUS RELATIONS AND NORTHERN AFFAIRS**

**in regard to  
discussions contributing to  
*THE ARCTIC POLICY FRAMEWORK***

Submitted by the  
NWT & Nunavut Chamber of Mines  
February 2018

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**SUBMISSION TO THE GOVERNMENT OF CANADA  
in regard to discussions contributing to  
THE ARCTIC POLICY FRAMEWORK**

**EXECUTIVE SUMMARY**

On behalf of the northern minerals industry, the NWT & Nunavut Chamber of Mines is pleased to submit this document to support discussions leading to a new Arctic Policy Framework (APF).

A successful APF will support mineral development in northern Canada so as to sustain and grow the significant benefits that industry provides today to northern Indigenous and non-Indigenous residents, to communities and governments, to the territories, and to Canada.

The APF will acknowledge that the minerals industry today is not the industry of our grandfather's, and that it works today to high standards and environmental performance to create the most significant participation rates by northern and Indigenous communities in northern history. It is an important tool in delivering on Canada's promise for Indigenous reconciliation and the growth of a larger and significant middle class in northern Canada.

The minerals industry is the North's economic advantage, with economic opportunities like farming, forestry, fishing, manufacturing, much less available than in southern Canada. As a result, in both the Northwest Territories (NWT) and Nunavut (NU), the minerals industry is the largest private sector contributor to the economy, directly contributing from 20-40% of the Gross Domestic Product, depending on market and economic conditions. Indirectly, the industry contributes even more with benefits flowing to other economic sectors including transportation, construction, and real estate. Most of the rest of the two territories' economies are reliant on government.

The evidence of the northern mineral industry's importance is in the numbers.

Over the past 20 years, the NWT and NU minerals industry has created wealth for Canada, including:

- 65,000 person years of employment;
- Over \$23 billion in business spending; and
- Billions of dollars in various taxes and royalties to public governments and, in recent years, also to Indigenous governments.

Of these benefits to Canada, the NWT<sup>1</sup> and Nunavut<sup>2</sup> have been able to capture a significant share, including:

- 29,000 person years of northern and Indigenous employment;
- Over \$15 billion in northern spending of which well over \$5.6 billion is with Indigenous business;
- Hundreds of millions of dollars in industry investment in community donations, scholarships, and benefit agreement payments; and
- Several billion dollars in taxes and royalties.

Mineral industry efforts to date have created significant new employment and business opportunities for northern and Indigenous residents in the NWT and Nunavut. Unique and effective training programs have helped and are helping. Since 2004, the NWT's Mine Training Society has served over one

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<sup>1</sup> [Measuring success 1996-2016: Diamond mines deliver big benefits to the Northwest Territories](#), NWT & Nunavut Chamber of Mines, November 2017

<sup>2</sup> [Benefits growing with Nunavut's new mining industry](#), NWT & Nunavut Chamber of Mines News Release, February 9, 2018

thousand individual northerners with training and/or career counseling and has facilitated employment for over 5% of the NWT's labour force.<sup>3</sup>

Simultaneously, this new employment has reduced social assistance payments, and has contributed to increased school enrolment.<sup>4</sup> The minerals industry is boosting people from near poverty to healthy incomes and helping grow the middle class. As a new generation raises families in healthier environments, it improves community health for future generations.

But there is significant need for further economic growth to address the fastest growing population in Canada. More minerals industry benefits are needed.

Fortunately, from a mineral potential perspective, there is significant opportunity for mining growth. With nine geological provinces, the NWT and Nunavut hold huge opportunity to host deposits of minerals that include gold and silver, diamonds, base metals, rare earths and green energy minerals to name a few. But mineral potential has barely been tapped as a result of the region's daunting size (one third of Canada), harsh climate and geography, lack of infrastructure, and low population.

To grow the minerals industry and its many benefits, the Arctic Policy Framework should grow investments in our northern people and in our physical and scientific capital.

Investments to support people are required in:

- Basic education so as to increase student attendance, participation and graduation rates, and consequently, post-secondary education success, and increased employability;
- Training programs and tools to grow and match skills to industry and community needs;
- Healthy lifestyle programs to encourage people success; and
- Public awareness programs to role model, celebrate people success, and to spark the imaginations and hopes of youth about future career opportunities in the minerals industry.

Just as importantly, the APF must plan to invest in physical capital infrastructure and geoscience:

- Infrastructure – The North suffers the largest infrastructure deficit in Canada. This contributes significantly to higher costs, with mine construction costs of up to 2.5 times higher than in southern Canada, and mineral exploration up to 6 times more expensive.<sup>5</sup> Lack of transportation and power infrastructure also drives the need for northern industry and communities to rely on carbon based fuels for power and heating, contributing to greenhouse gas emissions. Investments in transportation and power infrastructure would help reduce costs, facilitate development, provide alternatives to carbon based fuels, and level the playing field with southern Canada;
- Geoscience – Geoscientific knowledge is the research and development for the mineral exploration industry. However, geoscience in northern Canada lags southern Canada. "Approximately 60% of the Canadian territories' lands lack sufficient geo-science knowledge."<sup>6</sup> This adds extra burden on northern explorers that they wouldn't face in other parts of the country. Investment in geoscientific research to help fill the knowledge gaps will support development.

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<sup>3</sup> [The Mine Training Society, Celebrating Years of Training Northerners](#)

<sup>4</sup> [NWT Diamonds Report](#), NWT & Nunavut Chamber of Mines, and the Mining Association of Canada, 2008

<sup>5</sup> [Levelling the Playing Field: High costs, lack of infrastructure inhibit exploration and mining development in Canada's North](#); Study by The Mining Association of Canada, NWT & Nunavut Chamber of Mines, et al., May 2015.

<sup>6</sup> [Resource Development in Northern Canada](#), Report of the Standing Committee on Natural Resources, Leon Benoit, M.P., Chair, November 2012, 41st Parliament, 1<sup>st</sup> Session, Page 2.

