

Northwest Territories Action Plan for
**PROMOTING CRITICAL
MINERALS**

Plan d'action des Territoires du Nord-Ouest pour la
**PROMOTION DES MINÉRAUX
CRITIQUES**

What We Heard

Ce que nous avons entendu

A Summary of the Discussion from
A Virtual Workshop Held to Discuss
Critical Mineral Development in the
Northwest Territories

Résumé d'un atelier de discussion
virtuel sur le développement des
gisements de minéraux critiques aux
Territoires du Nord-Ouest

▶ NOVEMBER 9
9 NOVEMBRE 2021



ABBREVIATIONS

Canadian Minerals and Metals Plan	CMMP
Client Service and Community Relations	CSCR
Environment and Natural Resources	ENR
Education Culture and Employment	ECE
Environmental, Social, and Governance	ESG
Government of Canada	GC
Government of the Northwest Territories	GNWT
Indigenous Governmental Organization	IGO
Industry, Tourism and Investment	ITI
Inuvialuit Final Agreement	IFA
Kitikmeot Inuit Association	KIA
Mackenzie Valley Resources Management Act	MVRMA
Non-governmental Organization	NGO
Natural Resources Canada	NRCan
Northwest Territories Geological Survey	NTGS
Northwest Territories	NWT
Resource and Energy Development Information	REDI
Saskatchewan Research Council	SRC
The National Orphaned / Abandoned Mines Initiative	NOAMI

TABLE OF CONTENTS

I	EXECUTIVE SUMMARY	04
	SOMMAIRE	05
II	WHAT THIS REPORT DOES	06
III	NWT CRITICAL MINERALS AND ADVANTAGES – WHY NWT NEEDS AN ACTION PLAN	07
	Summary	07
	NWT’s Competitive Advantages	08
	NWT Initiatives Already in Place	08
	• Economic Development and Competitiveness	08
	• Advancing the Participation of Indigenous Peoples	08
	• Communities	09
	Critical Mineral Deposits in the NWT	09
IV	NWT MINING HISTORY, REGULATORY REGIME AND ESG	10
	Mining in the Northwest Territories	10
	NWT Regulatory Regime	12
	Environmental, Social, and Governance (ESG) Investment criteria	12
V	CRITICAL MINERALS AND THE CANADIAN MINERALS AND METALS PLAN	13
	Critical Minerals Defined	13
	Critical Minerals List	14
	Goals of the Canadian Minerals and Metals Plan (CMMP).....	14
	Canada’s Competitive Advantages	14
	Action Plan Themes	16
	• The National Orphaned / Abandoned Mines Initiative (NOAMI)	16
	• A Pan-Canadian Geoscience Strategy	16
	• Canada Brand for Mining.....	16
	• Increasing Indigenous Participation and Procurement	16
	• Collaboration With Global Partners for COVID-19 Recovery	17
VI	THE CRITICAL MINERALS VIRTUAL WORKSHOP	17
	The Workshop’s Four Themes	18
VII	SUMMARIES OF THE COMMENTS FOR THEMES 1 TO 4	19
	• Awareness, Engagement, Information Sharing, and Understanding of Critical Minerals Development in the NWT	20
	• Marketing and Promoting the NWT’s Critical Minerals Potential	21
	• NWT Critical Minerals Commodities – What They Are and Where They Are Found.....	22
	• Critical Minerals Partnerships and Collaborations	24
VIII	NEXT STEPS	25

I EXECUTIVE SUMMARY

On November 9, 2021, the Department of Industry, Tourism and Investment (ITI) held a virtual workshop to solicit suggestions for developing an action plan to promote and develop the territory's deposits of critical minerals. ITI invited 75 people who represented a wide cross-section from industry, industry associations, federal, territorial, provincial, and Indigenous governments, Indigenous development corporations, academics, NWT regulatory bodies and an elected member from the NWT Legislature. This report documents the suggestions and comments made by participants during the workshop.

The Government of Canada's Department of Natural Resources (NRCan), working with provinces, territories, and industry, developed a national plan – the Canadian Minerals and Metals Plan (CMMP) – first published as a preliminary version in 2019. This plan was updated in September 2020 and defined critical minerals simply to be those essential for building “a clean and digitized economy” and also defined criteria to determine which minerals were deemed as “critical.” (see below). Of the 31 minerals listed by NRCan as critical, several of significant occurrence or that are known to occur with good potential for additional discoveries are found in the NWT.

