



Thank you for very much for the invitation to speak to you today.

I thought I'd continue on the theme I used the last time I was before you, and that is in the form of a Report to Partners, for you are all partners in, and beneficiaries of, the minerals industry.

Key Messages

- Why mining is still important
- Update on our current benefits
- Opportunities before us
- Concerns & threats
- Actions to sustain mining and its benefits



Today, I want to update you on what's been happening around our industry, particularly the increasing benefits.

I will speak also to opportunities before us, but also to concerns and even threats before us.

And then I'll close with some thoughts on what actions are needed to sustain and grow our industry, and what you can do to help.

Operating mines today

3 NWT Operating Mines



3 Nunavut Operating Mines

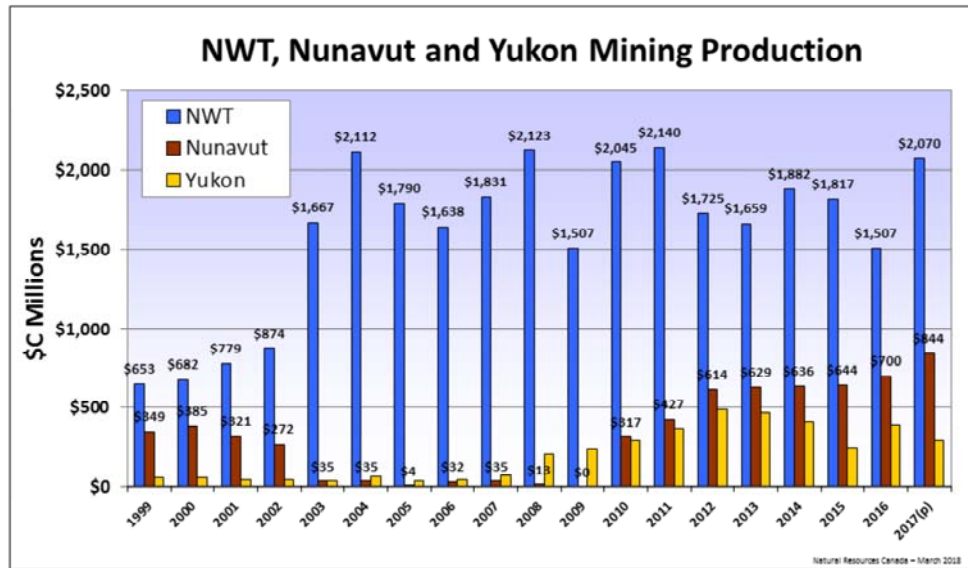
So, where is mining at today?

Today, we have three operating mines in the NWT, and all three produce diamonds from the same area, called the Slave Geological province.

The newest mine is Gahcho Kué

We have three mines in Nunavut, two produce gold and one iron.

Our mines create significant value



- NWT is maintaining strength through diamonds. Increases in production at all 3 diamond mines saved our bacon after Snap Lake closure
- In Nunavut, rejuvenating industry with gold and iron from zero production in 2009

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Preliminary estimates for 2017 mineral production posted by Natural Resources Canada show that the total value of NWT mining production is \$2.070 billion, up \$563 million (37%) from \$1.507 billion in 2016. Of this:

- Diamond production accounts for nearly the entire value at \$2.060 billion, up \$574 million (39%) from \$1.486 billion; and
- With no other minerals produced in the NWT, sand, gravel, and stone production value accounts for the remaining \$10.5 million

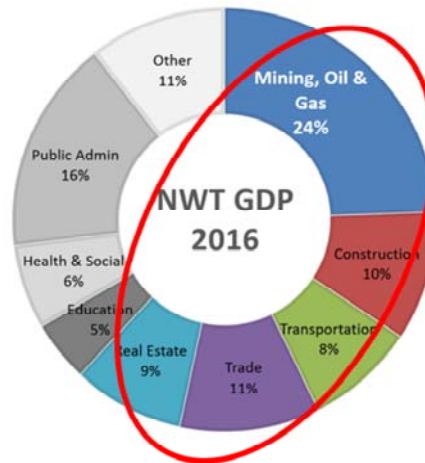
In Nunavut, the total value of mining production for 2017 is estimated at \$844 million, up \$144 million (21%) from \$700 million in 2016. Of this:

- Gold production value is \$594 million, up \$88 million (17%) from \$506 million in 2016;
- Silver production value is \$0.6 million, down \$4.4 million (88%) from 5.0 million last year; and
- Iron ore is estimated at \$250 million, up \$61 million (32%) from \$189 million last year.