## WHO IS THE CHAMBER?

The NWT & Nunavut Chamber of Mines is a northern based non-profit organization with offices in Yellowknife and in Iqaluit. The Chamber has been championing for a strong and healthy minerals industry in the Northwest Territories and Nunavut for over 50 years and continues to do so with broad membership support which includes exploration and mining companies, Indigenous and non-Indigenous service and supply companies and organizations.

The Chamber of Mines is submitting this response to the Federal Government's call for comments as the representative of the minerals industry – those companies that directly explore for and mine minerals, and the many associated businesses – Indigenous and non-Indigenous – that support and rely on this activity.

We are pleased to provide the following responses to questions put forward by Canada to help guide the creation of a new Arctic Policy Framework.

## CHAMBER RESPONSES TO THE DISCUSSION GUIDE

Following are the Chamber of Mines' responses to the questions put forward in the Discussion Guide.

### 1. Comprehensive Arctic Infrastructure

#### ***Question: What are the key infrastructure priorities for your region?***

The Northwest Territories and Nunavut have the largest infrastructure deficit in Canada, which contributes significantly to the higher costs of living.

There are a number of well-known physical infrastructure projects that have been tabled in recent years that would address the deficit and improve costs of living and doing business in the NWT and Nunavut. They include:

- **Slave Geological Province Road** into the NWT's portion of the mineral rich Slave Geological Province would help reduce costs for existing diamond mines and would open up the potential for new mines. The region is rich in a large variety of commodities from diamonds to gold and silver, from zinc to rare earths and other 'green' minerals. All-weather roads allow just-in-time delivery which makes viable the use of more environmentally friendly fuels like liquefied natural gas and biomass. This would help northerners replace more GHG-intensive diesel fuel.
- **Grays Bay Road and Port** would open Nunavut's portion of the Slave Geological Province and would eventually link to the NWT's Slave Geological province road, linking Nunavut for the first time by road to southern Canada. A significant return on investment would come from the road's ability to reduce costs and help unlock mineral potential similar to the NWT's.
- **The Tlicho Road**, in the NWT will link the Tlicho community of Whati with the Mackenzie Highway, reducing costs for that community, and also enabling the unlocking of significant mineral potential. One mining project is already 'shovel ready', waiting for this road to be developed to allow construction and mining operations to begin. The road would also allow just-in-time delivery of supplies, making viable the use of alternative fuels to diesel. The Tlicho road would reduce seasonal ice road construction costs to two additional communities and would also reduce costs to facilitate other mineral development.
- **A Manitoba-Nunavut road and power** connection into the Kivalliq region of Nunavut would help reduce costs and improve economics of exploration and mining in that mineral rich region to help sustain and grow much needed benefits in that quickly growing region. It would reduce

the cost of living, create more opportunities for remote Kivalliq communities, and generate much-needed economic activity. In addition to providing easier, cheaper access, the road link can also provide access to connect to Manitoba's electrical grid and import cheaper, southern hydroelectric power. This could help eliminate the region's reliance on aging, expensive, and environmentally-damaging diesel generators. The Manitoba link could also add further benefits by providing a route to build a fibre optic network.

- Completing the **Mackenzie Valley Highway** could also help incent mineral development in the western NWT. Infrastructure support for a road into Nahanni National Park could help both mining development and tourism in that southwest NWT region.
- **Hydroelectric power** opportunities and expansion can also help offset the use of diesel fuel in the North, and along with linking of stranded grids in the NWT and linking them to southern Canadian power grids, would allow 'wheeling' of climate friendly power, exporting and importing power south and north.

### ***Why investment in physical infrastructure is needed***

Historically, the northern minerals industry has been a strong catalyst for infrastructure development and has provided the return on investment to pay for it over the long terms required. That infrastructure still serves the needs of the territories and its residents today. For example:

- All three of the hydro-electric power facilities in the NWT were built for mining, and while the customer mines have now closed, the power plants continue to serve the North.
- The only operating railway in the NWT and Nunavut was built with Canada's support to serve a mine, now closed. The rail line continues to operate.
- Highways to Yellowknife and other communities were built as roads to resources and now serve communities.
- The world's first ice-breaking cargo ship, the *MV Arctic*, was designed and built with Canada's financial support to service Canada's Arctic mines. The vessel, and its even larger and more powerful progeny, continue to support northern mining.

However, there has been a 40 year gap in infrastructure investment by Canada in the North, since the Federal Government partnered in the Nanisivik mine and the *MV Arctic* in the late 1970s. Over the past 40 years, northern mines have been left to their own devices to supply their own support infrastructure. This requires mines become totally self-sufficient, supplying their own roads, power, airports, ports, and accommodations. This is a change from the past, when governments helped with mining development through the supply of roads, railways, power and shipping. This 40 year infrastructure investment gap continues to be challenging, and needs to be addressed.

The ramifications of this largest infrastructure deficit in Canada, are demonstrated in a recent industry report:<sup>7</sup>

- For base metal mines, capital costs are 2.5 times higher compared to an equivalent mine in a centrally-located jurisdiction.
- For gold metal mines, capital costs were doubly more expensive.
- For diamond mines in the territories, capital costs were 15-20% higher.
- 70% of the cost increase is directly related to the lack infrastructure.

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<sup>7</sup> [Leveling the Playing Field: Supporting Mineral Exploration and Mining in Northern Canada, April 2015](#), The Mining Association of Canada, the Prospectors & Developers Association of Canada, the Association of Consulting Engineering Companies - Canada, the NWT & Nunavut Chamber of Mines, and the Yukon Chamber of Mines.

- Exploration costs vary directly with distance from transportation infrastructure, with the most remote project costing six times that of the least remote project.