A corresponding CMMP action plan was developed and updated in 2021. In addition to the CMMP, NRCan worked with the Government of the United States to develop the *Canada – U.S. Joint Action Plan on Critical Minerals Collaboration*, released in January 2020. This plan followed on from the commitment made in June 2019 by the Prime Minister of Canada and the President of the United States to ensure critical mineral security and the future competitiveness of Canadian and U.S. minerals industries.

The CMMP contains several ideas for positioning Canada as a global supplier of choice of critical and non-critical minerals to our allies and global partners. Many of these ideas can apply to the NWT, and the workshop was held to discuss what actions the NWT can take to best position itself as a reliable supplier of critical minerals within the Canadian context.

I SOMMAIRE

Le 9 novembre 2021, le ministère de l'Industrie, du Tourisme et de l'Investissement (MITI) a organisé un atelier virtuel visant à solliciter des suggestions en vue de l'élaboration d'un plan d'action pour la promotion et le développement de gisements de minéraux critiques du territoire. Le MITI a invité 75 personnes de l'ensemble de l'industrie, des associations industrielles, des gouvernements fédéral, territoriaux, provinciaux et autochtones, des sociétés de développement autochtones, des universités, des organismes de réglementation des TNO, ainsi qu'un député de l'Assemblée législative des TNO. Ce rapport documente les suggestions et les commentaires formulés par les participants au cours de l'atelier. Le ministère des Ressources naturelles du gouvernement du Canada (RNCAN), en collaboration avec les provinces, les territoires et l'industrie, a élaboré un plan national, le Plan canadien pour les minéraux et les métaux (PCMM), dont la version préliminaire a été publiée pour la première fois en 2019. Selon ce plan mis à jour en septembre 2020, les minéraux critiques sont simplement les éléments constitutifs de « l'économie propre et numérique ». Par ailleurs, le plan propose des critères permettant de déterminer les minéraux jugés « critiques » (voir ci-dessous). Parmi les 31 minéraux considérés comme essentiels par RNCAN, plusieurs sont présents en quantités importantes aux TNO, où l'on trouve également divers minéraux connus et présentant un potentiel de découvertes supplémentaires. Un plan d'action correspondant au PCMM a été élaboré et mis à jour en 2021. En parallèle, RNCAN a coopéré avec le gouvernement des États-Unis pour élaborer le Plan d'action conjoint Canada-États-Unis encourageant la collaboration dans le domaine des minéraux critiques, publié en janvier 2020. Ce plan faisait suite à l'engagement pris en juin 2019 par le premier ministre du Canada et le président des États-Unis d'assurer la sécurité des minéraux critiques et la compétitivité future des industries minières canadiennes et américaines.

Le PCMM contient plusieurs idées pour faire du Canada un fournisseur mondial privilégié de minéraux critiques et non critiques pour nos alliés et partenaires mondiaux. Bon nombre de ces idées s'appliquent aux TNO, et l'atelier a été organisé pour discuter des mesures que les TNO peuvent prendre pour faire valoir leur rôle de fournisseur fiable de minéraux critiques dans le contexte canadien.

II WHAT THIS REPORT DOES

The GNWT- ITI is looking to develop a critical minerals action plan to promote and develop NWT's deposits of critical minerals while also increasing its exploration rates and its geological knowledge. This report documents the themes that were discussed during the critical minerals workshop, outlines the workshop's format, and summarizes the participants' suggestions and comments.

This report provides background and current information about the NWT including why an action plan is needed, a brief history of mining and current advanced projects, what critical minerals occur in the territory, the advantages to exploring and project development in the NWT. This report also includes a summary of the NWT regulatory regime and its relationship to Indigenous governments and organizations and its positive impacts on a project proponent's ESG criteria for use by investors, thereby highlighting the competitiveness of the NWT and attracting new investment to the territory.

This report also summarizes the CMMP and the related action plan to show what has been proposed or done by the federal government to provide some context for the NWT's critical minerals plan.

III NWT CRITICAL MINERALS AND ADVANTAGES – WHY NWT NEEDS AN ACTION PLAN

Summary

The GNWT is developing a critical minerals action plan to identify specific steps for promoting and developing the territories' critical mineral potential. Although several critical mineral deposits currently are at the advanced exploration or initial mining stage, these projects represent only a portion of the NWT's potential for the development of other deposits and future discoveries that could become proven economic resources.