Nunavut provides an interesting example of a jurisdiction growing from zero mineral production in 2009, when they had no mines, to three mines and growing today.

Mining is largest private sector contributor

- Mining is the largest private sector contributor to the NWT economy
- And, contributes more through other sectors of the economy, eg, construction, transportation, trade, real estate



- *"Over the past 3 years, diamond mines contributed 41% of the GNWT's corporate income, fuel, property and payroll tax revenue" ... GNWT Spokesperson*

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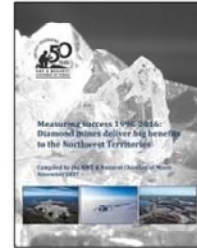
Mining continues to be the NWT's largest private sector contributor to the economy.

This is due to its direct contributions, and its indirect ones through construction, transportation, etc.

In a good year, our minerals industry could be as much as 50% of a territory's economy, and you can see what GNWT has reported (this in a lower diamond market. Imagine if diamond prices were stronger!).

NWT diamond benefits continue to grow

- Jobs – over 26,000 person-years
 - 50% Indigenous
 - 1,663 northern workforce
- \$13 billion plus in northern business (70%)
 - \$5.6 billion with Indigenous business
- Over \$100 million to communities in IBA payments, scholarships, donations
- Significant taxes & royalties to public and Indigenous governments



[Data from 1996-2016 Socio-Economic Agreements reporting](#)



Total and northern benefits continue to grow and are significant.

We have updated our statistics, collected from socio-economic reports each mine submits to the government. You can download the Measuring Success report from our website.

This is a business that must be sustained and even grown.

Looking forward: NWT's near-term opportunities



Looking forward, we have a number of near term mining opportunities before us in the NWT.

I will speak to these 5 in more detail in the following slides.

Diavik A21 deposit, NWT

- Now mining the A21 diamond deposit
 - First ore delivered at the end of March 2018
 - Sustainable production by Q3
 - US\$350 million investment over past 4 years; ahead of schedule and on budget
 - Important source of incremental supply; ensures the continuation of existing product levels until closure in 2025



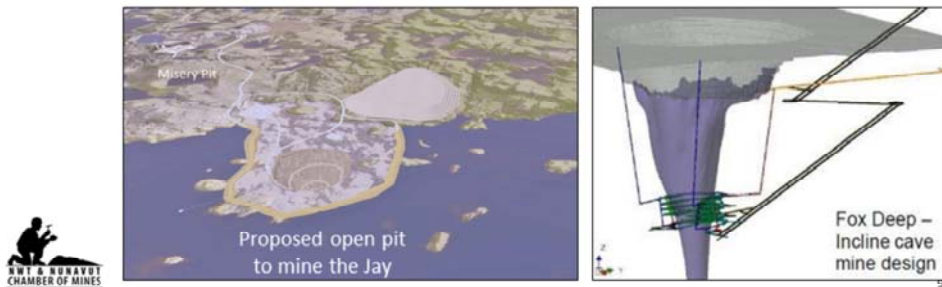
Our top diamond producer, Diavik is now mining its fourth ore body called A21. Sustainable production is expected later this year.

While it won't extend the mine's life, it will make the mine's production more robust to closure.

And it has brought investment spending and jobs for construction of the A21 dike and pit.

Ekati Mine – Jay and Fox Deep ore bodies

- EKATI is important as it is NWT's largest mine
 - 1,700 workers and \$476 million annual spending
- Jay deposit could add 11 years
 - \$690 million to construct = jobs, business opportunities
- Fox Deep offers further mine life opportunity
 - \$628 million initial capital cost for underground operation



Our largest mine, EKATI is planning to develop another ore deposit called Jay which will extend their mine life by 11 years. In addition, they are examining another underground project called Fox Deep. Combined, the two developments could help the mine continue mining until 2042.

That would be fantastic given Ekati is a large mine with about 1,800 workers.

Constructing these projects is expensive, and will also contribute to our economy.

Proposed Prairie Creek Mine (zinc, silver, lead)

- Pre-production cost – \$279 million
- Annual operating costs ~ \$90 million
- 15 year mine life with opportunity to extend
- Workforce ~ 220
- 2.5 years construction; production to begin mid-2020
- 184 km all-season road to Liard Highway
 - Enables use of Liquefied Natural Gas
 - MOU with Power Corp re diesel/LNG power supply



Canadian Zinc's Prairie Creek mine could see the mine begin production in mid-2020.