That report made several recommendations that should be considered under the Arctic Policy Framework:

- Support exploration with a new and enhanced federal Mineral Exploration Tax Credit (METC) for projects in remote and northern parts of Canada at 25% versus the current 15%, as well as financial incentives to make the costs of drilling for early-stage exploration projects more economically feasible.
- Support mining companies to build and operate in remote and northern areas with a base 10% investment tax credit, in addition to either: 1) a 15% investment tax credit for eligible infrastructure, or 2) a pardonable 25% conditionally repayable contribution for infrastructure investments. Flexibility is needed to enhance the project economics for companies in both taxable and tax limited positions.
- Create a Canadian Infrastructure Bank with a strong mandate to support northern infrastructure investment (similar to the Alaska Investment Development and Export Authority - AIDEA<sup>8</sup>).

The mining industry must compete on a global stage with other countries and even with other Canadian jurisdictions that have more and better infrastructure. Mining must also accept global market prices for its products and cannot pass on higher costs to its customers. As a result, the higher costs in the North due to lack of infrastructure affect the competitiveness of the northern minerals industry.

An additional cost that mines now face relate to actions to address climate change, notably the decision to add a carbon price to fuel that mines require. While the tax's logic is to change behaviour away from carbon based fuels, mines in the remote north do not have that option to change their behaviour. Mines with no all-season road access and with no grid power are forced to use diesel fuel to generate electricity. With no other options, the additional carbon pricing on fuel simply becomes another tax on northern mining that reduces its economic viability.

### ***Geoscience infrastructure gaps too***

Another type of infrastructure that is underdeveloped is geoscientific knowledge.

Geoscience is the R&D of the minerals industry. The mineral exploration industry relies on base geological knowledge from which they can develop new exploration theories and ventures to find hidden mineral deposits.

Gathering geoscience knowledge is a never-ending process, and can be repeated to much greater detail over time and as new techniques and geoscience models are developed.

Much of the North has insufficient geoscience knowledge, as identified by the national and territorial geological surveys, those organizations who carry the responsibility to gather geoscience knowledge. (see the map in the Background Charts and Figures in this report).

The Arctic Policy Framework could help the northern economy by ensuring strong investments in geoscience knowledge.

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<sup>8</sup> [Alaska Industrial Development and Export Authority \(AIDEA\)](#)

## 2. Strong Arctic people and communities

### **Question: What key actions could increase well-being within Arctic communities?**

Well-being is directly related to the *social determinants of health*.

In Canada, important social determinants of health include Income, education, and employment.

Across northern Canada, and particularly in smaller Indigenous communities, income, education and employment are some of the lowest in Canada. This contributes to high social problems, which then affect income, education and employment, creating a vicious cycle.

Mining has begun to break that cycle.

Over the last 20 years, the growth of new mines in the Northwest Territories and in Nunavut has facilitated significant training, employment, and business opportunities. Examples include:

- The NWT's Mine Training Society has served over one thousand individual northerners with training and/or career counseling and has facilitated employment for over 5% of the NWT's labour force.<sup>9</sup>
- Newly trained workers have joined other northern workers in working at the mines, resulting in 29,000 person years of northern and Indigenous employment in the NWT<sup>10</sup> and Nunavut.<sup>11</sup>
- Creation of new mining jobs and employing residents who had few to no other job opportunities has reduced governments' social assistance payments, and more importantly, have helped people regain pride through meaningful employment.
- Business spending by mines in the North has exceeded \$15 billion of which over \$5.6 billion is with Indigenous business. These businesses, in turn, hire more northern and Indigenous workers, providing more opportunity for resource benefits to 'stick' in the North.
- Hundreds of millions of dollars has been invested by industry through community donations, scholarships, and benefit agreement payments, adding additional benefits.
- With mining development has come increased school enrolment.<sup>12</sup>
- The minerals industry has facilitated movement of northern and Indigenous residents from near poverty to healthy incomes.
- Mining is growing the middle class, and in Indigenous communities too.
- Traditional and cultural on-the-land activities have been rejuvenated as a result of mineral industry salaries and business spending in communities empowering residents to afford the boats, snowmobiles, and other expensive requirements to go on the land.
- As family wealth grows, family health can grow too, and is helping a new generation to raise families in healthier environments, contributing to community health for future generations.
- Northern mines also help provide life skills training programs, and provide employee family assistance programs for their workers, which can help them deal with personal and other problems.
- Health and safety training and programs delivered at mine sites which empower workers to focus on safety at work and at home

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<sup>9</sup> [The Mine Training Society, Celebrating Years of Training Northerners](#)

<sup>10</sup> [Measuring success 1996-2016: Diamond mines deliver big benefits to the Northwest Territories](#), NWT & Nunavut Chamber of Mines, November 2017

<sup>11</sup> [Benefits growing with Nunavut's new mining industry](#), NWT & Nunavut Chamber of Mines News Release, February 9, 2018

<sup>12</sup> [NWT Diamonds Report](#), NWT & Nunavut Chamber of Mines, and the Mining Association of Canada, 2008

There is room for improvement and more must be done by governments too. Particular areas of focus for governments to improve community health and personal success include:

- Increasing education enrolment and graduation success
- Ensuring quality education so that high school graduates in fact have high school qualifications
- Incorporating work skill training into schools, including offering vocational programs in addition to academic training
- Supporting the education system to ensure high school graduates can pass the pre-trades entrance exams
- Helping provide youth and adults with life skills training to improve money management skills

Note: Our individual mining members would be happy to provide more detailed thoughts and experiences and recommendations on further improving outcomes.

Finally, increasing northerners' public awareness of the jobs and business opportunities, and of the ways that modern mining can provide these benefits AND MOST IMPORTANTLY still protect the environment, will help attract even more northerners into industry related jobs. This is important if the North is to maximize its economic 'stick' by reducing employment and business leakage to southern Canada.

### **3. Strong, sustainable and diversified Arctic economies**

***Question: What can be done to advance sustainable economic development, diversify the Arctic economy, build capacity/expertise and increase the participation of Arctic residents in local economies, grow small-to-medium Arctic businesses and enhance partnerships?***

Outside forces destroyed the fur and seal economies of the North, taking away traditional self-reliance, and forcing an increased reliance on government support and social assistance. The actions of these outsiders have contributed to increased social problems across the North.