Any NWT critical minerals action plan should consider the information and opinions expressed by industry associations, governments, Indigenous governments, Indigenous rights holders and critical minerals stakeholders. The latter group includes individuals who are currently developing critical mineral projects in the NWT and have uniquely informed perspectives. However, the workshop was designed to capture a wide range of unique perspectives and illustrate the complexities that currently exist in general for mineral development across NWT regions.

Attracting companies wishing to explore for and mine minerals will also form a part of any action plan, which is, at its core, a multi-pronged communications plan. Additionally, the possibility of finding direct customers like electric car manufacturers such as Tesla or other large companies that need cobalt, lithium and other minerals for batteries or other hi-tech applications, and who are willing to sign contracts with mining companies to ensure a long-term supply would be ideal. Developing an action plan will help ITI to make a decision whether to assist a mining company with this type of marketing or leave it entirely with the mining company to do. Marketing and awareness was one of the topics discussed in Theme 2 during the workshop, which is summarized in this report.

This is the first critical minerals action plan to be developed by the GNWT and is unlikely to be the last. It focuses on identifying initial actions that the GNWT and others can take to better understand and effectively communicate the NWT's critical minerals potential.

i) NWT's Competitive Advantages:

- As a Canadian territorial jurisdiction, NWT enjoys stable political, fiscal, legal and banking frameworks;
- A long history of mining in the NWT, resulting in a trained and educated workforce, Indigenous and non-Indigenous, and a general acceptance by the NWT public of mining as an industry beneficial to the economy;
- The Northwest Territories Geological Survey (NTGS), with publicly available historical and current geoscience knowledge;
- The new *Mineral Resources Act*, which has provisions for sharing benefits from mineral developments with Indigenous governments and organizations, communities and residents;
- A new *Public Lands Act*, that will come into force when the regulations are completed;
- Robust and thorough environmental assessment and regulatory regimes mandated by the Mackenzie Valley Resource Management Act (1998) and the Inuvialuit Final Agreement (1984), which can result in positive environmental and social indicators for investors using ESG criteria to evaluate resource companies.

ii) NWT Initiatives Already in Place:

- *Economic Development and Competitiveness*
 - *NWT Mineral Development Strategy*;
 - The Mining Incentive Program funds mineral exploration projects. In its first five years, the program has provided approximately \$3 million to 59 applicants and has leveraged an additional \$11.8 million in exploration spending by companies and prospectors;
 - An online map-staking system is under development.
- *Advancing the Participation of Indigenous Peoples*
 - Under the *Northwest Territories Lands and Resources Devolution Agreement*, resource revenues are shared with Indigenous governments and organizations that have signed the agreement;
 - Regional mineral development strategies, under consideration or completed by Indigenous governments and organizations;
 - Under the *MVRMA*, consultation and engagement with Indigenous governments and organizations and communities are necessary components of both the environmental assessment and the regulatory processes;

- A recent review of the NWT’s government procurement policies to maximize northern benefits including those to Indigenous companies;
- A special unit within ITI, Client Service and Community Relations (CSCR) is dedicated to facilitating good working relationships between project proponents and Indigenous governments and communities, provides advice and information to proponents and Indigenous groups about the regulatory regime, and facilitates engagement and consultation.
- *Communities*
 - Resource and Energy Development Information (REDI) initiative to build awareness in communities of the resource sector in NWT and how it is managed. This program is delivered by CSCR; and
 - Prospector training courses that teach NWT residents how to prospect for minerals and stake mineral claims. The prospector training courses are currently being delivered online due to the pandemic.

iv) **Critical Mineral Deposits in NWT:**

The NWT has known deposits and occurrences of at least 23 of the 31 critical minerals on NRCan’s list:

- | | | |
|-------------|-------------------------|-------------|
| • Bismuth | • Lithium | • Tellurium |
| • Cesium | • Molybdenum | • Tin |
| • Cobalt | • Nickel | • Titanium |
| • Copper | • Niobium | • Tungsten |
| • Fluorspar | • Platinum group metals | • Uranium |
| • Germanium | • Rare earth elements | • Vanadium |
| • Graphite | • Scandium | • Zinc |
| • Indium | • Tantalum | |

Some NWT critical mineral projects are in the advanced exploration phase, such as:

- Zinc and lead – Pine Point Mining Limited’s Pine Point project and NorZinc’s Prairie Creek project;
- Cobalt, bismuth and copper - Fortune Minerals’ NICO project;
- Rare Earth Elements (REE) – the Nechalacho project, operated by Vital Metals’ subsidiary Cheetah Resources.