This is a smaller investment than some of the mines, as much of the mine was already constructed back in the 1980s. (although it never operated)

The company projects a healthy mine life with opportunity to mine even longer.

The mine requires an all-season road and that allows greener energy like LNG to be used, and Canadian Zinc is working with the Power Corp to investigate this. \

The all-weather road proposal is still undergoing the approvals process.

Proposed NICO Mine (cobalt, gold, bismuth, copper)

- Cobalt market is strong – green energy
- 21 year mine life
- Capital cost ~\$600 million
- Workforce: 220 in NWT & 85 in SK
- 150 km all-season road to Mackenzie Highway
 - Tlicho road portion is advancing; mine will build spur road



NICO is an interesting poly-metallic mine in the Tlicho region.

The currently very attractive product is cobalt, which is needed for lithium batteries, in high demand for electric vehicles.

They are looking at a 21-year mine life.

Not a big mine like Ekati or Diavik, but a valuable addition to our mining portfolio.

The mine needs to ship bulk product and therefore needs an all-season road.

With announcement by government that the Tlicho Road is advancing, the NICO project can now move forward with a spur road to that future highway.

This means they will also have LNG fuel potential.

Mine and concentrator is in the NWT, with a refinery planned for Saskatchewan.

Proposed Pine Point Mine (lead, zinc)

- New owner – Osisko Metals
- Capital cost \$150-\$250 million
 - Existing infrastructure (road, rail, power) saves \$100 million
 - Construction could begin Q2, 2019; Operations Q4, 2020
- Phased, sequential open pit and underground mining
 - 8 deposits in Phase 1 and 8-10 deposits in Phase 2
 - 13 year preliminary mine life, average 321 jobs
- Project size could grow with current exploration



The Phoenix rising from the ashes is the proposed new Pine Point lead-zinc mine. The original Pine Point mine produced from 1964 to 1987, and has been closed since. But with better prices and different technologies, Pine Point Mining has made a preliminary mine life estimate of 13 years, with optimism it will grow.

They are going for a phased permit. There will be 8 deposits in Phase 1 and 8-10 deposits in Phase 2.

Exploration potential is felt to be good, and the project size could grow if continued exploration is successful. Drilling up to 50,000 meters in 2018 with additional geophysics.

Mine Closure Opportunities

- Giant Mine - > \$ 1 billion
- Diavik mine – perhaps \$150 million



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I'd be remiss if I didn't mention this opportunity.

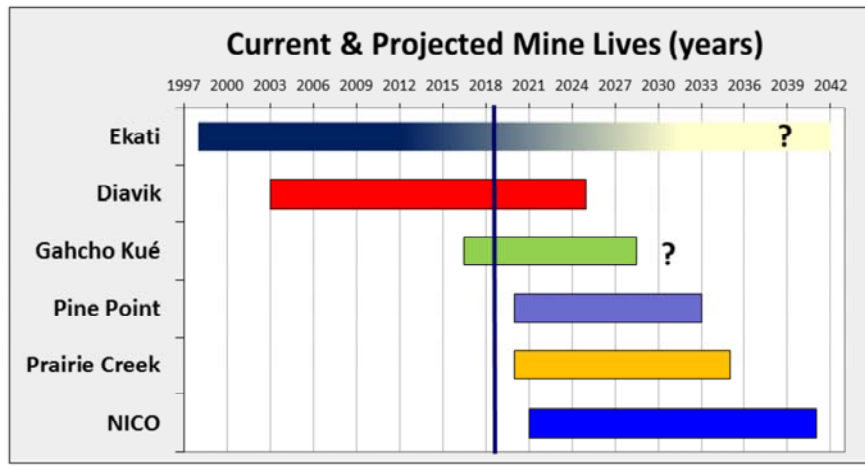
We should be looking for opportunities within the whole Mining Cycle – cradle to grave, if you will, from exploration to reclamation.

There are big opportunities on our doorstep with the Giant mine closure work coming, as well as other historic sites.

Diavik will be closing in 7 years, and there will be another opportunity.

We should ask how can we capture maximum northern benefits from upcoming reclamation work?

NWT Mine lives looking forward



- Ekati and Gahcho Kué potential for extension
- Diavik mine life fixed at 2025
- Prairie Creek, Pine Point and NICO will be smaller mines
- None are "slam dunks"



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With the importance of our industry to our territory, we want to always keep our eyes on mine lives, for we all know individual mines don't last forever.