The mining industry has been the first activity in almost half a century to begin to increase economic opportunities for Indigenous and other northerners. It is now critically important that governments take steps to at the very least sustain these benefits, but better yet to grow them.

Mining has been quite sustainable in northern Canada over its 80 year history. We have seen mines developed and operating in virtually every decade in the North. That being said, however, we have also witnessed periods where mining in some regions of the North has slowed to a halt, as was the case in Nunavut in the late 2000s when mineral production ground to a halt.

The North has untapped mineral potential, and over a wide range of minerals. With the proper supports, like investment in infrastructure, geoscience, an attractive investment climate, governments can help grow and sustain mining for many years to come.

Governments have taken policy and legislative steps in the past that have made significant positive differences to the lives of Indigenous people, and to the North.

The Inuit land claim is world renown for not only creating Inuit as the world's largest private land holder, but in recognizing Inuit desires to use non-renewable resources as a major platform for economic development. This was accomplished by allowing Inuit to purposefully select high mineral potential lands for the ability of the underlying resources to generate many, many socio-economic benefits to Nunavummiut beneficiaries, to Nunavut and to Canada.

Diversification is a worthy effort, but not diversification away from resource development.

It is very important that the Arctic Policy Framework put into place the conditions to support mineral resource development and to sustain and grow mineral resource benefits. Simultaneously, the APF can support other initiatives that support other sectors of the economy. After all, not everyone wants to, or can work in the minerals industry.

AND, with the strong protection mechanisms arising from Indigenous land claims built into the northern regulatory frameworks in all three territories, there does not need to be fear that other sectors will be compromised because of uncontrolled resource development.

In fact, synergies exist and can be found between resource development and other sectors.

A port development with mining as an ‘anchor tenant’ can be a port development for the military and for community resupply or for a fishing fleet. Similarly, hydro-power development too expensive for a small community alone, can be catalyzed by the development of a mine that will help provide the required return on investment to see it constructed.

And of course, an Arctic development can also be a sovereignty symbol.

The Arctic Policy Framework should be looking for symbiotic, mutually beneficial developments, not ‘either/or’ or mutually exclusive ones.

***Other benefits to build capacity/expertise and increase participation in local economies and grow small-to-medium Arctic businesses and enhance partnerships***

The minerals industry has already done much to help build people capacity and business capacity and it has already increased the participation of northern residents in the northern economies.

In fact, the mineral industry is already accomplishing much of what is being asked in this Arctic Policy Framework discussion.

There is, of course more that can be done.

With supportive Arctic Policy, governments can be supported in investing in education, community health, public awareness, infrastructure, geoscience, business development, etc. the Arctic Policy can help sustain and grow the minerals industry’s benefits throughout the North.

***Enhancing partnerships – growing an Indigenous mineral industry***

The minerals ‘industry’ is not one company, or one business, rather it is simply a collection of companies and individuals with a common purpose of exploring for, and developing benefits through the development of mineral resources.

That minerals industry is becoming increasingly Indigenous in northern Canada, witness:

- increasing participation from Indigenous individuals working at mines.
- increasing numbers of Indigenous mining service businesses. Already there is one 100% Indigenous-owned mining and exploration company. Wholly-owned Indigenous companies and joint ventures supply and transport fuel, cement, and many other supplies to the mines, and manage food services/accommodations for mines
- Increasing interest in building and owning infrastructure for mining. The Grays Bay Road and Port is a unique partnership between the public government of Nunavut and the Inuit Indigenous government represented by the Kitikmeot Inuit Association to develop a road to enable mining development.

This increasing Indigenous ownership in the minerals industry is also seeing positive side effects in new ways. The Tlicho Government negotiated a self-government land claim, and as part of that negotiated to

collect 95% of the income taxes generated in their region. Today, as residents become increasingly involved in the high paying minerals industry, income tax revenues are strengthened. It's a mutually beneficial partnership of a different but rewarding kind.

There will be more such participation and innovative partnerships in resource development, and the Arctic Policy would do well to support this. Much has been said in this document on actions that will contribute to this success.

#### 4: Arctic Science and Indigenous knowledge

***Question: How can Canada respond more effectively to local knowledge needs, increase the capacity of Arctic residents to participate in Arctic research initiatives, collaborate with territorial and provincial institutions and better integrate Indigenous knowledge into decision-making?***

The Federal Government's work to create environmental legislation based in Indigenous land claims was progressive and forward thinking.

In northern Canada today, there is a unique Canadian regulatory system that:

- is transparent and rigorous,
- requires the use of both scientific knowledge and Traditional Indigenous Knowledge
- is co-managed by Boards (Institutions of Public Governance) made up of Indigenous and public government appointees, and
- demands not only environmental performance, but also that development contribute to Indigenous and northern socio-economic benefits.

The North's resource management system is a model for Canada.

As modern Indigenous governments mature, they are taking on additional responsibilities for their social and economic well-being.

They require assistance with capacity building to manage their own investment climates, to oversee resource development in their land claim regions, and on their own privately owned lands.

Assistance is also required in supporting Indigenous government participation in environmental processes, in providing their Traditional Knowledge to enhance decision making. This will also help them meet the timelines required of their investors to meet market demands, or in other words, contribute to more efficient regulatory processes.

#### 5: Protecting the environment and conserving Arctic biodiversity

***Question: How can Indigenous and local experience/knowledge be incorporated into action on climate change and biodiversity?***

Ensuring Traditional Knowledge is incorporated and integrated into environmental research and monitoring will help inform decision making. The Arctic Policy Framework should reflect the importance of Traditional Knowledge. Industry supports, values, and works with local communities to utilize Traditional Knowledge and incorporate it into their operations.

**6: The Arctic in a global context**

***Question: What domestic interests and priorities should the Government of Canada pursue internationally?***

Resource and mining companies have demonstrated the ability to operate in what is arguably one of the most challenging environments in the world; sub-arctic and arctic regions. The skills, technologies, and innovations that have been developed in the North can serve as examples of best practices.