More information about these projects can be found in Section IV below.

IV NWT MINING HISTORY, REGULATORY REGIME AND ESG

➤ MINING IN THE NORTHWEST TERRITORIES

Mining and mineral exploration have together played a major role in the NWT economy for almost 100 years. Exploration began in the 1920s, when a rich lead-zinc deposit was first discovered at Pine Point on the south shore of Great Slave Lake. The mine was developed by Cominco and began producing ore in 1964, shutting down in 1988. Gold was discovered at Great Slave Lake in the 1930s, near the area that became Yellowknife, and two mines – Con, which started in 1937, and Giant, which began producing in 1948 – produced 12 million ounces of gold over nearly 70 years of operations.

In 1992, diamonds were discovered at Point Lake, near Lac de Gras, about 200 km northeast of Yellowknife. That discovery resulted in extensive exploration throughout NWT and what is now Nunavut. Four diamond deposits were subsequently developed into mines and began production:

- Ekati, the first diamond mine, was opened by BHP Diamonds in 1998, close to Lac de Gras; the mining lease block contained several kimberlites including the one at Point Lake. The project is 100 percent owned by Canadian Arctic Diamond Company;
- In 2003, Diavik was opened and operated by Rio Tinto, which became the 100 percent owner in 2021. The mine is about 20 km from Ekati and situated on an island in Lac de Gras;
- The third, Snap Lake, was opened by De Beers Canada in 2008, 220 km ENE of Yellowknife. Snap Lake went into care and maintenance mode in December 2015 due to operating problems and high costs;
- De Beers opened the Gahcho Kué diamond mine with partner Mountain Province Diamonds, 85 km SE of Snap Lake, in September 2016.

The NWT has several advanced minerals projects that will possibly develop into producing mines:

- Pine Point Mining Limited's (owned by Osisko Metals) zinc and lead project at the site of the former Cominco mine;
- Gold Terra's Yellowknife City Gold project, which is exploring on the former Con and Giant gold properties and surrounding areas;
- Nighthawk Gold's Indin Lake Greenstone Belt project on the former Colomac mine property, approximately 200 km north of Yellowknife;
- Kennady Diamonds – owned by Mountain Province, also 49 percent owner of the De Beers-operated Gahcho Kué diamond mine, and adjacent to the Gahcho Kué mine;
- NorZinc's Prairie Creek zinc, silver and lead project; NorZinc has secured all required permits and licences, but must build a road from the mine site to Highway 7 before development can begin;
- Fortune Minerals' NICO property – cobalt, gold, bismuth, and copper project. Fortune has all permits and licences and is now planning to build the access road from the mine site to the Tłıchǫ All Season Road and a processing facility in Fort Saskatchewan, AB;
- Nechalacho – owned by Vital Metals and Avalon Rare Earths Limited. This is a rich rare earth elements (REE) deposit containing both light and heavy REE minerals along with other similar metals such as scandium, lithium, zirconium, beryllium, niobium, fluorspar, and tantalum. The project has permits and is currently undergoing a three-year bulk sampling program;
- Cantung/Mactung – under the responsibility of the Government of the Northwest Territories, Cantung is in care and maintenance and is undergoing a joint sales process with the Mactung property.

Not all the projects listed above produce critical minerals. Gold, for example, is not on the critical mineral list although it has been, and will continue to be, very important to the NWT economy. However, REE minerals, gold, lithium, and cobalt are vital to high-tech production of batteries for electric cars, defence and security applications, battery storage, solar panels, and handheld smart devices.

➤ NWT REGULATORY REGIME

The *Mackenzie Valley Resources Management Act (MVRMA)* passed into law in 1998 and was revised in 2014. The Act sets up an environmental and socio-economic regulatory and environmental assessment process that is based in the environmental protection clauses of three modern comprehensive treaties completed in the Mackenzie Valley – the Gwich'in Comprehensive Land Claim Agreement, signed in 1992, the Sahtu Dene and Métis Comprehensive Land Claim Agreement, signed in 1993, and the Tłı̨chǫ Agreement, signed in 2003. The Act covers all water and land use including for mineral and petroleum developments, as well as infrastructure developments such as highways. The Act ensures that Indigenous concerns regarding traditional resources such as wildlife, plants, fish, birds, and the well-being of citizens are heard and included as conditions of permits and licences.