Current mine life projections look like this:

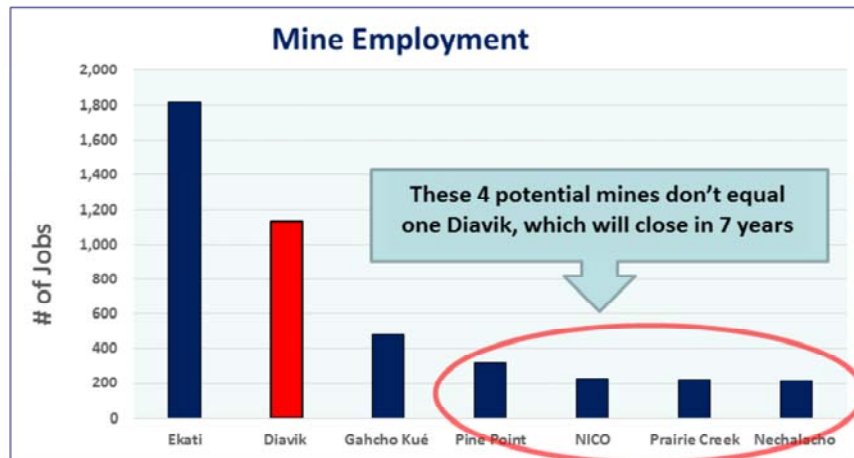
Ekati is projecting a much longer mine life now, under new ownership. That's great news given just three years ago, they were looking at a 2020 closure. What a difference that would have made to the NWT.

Diavik is still fixed at 2025

Gahcho Kué is our new mine, and there is some potential for an increased mine life from underground and perhaps from satellite deposits at Kennady Lake, but no work has been reported yet on feasibility of this.

Prairie Creek, Pine Point and NICO will be welcome additions.

Remember, not all mines are equal, eg, Jobs



- Future NWT mines like Pine Point, NICO and Prairie Creek are smaller & deliver lower government revenues & community benefits. Jobs and business spending are lower.
- Many small mines needed to replace impact of just 1 diamond mine
- **We need to find more new mines**



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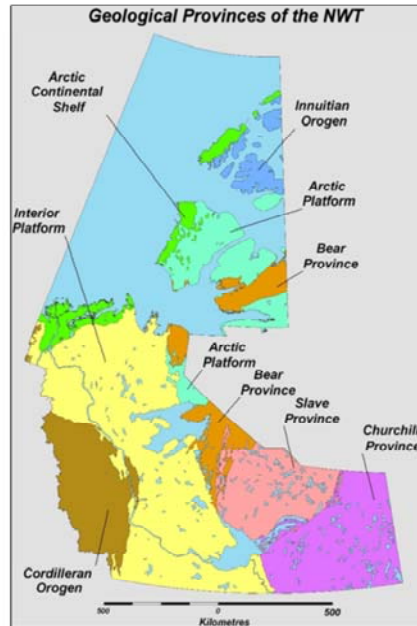
While we do have some other mining projects before us, like NICO, Prairie Creek Pine Point, it's important to remember that not all mines are equal.

These proposed mine are smaller mines, certainly in terms of manpower, shown here. They will likely also conduct smaller amounts of business, and pay less taxes as a result too.

We need to be finding more mines to sustain the strong benefits of our industry.

The NWT has great mineral potential

- 8 geological provinces
- Diverse mineralogy
 - Gold, silver, diamonds, lead, zinc, uranium, tungsten, rare earths, cobalt, bismuth, nickel, copper, iron, etc.
- Under-mapped & remote means under-explored
- This equals tremendous mining opportunity



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We have the mineral potential to mine for a long, long time.

The most important reason that mining is our economic advantage is our great Geology.

The colour scheme here represents regions of distinct geology, or geological provinces.

In our huge area, we have 8 geological provinces.

- This geological variety means great variety in mineral deposits and therefore mining opportunities.

- We are also under-mapped, meaning we have some of the poorest maps in the country.

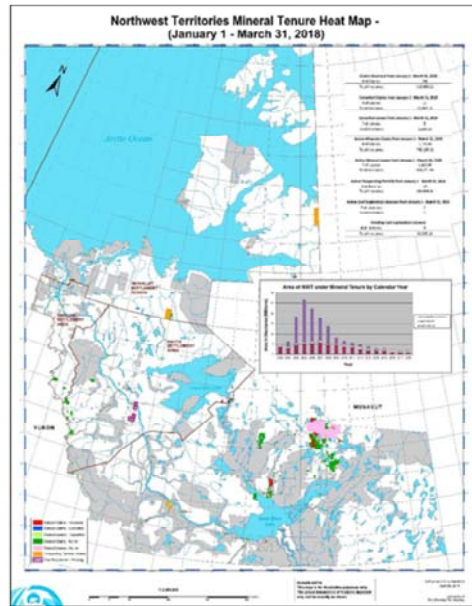
- And because we are so big and remote, our infrastructure is underdeveloped and it is expensive to work here.