***Question: What do you see as the main challenges and opportunities for Canada's Arctic foreign and defence policy in the next 10-20 years?***

With climate change reducing the Arctic ice pack, and new investments in ship technology, access to Northern Canada is becoming easier. Some examples include:

- In 2014, the ice breaking cargo ship MV Nunavik took a shipload of mineral concentrates from Nunavik to China via the Northwest Passage. It was unescorted by ice breakers.
- In 2016, the 280 metre long passenger cruise ship Crystal Serenity became the largest vessel to ever attempt to go through the passage, according to the cruise ship company.
- In 2017, the Chinese ice breaker, Xue Long, or Snow Dragon, transited the NW Passage unescorted.
- Our northern minerals industry also regularly ships into and around the Northwest Passage, as do community resupply ships.

The increased marine traffic could create challenges in marine safety, Arctic sovereignty, and environmental pressure.

The Arctic Policy could help provide resources to establish a defense, safety, and policing presence; to ensure modern navigation aids and knowledge is in place; and to support safe and responsible use of the Arctic waters.

The Chamber of Mines envisions responsible mineral exploration and resource development as a way to help create a strong, self-sufficient north with healthy, vibrant communities.

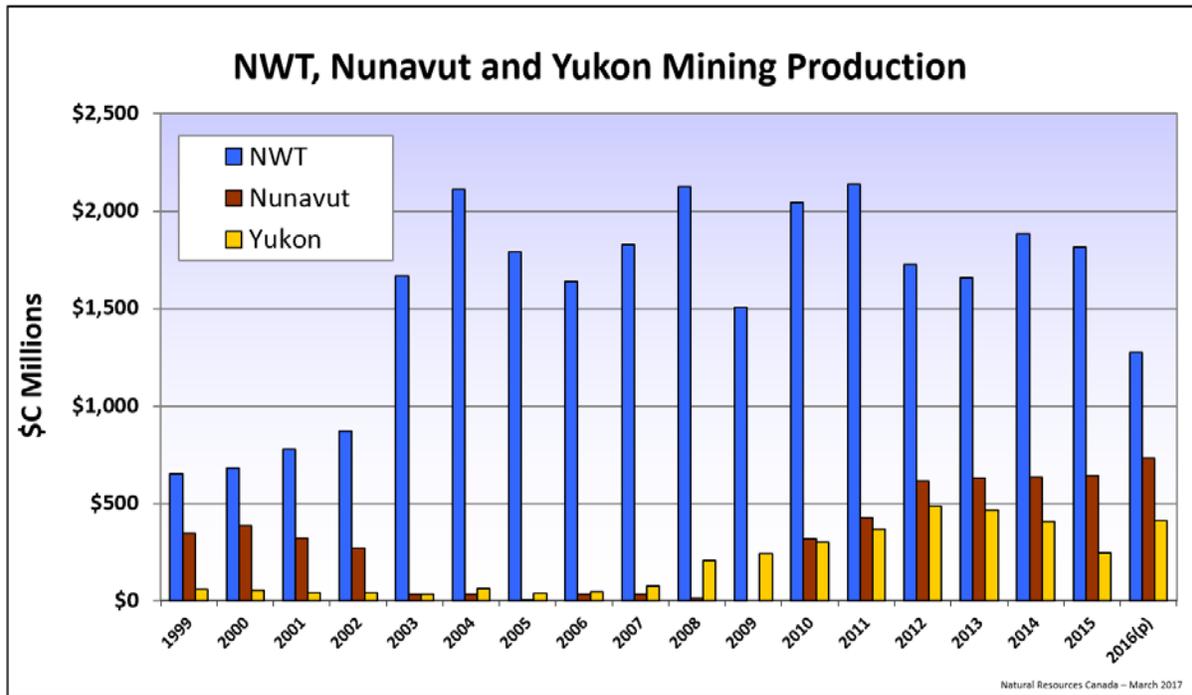
**Designate the North a Special Economic Zone in Canada**

To help fully realize its potential, the North could be considered, and better yet officially declared by Canada as a 'special economic zone', and the Arctic Policy be used to focus actions on reducing its high cost of living, empowering its young and growing population, better mapping its large land mass, and righting the significant infrastructure deficit, and providing preferential tax treatment to help incent responsible growth.

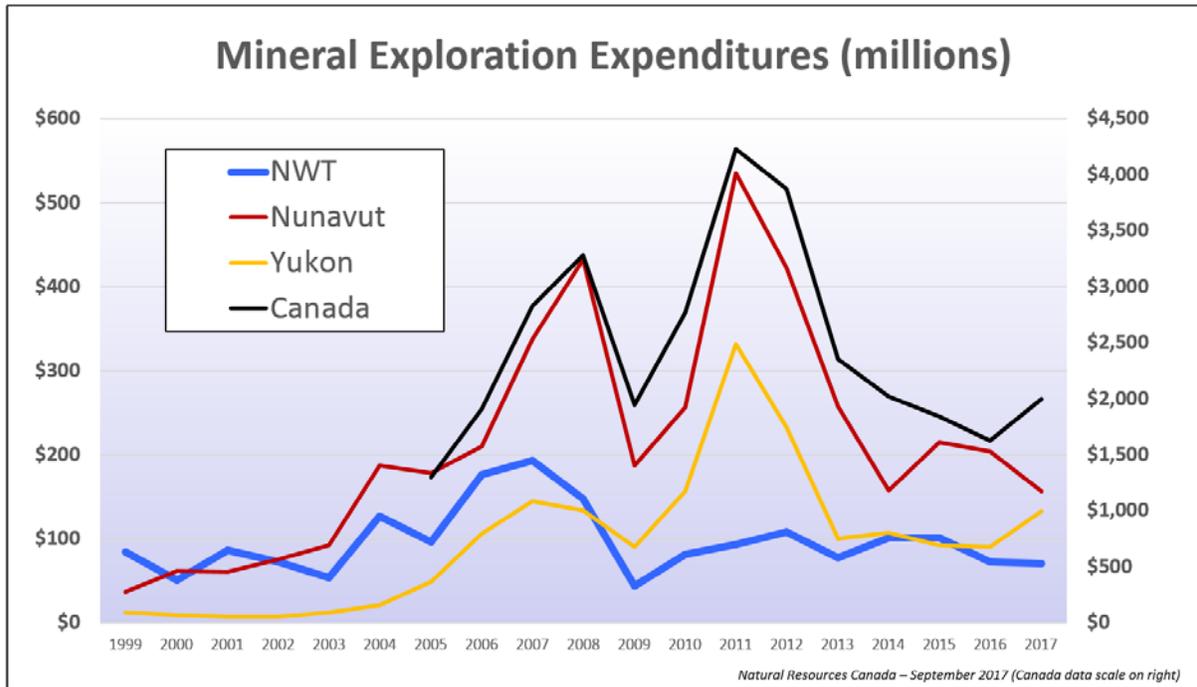
Developing a special economic zone has the potential to take a more focused approach on elevating the North and its communities to increased economic and personal self-reliance, to make it an even stronger contributor to the overall well-being of Canada.