A similar development review process is contained within the Inuvialuit Final Agreement (*IFA*), signed in 1984 and which covers the Inuvialuit Settlement Region in the Arctic area of the NWT.

Consultation and engagement with Indigenous governments and organizations and communities are key and necessary components of both the environmental assessment and the regulatory processes of the *MVRMA* and the *IFA*.

➤ ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG)

ESG refers to the environmental, social, and governance criteria that are used by investors to evaluate a company's operations and screen potential developments the company may be proposing. Investing using ESG criteria is also referred to as "sustainable investing" or "socially responsible investing."

Companies applying for permits to develop resources in the NWT must meet the environmental and socio-economic requirements of the *MVRMA* or the *IFA*, depending on the area of jurisdiction where the development is proposed to occur. Neither of these regulatory and review processes looks at a project proponent's governance regime, but both undertake take a comprehensive review and regulatory examination of environmental and local socio-economic matters related to a proponent's proposed development.

Environmental criteria used by investors to evaluate a company's performance include the company's energy use (oil, natural gas, renewable energy, electricity), disposal methods for hazardous waste, pollution management, compliance with government regulations and local Indigenous organization land use plans, conservation and treatment of wildlife, fish, plants, and forests. Social criteria include how a company treats employees, local stakeholders, donations made to communities, whether it has robust health and safety policies and how they are implemented. Governance criteria include transparent accounting practices, board members without conflicting interests and whether a company is involved in illegal practices.

V CRITICAL MINERALS AND THE CANADIAN MINERALS AND METALS PLAN (CMMP)

The CMMP states that it is “a pan-Canadian initiative developed with the federal, provincial and territorial governments in consultation with industry, Indigenous peoples, civil society, and other groups.” The plan also states that ministers responsible for mining in the three levels of government have agreed that a national plan will best advance economic recovery, growth, and competitiveness.

The global demand for critical minerals has been rising for the past several years. Some, such as rare earth minerals, are essential for renewable energy and used in automotive and high-technology applications such as high cycle-life, high-capacity batteries, solar panels, wind turbines and high strength magnets. REE minerals are essential for consumer electronics such as smart phones, laptops, consumer applications in home lighting, heating and appliances, electric self-driving cars and trucks, defence and security technologies, agriculture, medical equipment such as MRI devices and critical infrastructure such as electrical power generation and transmission.

This is a general, high-level overview of the CMMP, presented to provide context for the proposed NWT critical minerals action plan.

As stated in the CMMP, Canada defines “critical minerals” to be:

- Essential to Canada's economic security;
- Required for Canada's transition to a low carbon economy;
- A sustainable source of critical minerals for Canada's partners.

Using the criteria above, NRCan developed the list of 31 critical minerals in consultation with provinces, territories and mineral exploration, mining and manufacturing industries and associations. The list is included in the CMMP, and Canada has produced many of them, such as nickel, aluminum, and fluorspar for decades. The minerals on this list are found throughout Canada:

- Aluminum
- Antimony
- Bismuth
- Cesium
- Chromium
- Cobalt
- Copper
- Fluorspar
- Gallium
- Germanium
- Graphite
- Helium
- Indium
- Lithium
- Magnesium
- Manganese
- Molybdenum
- Nickel
- Niobium
- Platinum group metals
- Potash
- Rare earth elements
- Scandium
- Tantalum
- Tellurium
- Tin
- Titanium
- Tungsten
- Uranium
- Vanadium
- Zinc

The goals of the CMMP are:

- To improve the competitiveness of Canada’s minerals and metals industry;
- To position Canada for long-term success in a clean, digitalized, global economy; and
- To establish Canada as a leading mining nation.

The CMMP lists Canada’s competitive advantages:

- A stable political environment;
- Preferred access to major markets;
- Stable and competitive fiscal, legal and regulatory frameworks;
- State-of-the-art public geoscience;
- A large and robust junior mining sector;
- Competitive taxation, including one of the lowest effective tax rates among international mining jurisdictions, the flow-through shares tax mechanism, and the mineral exploration tax credit;
- A global hub for exploration and mine financing;

- A strong and innovative mining supply and services sector. There are more than 30 smelters, refineries, and pelletizers throughout the country that process ores that contain nickel, aluminum, copper, gold, silver, cobalt, iron ore, lead, bismuth, and platinum group metals. There is also a REE processing facility operated by the Saskatchewan Research Council (SRC) that is currently processing ore from the bulk sampling program at Nechalacho;
- A large, educated and trained exploration, mining and services workforce.