- This means we are under-explored compared to the rest of Canada.

It means we have tremendous untapped mining potential.

But, we've closed over 30% of the NWT

- All the grey is off limits to exploration
 - Conservation
 - Land claims
 - Land use plans
- And some “open” areas are effectively closed
- Industry is challenged for access to land to explore



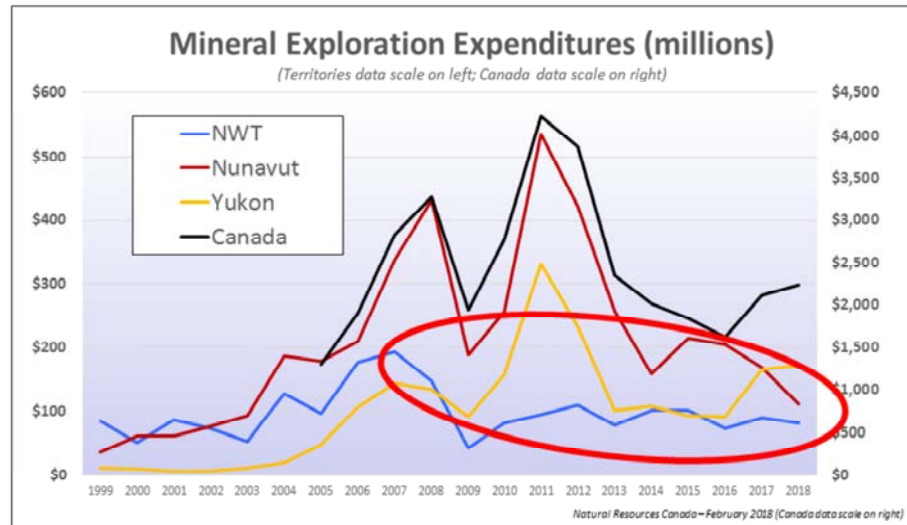
But despite all of our great geological and mineral potential, and our strong benefits from mining, we've put over 30% of the NWT off limits to exploration.

All the grey areas on this map are off limits to exploration today.

Even some areas which supposedly are open to exploration, have been effectively closed by communities. (eg, Upper Thelon). Some areas like the huge 93k sqkm UNESCO biosphere reserve around Great Bear Lake will likely also contribute to investment uncertainty.

If we limit access to land, we reduce the probability of exploration success.

We're still not attracting much exploration



- Canada and Yukon are increasing; Nunavut is decreasing; NWT still flat
- NWT is languishing; since 2007, NWT missed more than **\$1 billion** in exploration investment compared to Nunavut and Yukon



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At the same time (and also as a partial consequence of limited land access) we are not attracting the exploration investment that we should to sustain and grow our industry.

Finding new mines to sustain our industry requires exploration.

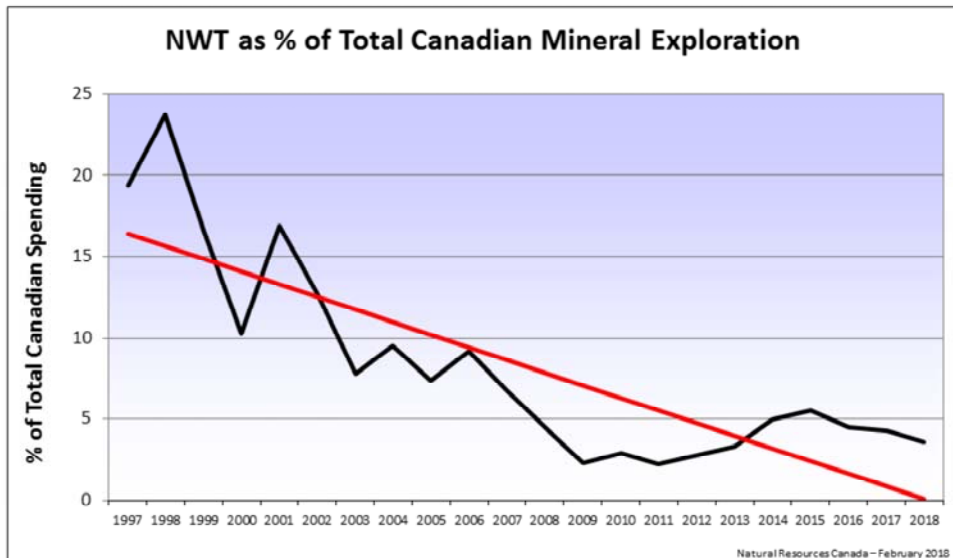
That takes money, and it takes lots of exploration projects, since the odds of success are against the explorer.