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BACKGROUND CHARTS & FIGURES

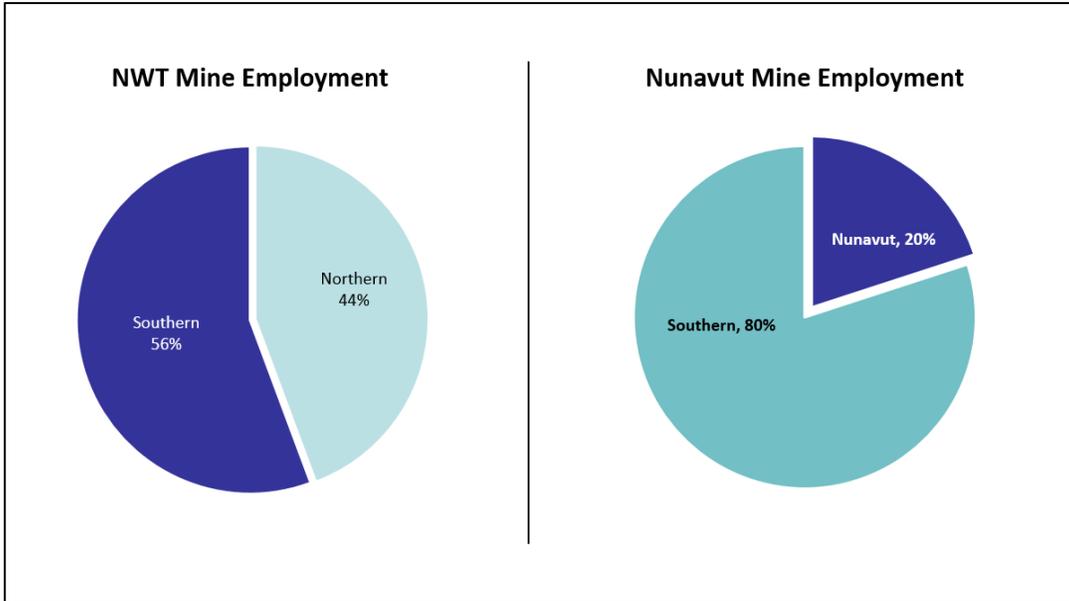


Mineral production is valuable in the north as it creates significant socio-economic and economic benefits. Steady NWT production creates socio-economic stability, as is the growing mineral production in Nunavut. If the Arctic Policy Framework takes actions to support an attractive investment climate, the untapped mineral potential in northern Canada can sustain and grow benefits for Indigenous and non-Indigenous Canadians for generations to come.

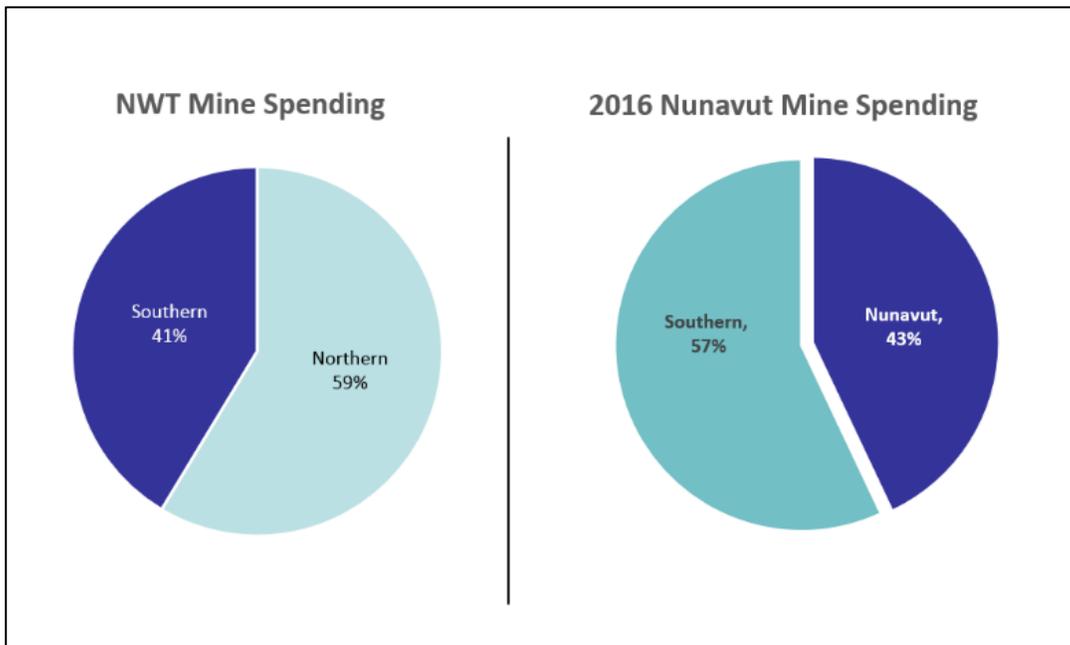


Mineral exploration is a risky business, and only 1 in 1,000 exploration plays becomes a mine. Healthy exploration investment must be supported and strengthened in northern Canada. The Arctic Policy Framework can help with low northern investment.