In addition to the above advantages, Canada has significant deposits of critical minerals such as cobalt, graphite, nickel, lithium, zinc, lead, fluorspar, uranium, rare earth minerals, and the second largest deposits of niobium and indium in the world, much of which is supplied to the United States.

As noted above, the minerals on this list are essential to several industries including telecommunications, consumer electronics, healthcare, aerospace, agriculture, and clean energy production such as solar and wind power. Ensuring production and supply chain efficiencies is a strategy of the CMMP to ensure that the goals of economic security and transitioning to a clean economy can be met.

The CMMP's mineral list provides certainty about Canada's priorities for mineral production and provides direction for governments to ensure policies are developed to "address key points in supply chains." As per the CMMP, federal, provincial, and territorial collaboration is considered essential to the success of the plan to find opportunities and to promote Canada as a global supplier.

The CMMP contains several pan-Canadian actions:

THE NATIONAL ORPHANED / ABANDONED MINES INITIATIVE (NOAMI)

Started in 2002, this is a national multi-stakeholder committee that includes non-governmental organizations (NGOs), industry, Indigenous groups, government and academic representatives that look at community relations, innovation, and risks to remediating orphaned and abandoned mine sites and preventing future abandonments.

A PAN-CANADIAN GEOSCIENCE STRATEGY

In 2020, the federal government announced funding of \$100 million to renew two Geological Survey of Canada programs: the Geo-mapping for Energy and Minerals (GEM) program which provides geoscience knowledge to help find northern minerals, and the Targeted Geoscience Initiative (TGI) which provides geoscience knowledge and innovative techniques to find deep mineral deposits.

CANADA BRAND FOR MINING

The CMMP action plan proposed to develop a values-based Canada Brand for Mining to establish Canada as an exploration and mining power, increase foreign direct investment and promote the mining services sector.

INCREASING INDIGENOUS PARTICIPATION AND PROCUREMENT

The CMMP Secretariat held a workshop in 2020 with more than 60 representatives from Indigenous businesses and communities, industry, NGOs and other stakeholders to discuss how to increase Indigenous participation and procurement.

Key suggestions from this workshop included:

- More dialogue with industry;
- Uniform procurement policies and processes across the country;
- Standardized procurement data;
- An asset mapping strategy to map the procurement landscape, identify opportunities, and highlight resources and gaps;
- Realistic Indigenous contracting targets that are informed by data and made public.

COLLABORATION WITH GLOBAL PARTNERS TO RECOVER FROM COVID-19

The COVID-19 pandemic caused a global economic downturn and a sharp reduction in supply chain activity. Canada has engaged with Japan, the European Union and Australia to strengthen supply chains and set international standards. Just prior to the pandemic, in January 2020, Canada and the U.S. signed the Canada-U.S. Joint Action Plan on Critical Minerals Collaboration to advance each country's mutual interest in securing supply chains. Critical minerals are essential to the U.S.'s national security, manufacturing and economic interests, and this joint plan may help encourage American investment in critical mineral exploration and development in Canada.

The federal, provincial, territorial governments and the Canadian minerals industry took several actions because of the impact of the COVID-19 pandemic to ensure the industry's continuing viability and to ensure the safety and health of employees. A summary of these actions is contained in the CMMP, which helped industry begin to recover from the pandemic in 2021.

VI THE CRITICAL MINERALS VIRTUAL WORKSHOP

This virtual workshop, in which 59 people participated, included representatives from industry, industry associations, Indigenous governments and organizations, elected representatives, employees from ITI, LANDS, ECE, ENR, and INF, and representatives from the British Columbia, Alberta and Saskatchewan governments and several representatives from the federal department and agencies.

During the workshop, participants were assigned to smaller groups to better facilitate discussion of the four main themes, listed below, and there was open discussion on other themes, goals, considerations, and challenges. These themes were refined using questions, and participants answered the questions or made suggestions for each one using electronic "cards", also called "sticky notes", which they uploaded to the facilitators. Participants were then asked to vote on their pick for the top five suggestions for each category, and this was used to compile a list of the most active cards for each theme.

Staff members from ITI, also in attendance, were later tasked with collating and sorting the cards into the four main categories and related questions and reported back at a subsequent online workshop December 13, 2021.