But, we have problems. The statistics for the NWT show it:

- Our investment is declining.
- And it's been doing that for over 10 years.

There is something amiss in the NWT compared to its sister territories.

And NWT continues to lose its attractiveness



- The NWT is projected to continue capturing an even lower share of Canadian exploration investment in 2018.

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And we are losing our investment attractiveness.

The chart shows that we are capturing less and less of our share, meaning the money is going to investment in other jurisdictions.

What contributed to low NWT attractiveness

- These affected investment uncertainty, reduced land access, and added costs
 - 2000-2018: Unsettled land claims challenge land access create uncertainty
 - 2000-2014: NWT Protected Areas Strategy – 60,000 sq.km. protection
 - 2007: Akaitcho land claim 62,000 sq.km. interim withdrawal
 - 2007: Thaidene Nene land withdrawal of 33,000 sq.km.
 - 2007: 18,000 sq.km exploration blocked Upper Thelon, costs industry \$25m
 - 2008: New Akaitcho requirement for onerous Exploration Agreements
 - 2009: North Arrow Minerals grassroots exploration challenged in court
 - 2010: Akaitcho “public concern” triggers EA for TNR Gold grassroots project
 - 2015: ‘public concern’ triggers EA for grassroots sand exploration
 - 2016: UNESCO biosphere reserve over 93,000 sq.km. around Great Bear Lake
- **Most of these have not been resolved today**



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What caused this, you ask?

The reason is related to a number of issues, including unresolved land claims, strong conservation initiatives creating land access challenges, and regulatory issues.

Here are number of actions that occurred over the past that contributed to investment uncertainty. Most of these have still not been resolved.

These are areas where we need all governments’ help – public and Indigenous governments.

The consequences? What others are saying ...

TERRITORIAL OUTLOOK ECONOMIC FORECAST
Spring 2018

**Commodity Prices Rising: Boom Times
Around the Corner**

The mining sector has wind in its sails. For starters, the global economy is performing well, with the U.S., Canada, the eurozone, and China growing at a strong clip in 2017. And that momentum will carry forward, given the favourable outlook for the global economy. **But economic growth is uneven across regions.**



The Conference Board
of Canada

Le Conference Board
du Canada

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How's it working for us?

Let's look at what others are saying about our economy.

Here's what's in the Conference Board of Canada's freshly released Spring 2018 Territorial Economic Forecast.

Looks like things should be good for mining.

NWT Economic Forecast is “Grim”

NORTHWEST TERRITORIES

Economic Prospects Grim

Chapter Summary

- Peak diamond production has passed in the Northwest Territories. Diamond production will begin to fall, and all three operating mines will close by 2035.
- Two new metal mines will open in the next five years, but that will not make up for the decline in diamond production, leaving mining output to fall for most of the next 23 years.
- Almost all sectors of the territory's economy will suffer as a result of declining diamond production. Employment will contract, resulting in higher outmigration and unemployment.
- As a percentage of the territorial population, the number of seniors will triple by 2040, putting pressure on the government's finances.
- Real economic growth will contract by 2.9 per cent this year and be flat in 2019, before falling for most of the rest of the forecast period.



The Conference Board
of Canada

Le Conference Board
du Canada

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Focusing in on the NWT though, it's not a pretty picture.

Much of this relates to no replacement for Diavik's closure in 2025, as pointed out earlier in our slides.

Other potential threats

- Federal Legislative Agenda
 - Carbon Tax
 - Conservation 2020 – Canada’s strong view on protected areas
 - Caribou “endangered” status
- GNWT Legislative Agenda
 - Mineral Resources Act
 - Environmental Protection Act
 - Protected Areas Legislation
 - Environmental Rights Act.
 - Waters Act
 - Forest Management and Protection Act



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We have other potential threats to our business costs and to land access. Here are a few.

One needs to remember that the mining industry is a “price taker”, meaning they have to accept whatever price the markets decide. Our mines cannot pass increased costs onto its customers.