## MINE EMPLOYMENT AND SPENDING



*With the creation of a supportive Arctic Policy, there are significant opportunities to increase northern and Indigenous mining employment, by increasing education success, public awareness, and by growing the industry too. By helping lower the costs of living, the Arctic Policy can also help attract southern workers to the north, adding more to northern benefits.*



*A supportive Arctic Policy can also help grow northern business benefits by reducing the cost of doing business, and by supporting northern business training and business development.*

**GROWING INDIGENOUS MINING BUSINESSES = GROWING INDIGENOUS INDUSTRY**

## NWT Mine Spending = Huge Business Growth

### \$13 billion Northern business, with \$5.6 billion Aboriginal

- **A whole new generation of Aboriginal mining service & supply businesses**

|  |   |   |
|--|---|---|
| <ul style="list-style-type: none"> <li>• Tii Cho Logistics Inc.</li> <li>• Tii Cho Landtran Transport Ltd.</li> <li>• Tii Cho Air Inc.</li> <li>• Tii Cho Road Constructors Ltd.</li> <li>• Tii Cho Blasting Services Inc.</li> <li>• Denesoline Western Explosives</li> <li>• Aboriginal Engineering Ltd.</li> <li>• Tliicho Engineering &amp; Environmental Services Ltd.</li> <li>• Ventures West Transport Ltd.</li> <li>• Metcrete Services Ltd.</li> <li>• Metshaw Freighters Ltd.</li> <li>• Kete Whii Ltd.</li> <li>• Kete Whii Procon J.V.</li> <li>• Sodexho Alliance</li> <li>• Exploration Medical Services</li> <li>• Kitikmeot Cementation Mining &amp; Development</li> <li>• Lac De Gras Constructors</li> <li>• Nishi Khon SNC Lavalin Inc.</li> <li>• North Slave Logistics</li> <li>• Nuna Logistics</li> <li>• Malca-Amit (NWT) Ltd.</li> <li>• Nishi Khon / SNC Lavalin Inc.</li> </ul> | <ul style="list-style-type: none"> <li>• Ekati Services</li> <li>• Det'on Cho Earth Energy</li> <li>• Det'on Cho DNX</li> <li>• Bouwa Whee Catering</li> <li>• Det'on Cho Foraco</li> <li>• Det'on Cho Hazco</li> <li>• Det'on Cho Nahanni Construction</li> <li>• Det'on Cho New North</li> <li>• Det'on Cho NUNA</li> <li>• Det'on Cho Pure Earth Elements Environmental Solutions</li> <li>• Det'on Cho Scarlet Security</li> <li>• Det'on Cho Stantec</li> <li>• Det'on Cho Training &amp; Conference Centre</li> <li>• Det'on Cho Logistics</li> <li>• Det'on Cho Medic North</li> <li>• Det'on Cho Mining Supplies</li> <li>• DICAN / ADG</li> <li>• Kete Whii / Ledcor</li> <li>• Kete Whii / Procon</li> <li>• Akaitcho Helicopters</li> <li>• Dene-Emco Ltd.</li> <li>• Denesoline/Air Tindi Joint Venture</li> <li>• Denesoline/Arcan Construction</li> <li>• Denesoline/De Beers Labour Contract</li> <li>• North Slave Freighters Ltd.</li> </ul> | <ul style="list-style-type: none"> <li>• Northcan Freighters Ltd.</li> <li>• Denesoline/Discovery Mining Services – Logistics Expediting</li> <li>• Denesoline/Deton Cho/Procon</li> <li>• Denesoline/Deton Cho/Ledcor</li> <li>• Denesoline/Dyno Nobel</li> <li>• Denesoline/ESS Compass</li> <li>• Denesoline/McCaw Drilling &amp; Blasting</li> <li>• Denesoline/Nuna Logistics</li> <li>• Denesoline/Tliicho Logistics</li> <li>• Lutsel K'e Air Services</li> <li>• A.T.B. Construction</li> <li>• Trinity Helicopters</li> <li>• Nuna Logistics (on there already)</li> <li>• Kitnuna</li> <li>• Kitikmeot Caterers</li> <li>• Kitikmeot Cementation Mining &amp; Development</li> <li>• Geoteck Ekutak</li> <li>• Medic North Nunavut</li> <li>• Nunavut Sealink &amp; Supply</li> <li>• Nanami Stantec Ltd</li> <li>• Toromont Arctic Ltd</li> <li>• Kitikmeot Blasting Services</li> <li>• Kitikmeot Tire</li> <li>• Tundra Site Services North</li> <li>• KBEX</li> </ul> |
|--|---|---|

Canada has witnessed significant northern Indigenous business growth in the NWT through 20 years of diamond mining. Nunavut is on a similar growth path. An Arctic Policy that supports a strong mining industry will support this business growth.