The meeting was facilitated by Neolé Inc. in partnership with Yellowknife-based company Gray Matters Design and Marketing. This report was written by Inukshuk Publishing in Yellowknife.

➤ THE WORKSHOP'S FOUR THEMES

1. Awareness, engagement, information sharing, and understanding of critical minerals development in the NWT;
2. Marketing and promoting the NWT's critical minerals potential;
3. NWT critical minerals commodities – what they are and where they are found;
4. Critical minerals partnerships and collaborations.

In general, participants agreed on the great need for more infrastructure in the NWT, including roads and clean power such as hydroelectricity. They said Indigenous participation, engagement and consultation and education was important to the success of any resource and infrastructure development project.

A summary of the comments for each theme can be found below. A listing of all comments for each of the themes can be found in the attached Appendix.

VII SUMMARIES OF THE COMMENTS FOR THEMES 1 TO 4

➤ SUMMARY THEME 1:

AWARENESS, ENGAGEMENT, INFORMATION SHARING, AND UNDERSTANDING OF CRITICAL MINERALS DEVELOPMENT IN THE NWT

Participants were asked to respond to the following questions:

1. What do you think the public perception is about critical minerals now?
2. What messages would be most useful for the public to know about critical minerals?
3. How might we convey this information to the public?

The most active cards for Theme 1 are:

1. Lack of public understanding/awareness;
2. Importance of critical minerals in achieving climate goals and transitioning to green economy;
3. Canada has some of the highest ESG standards in the world. Far better for these minerals to be mined right here in Canada than in other jurisdictions that may not share the same standards;
4. Recognize your audience and speak to them at their level, in ways they can easily understand;
5. Traditional and social media advertising;
6. Focus on education;
7. Correlation to “green” transition becoming increasingly important;
8. Focus on the whole picture. Don’t sugar coat the benefits of development while ignoring the impacts. Unbiased information will resonate far more than industry “propaganda”;
9. I think most people have a limited knowledge - but I think most understand that minerals are in their phones, computers.

10. We can start in the schools. I think though also we need to engage with all leaders and influencers in communities small and large and all our elected officials to try to get a common understanding of this primary sector of our economy and how all secondary, tertiary and service industries are dependent on primary economic activity to create GDP/societal prosperity, development and positive levels of income and socio-economic growth. We should be able to enunciate how economic and environmental sustainability must go hand in hand and are mutually supportable and not a zero-sum game.

Participants uploaded several responses to the questions for Theme 1 covering a wide range of topics such as the lack of public awareness of critical minerals and their importance to the Canadian economy, the country's ability to meet its climate goals and the transition to a green economy, which as one participant noted, was becoming "increasingly important". Canada has some of the highest ESG standards in the world, noted another participant, adding "Far better for these minerals to be mined right here in Canada than in other jurisdictions that may not share the same standards."

Education, both of students and the public, was mentioned by several participants. As well, messaging was seen to be very important. Many made suggestions about the content of the messages and the public and communications avenues to use to reach the audiences.

For more comments from participants, please see the Appendix.

➤ **SUMMARY THEME 2:**

MARKETING AND PROMOTING THE NWT'S CRITICAL MINERALS POTENTIAL

Participants were asked for answers to the following questions:

1. We intend to (further) promote increased investment and exploration in critical minerals. What are the most attractive features of the NWT, its regions, and its mineral resource sector that we should emphasize?
2. Can you recommend any events or activities that deal specifically with critical minerals, commodity specific or in general, that could be added to the GNWT strategy?
3. What other activities and tactics should be part of the GNWT promotion and marketing strategy?

Participants uploaded comment cards with suggestions for:

1. All-of-government attendance at mining conferences such PDAC and Roundup as well as attending investment conferences to talk about the advantages to mineral development in the NWT;
2. The availability and importance of public geoscience;
3. Strong government relationships with Indigenous government organizations, and other provincial and federal governments;
4. Building on the NWT's experience gained from the territory's long mining history; and
5. The NWT regulatory system and its relationship to Indigenous communities and ESG considerations.