This means that every new cost of work cuts into profits unless some method can be found to offset the costs. The Carbon Tax is particularly problematic as it is intended to get Canadians to switch to alternative energy or fuels. Unfortunately, remote mines (and most northern communities) don’t have that capability, and diesel power is essential. A new tax will hurt us all in the north.

Other initiatives shown here have potential to reduce land access, or create regulatory uncertainty.

| Actions Public and Indigenous Governments can take to improve the economic climate, and their Status | | Government |
|--|--|---|
| Reduce Cost pressures | Say NO to regulatory cost recovery (MVRMA) | Canada |
| | Prevent small early exploration undergoing Environmental Assessment (MVRMA) | Canada |
| | Neutralize Carbon Tax when no alternatives to diesel exist | Canada |
| | Ensure Mineral Resources Act supports investment | NWT |
| | Assess and address potential costs and effects of upcoming New NWT Legislation | NWT |
| | Yellowknife Airport Improvement tax (lost this argument) | NWT |
| Improve Access to Land | Settle Indigenous Land Claims and open withdrawn lands to exploration | NWT |
| | Complete land use planning process and revisit existing land use plans | NU, NWT, Canada |
| | Reduce land conservation initiatives – federal, territorial | Canada, NWT |
| | Invest in more science for caribou protection plans | NWT, NU |
| | Coordinate Land Access across all jurisdiction, public and Indigenous so that the rules are the same through to feasibility study at least | NWT |
| | Build Infrastructure | NWT: Tlicho Road funding & construction |
| Advance Nunavut's Grays Bay Road & Port (Slave Province) | | NU, Canada |
| Advance NWT Slave Geological Province road | | NWT, Canada |
| Advance cheaper hydropower | | NWT, Canada |
| Provide exploration Incentives | Double MIP (Exploration Incentive Program) | NWT |
| | Extend the 150% assessment credit | NWT |
| | Invest in Geoscience | All |
| | Federal 15% Mineral Exploration Tax Credit | Canada |
| Increase Public Awareness & Support for Mining | ECE put mining into school curriculum | NWT |
| | Support increased Public Awareness Program | NU, NWT |
| | NWT Regional (Indigenous) Mineral Development Strategies | NWT |
| | Prospector & mine training funding | NWT, NU |
| Public & Indigenous Governments Market North | "Unlocking Our Potential" investor messaging | NWT |
| | Indigenous government marketing of investment | NWT |

Status: Red problematic to investment, Green is good and Yellow is questionable.

At the Chamber of Mines, we have developed a more comprehensive list of threats and opportunities for our industry.

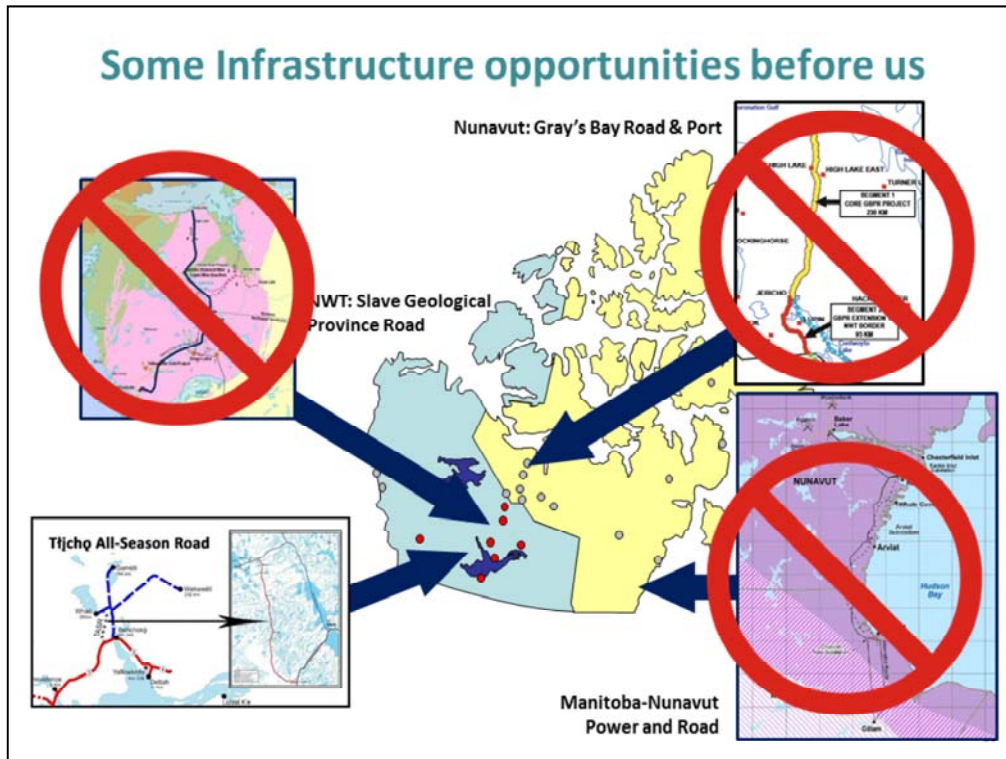
These are all areas where governments – public and Indigenous – can help its industry.