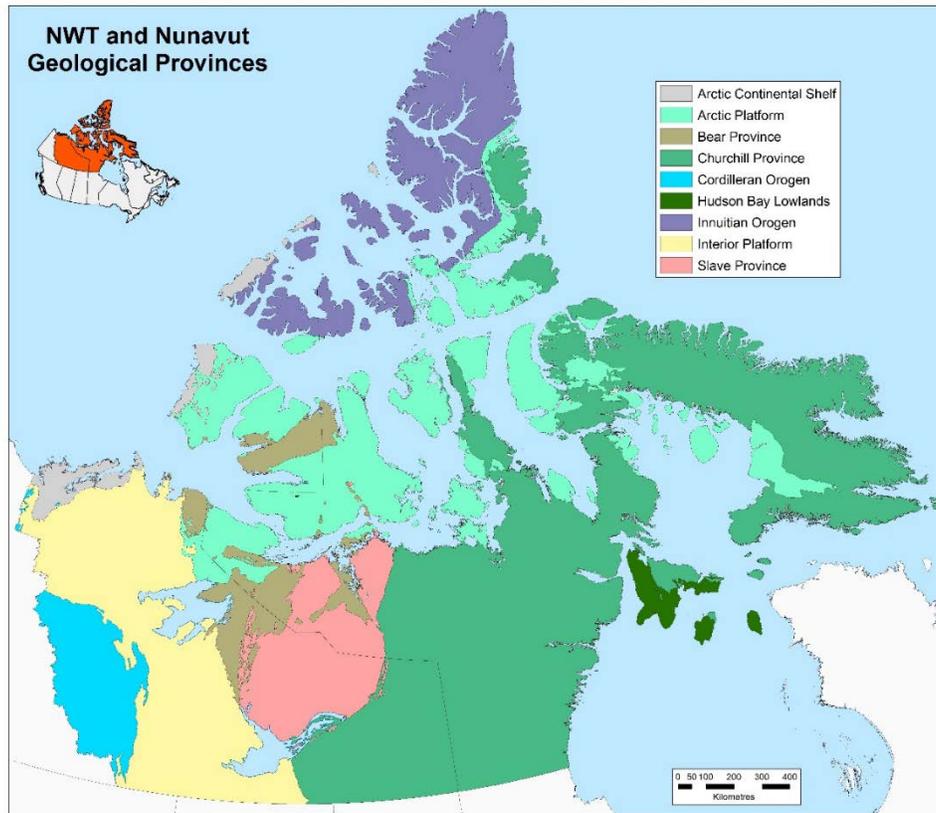
## Mining is growing NU Business Capacity, too

- **\$252 million Nunavut business spend in 2016**
- \$2.2 billion spending in Nunavut since 2007

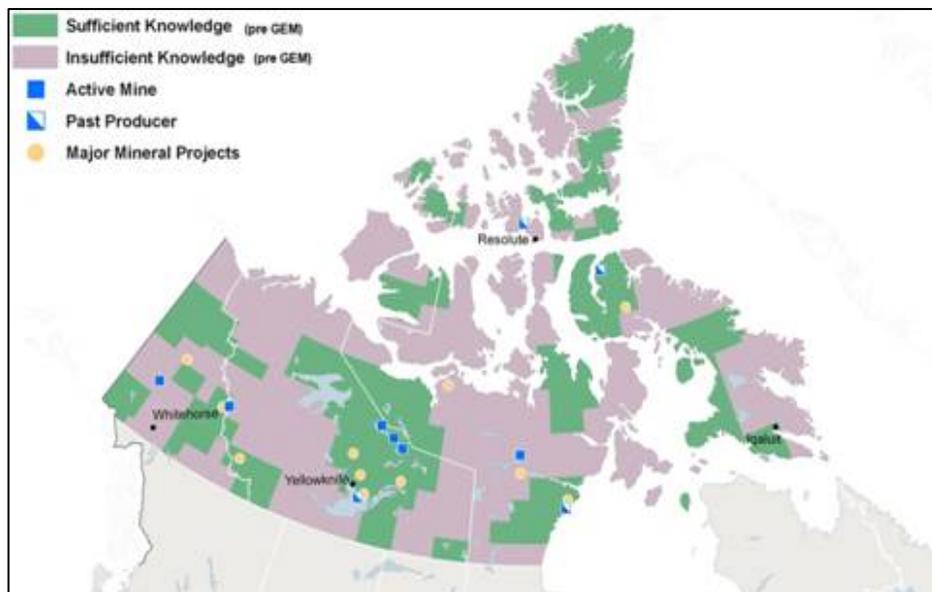
| <ul style="list-style-type: none"> <li>• Peter's Expediting</li> <li>• M &amp; T Enterprises</li> <li>• Kusugak Consulting</li> <li>• Qikiqtani Industry Ltd.</li> <li>• Nuna Group of Companies</li> <li>• AGLU Consulting &amp; Training</li> <li>• Kitikmeot Caterers Ltd.</li> <li>• Medic North Nunavut</li> <li>• Baker Lake Contracting &amp; Supply</li> <li>• Forest North Aviation &amp; Logistics</li> <li>• Eskimo Point Lumber &amp; Supply</li> <li>• Kivalliq Expediting &amp; Storage</li> <li>• Kitikmeot Blasting Services</li> <li>• Kitikmeot Cementation Mining &amp; Development</li> </ul> | <ul style="list-style-type: none"> <li>• Kasuk Exploration</li> <li>• Jago Services</li> <li>• Qillaq Innovations</li> <li>• Toromont Arctic</li> <li>• Kitnuna</li> <li>• Oomilik Enterprises</li> <li>• Akhaliak Consulting</li> <li>• Qillaq Innovations</li> <li>• Kiluk Ltd.</li> </ul> | <div style="text-align: center;"> <p>2016 spending</p> <table border="1" style="margin: 0 auto;"> <caption>2016 Spending Data</caption> <thead> <tr> <th>Region</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Southern</td> <td>57%</td> </tr> <tr> <td>Nunavut</td> <td>43%</td> </tr> </tbody> </table> </div> | Region | Percentage | Southern | 57% | Nunavut | 43% |
|---|--|---|--------|------------|----------|-----|---------|-----|
| Region  | Percentage   |   |        |            |          |     |         |     |
| Southern  | 57%  |   |        |            |          |     |         |     |
| Nunavut   | 43%  |   |        |            |          |     |         |     |


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## GEOLOGICAL POTENTIAL AND GEOSCIENCE INVESTMENT



*The NWT and Nunavut contain 9 geological provinces, and this diversity provides significant untapped mineral potential. The region is also very underexplored due to its size, geography, remoteness and climate.*



*There are many areas of the North that have insufficient Geoscience Knowledge. More research investment is required.*