We have coloured it as a report card: Red is problematic, green is good and yellow is somewhere between.

Note there is a bit of green under infrastructure, which we really need in the north. But now there's a lot of red.

Let me speak to that.

Some Infrastructure opportunities before us



We have some great infrastructure opportunities, including roads and power in the NWT and Nunavut.

We've seen some progress on each of these, and the Tliche Road is advancing, and with a Federal Government commitment to to fund 25% of it. That's a good thing.

Unfortunately, we have just heard that Canada has turned down funding applications on three other infrastructure projects shown here. That is not a good thing.

How you can help

- Talk to your MLAs and local Indigenous leaders
 - Our collective path forward relies on all governments: Federal, Territorial and Indigenous
- Encourage action through formal vehicles for change
 - Arctic Policy Framework
 - Pan Territorial Sustainability Framework
 - Industry – Government Overview Committee – NEW!
- Can we reignite Vision?
- **Eg: Launch a campaign? “THIS IS UNACCEPTABLE!”**



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So, how can you help?

As a Chamber of Commerce, and as individual businesses, you can help by talking to your elected officials, but public and Indigenous.

Encourage their support and action.

There are also some more formal vehicles which can be used for support.

- The Arctic Policy Framework is being drafted.
- The three territorial premiers have met this week for the first time in a while to discuss the pan territorial sustainability framework. Hopefully that will show solidarity in working to convince the Government of Canada that the north needs support.
- And there's a new vehicle being launched, and Industry-Government Overview Committee, and we will use that to try to get change.

Can we also reignite Vision in a stronger future economy? (Some of our members have suggested it's time for a new campaign titled "This is Unacceptable", as we look at our current state and motivate change.

Let me offer a historical thought on vision, and see what you think of it as a "re-igniter".

Can we reignite this Vision?

The Honourable Arthur Laing, Liberal Minister of Northern Affairs & National Resources,
Speech to the Canadian Institute of Mining, Edmonton Chapter, May 1966

- *It is inconceivable that all lands north of the 60th parallel, representing 35% of Canada's land area, which we believe contain a great resource potential, will remain as an undeveloped portion of Canada.*
- *Very often the discovery of one mine ... will lead to more, but as long as we continue to do nothing to replace that activity during the time allowed we will continue to experience the social upheavals and personal hardships that result when the resource comes to an end.*
- *I say to you, we welcome those searching for the resource wealth of the North, and I mean this not only as a friendly gesture in the hope that your success will make my task easier. Canada must expand and grow and my government, through the Department of Northern Affairs and National Resources, is endeavouring in many ways to assist private industry on to the road to success.*



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In 1966, The Right Honourable (Liberal) Minister for Northern Affairs & National Resources, Arthur Laing, made a speech to the Canadian Institute of Mining in Edmonton.

Redolent with supportive comments and vision, here are some of the statements the Minister made:

It is inconceivable that all lands north of the 60th parallel, representing 35% of Canada's land area, which we believe contain a great resource potential, will remain as an undeveloped portion of Canada.

Very often the discovery of one mine ... will lead to more, but as long as we continue to do nothing to replace that activity during the time allowed we will continue to experience the social upheavals and personal hardships that result when the resource comes to an end.

I say to you, we welcome those searching for the resource wealth of the North, and I mean this not only as a friendly gesture in the hope that your success will make my task easier. Canada must expand and grow and my government, through the Department of Northern Affairs and National Resources, is endeavouring in many ways to assist private industry on to the road to success.

Sadly, today, 50 years later, we are still hoping for this renewed vision, and perhaps this great Liberal Minister's thoughts can be used to reignite a renewed vision for the north.

Remember why it matters – people success!



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For, at the end of the day, this is why it matters.

It's all about people success!

And our mining industry is showing it can create that.

People success leads to community success and then territorial success.

These are tremendous success stories, and we must sustain and grow them.

Thank you for your time today.