The most active cards for this theme were:

1. Really strong investment in Indigenous and northern mineral supply companies;
2. Good ESG record and going forward. Great investment for ESG geared funds;
3. Strong relationship with transboundary geological surveys resulting in predictive power in exploration. Relationship with Saskatchewan Research Council for REE minerals. (Current relationship development);
4. Strong government support for exploration and research to support mineral development;
5. The strength of message is increased by who is delivering that message. It's important that it be developed inclusively;
6. Environmental safeguards already in place;
7. Nechalacho - Cheetah Resources trial mining. Small scale/artisanal mining in the critical minerals space;
8. The NWT has a long history of mineral development; it speaks to our experience. Let's use our successes as examples in telling our story;
9. Established, strong collaborations with scientists who study the geology of ore deposits. Their work provides important information that supports the exploration and extraction of mineral resources.

The NWT's vast mineral potential – “world-class nature of deposits in the North” - as one participant said, along with the potential for critical minerals in the NWT, were noted, along with suggestions for infrastructure development, especially for the Slave Geological Province and Gray's Bay Road. Mineral education in schools was considered important, and Mining Matters' educational presentations and material were suggested to be used in NWT schools.

Education about the NWT was deemed to be important for groups and companies based outside of the NWT. Marketing materials should focus on Indigenous participation in the economy and development projects as well as the ESG advantage a company could gain with investment in NWT projects.

For more comments from participants, please see the Appendix.

➤ **SUMMARY THEME 3:**

NWT CRITICAL MINERALS COMMODITIES - WHAT THEY ARE AND WHERE THEY ARE FOUND

There were three questions for Theme 3:

1. What NWT mineral commodities could we consider in developing and retaining economic strengths in our mineral industry?
2. How might an NWT critical minerals action plan be informed by regional (e.g, Indigenous regions, geologic regions, industrial regions) knowledge, input, and lessons learned?
3. Do any of these commodities have any particular advantages, opportunities, or risks that we should be aware of? In other words, what should we focus on and what potential pitfalls should we be aware of?

The most active cards for Theme 3 were for:

1. Regional mineral development strategies;
2. Indigenous considerations and knowledge;
3. Partnerships;
4. Geoscience considerations (mainly data-focused);
5. Lessons learned.

There was a wealth of information about minerals in the NWT from the comments posted for the workshop for Theme Three. Concern was expressed from some of the participants that if a focus was placed on critical minerals, exploration activity for other minerals would suffer. Critical minerals were still deemed to be important, and participants suggested that NWT should concentrate on getting production from known deposits such as the large tungsten deposits at Cantung and Mactung, cobalt and bismuth at the NICO project and at Port Radium, zinc and lead at Pine Point and rare earths at Nechalacho.

Participants suggested that exploration should continue to source deposits of several critical minerals known to occur in the NWT: copper, lithium, nickel, graphite, cobalt, zinc, uranium, tantalum, niobium, graphite, bismuth, rare earths, and tungsten. Exploration was considered important to continue to find other minerals, including gold, for which there is always a global market. As one participant said, “Diversify mineral production too so that we protect the industry from having all its eggs in one basket and (are) then exposed to market changes.” Another suggestion was for “Decoupling minerals that have different commodity cycles to avoid boom bust.”

Regional mineral development strategies were seen to be very important, including the ones under development by Indigenous governments and organizations, currently on hold due to COVID-19. Further, regional strategic environmental assessments were also seen as important for any developments in all regions. Enduring partnerships with Indigenous governments in NWT and Nunavut were seen to be key to development of the Gray’s Bay transportation corridor and the IZOK project, as was a suggestion to create economic zones and infrastructure such as roads and hydroelectricity.

For more comments from participants, please see the Appendix.

➤ SUMMARY THEME 4:

CRITICAL MINERALS PARTNERSHIPS AND COLLABORATIONS

There were three topics for discussion in Theme 4:

1. Organizational Partnerships;
2. Opportunities and Approaches for Developing Partnerships;
3. Facilitating and Encouraging Partnerships.

For Theme 4, participants were asked for answers to the following questions:

1. What types of partnerships or collaborations make sense for your organization?
2. Which types do not make sense for your organization?

The most active workshop cards for Theme 4 were:

1. Get back to in-person conferences. No substitute for in-person events where face-to-face discussions can be had;
2. May need to consider funding a high-profile activity and doing it very well as a leader for attracting more widespread attention. For example, a high-profile investor/newsletter writer tour of NWT properties and communities;
3. Need to teach kids about mineral sector career opportunities in schools and need to take a partnership approach; Industry wants to partner with ECE to get this into classrooms, e.g., Mining North Works. There are 100 different career opportunities in mining.

Industry representatives said the partnerships that were most beneficial to them were the ones that advanced the goals of the company. For example, one company which has mine development plans in the NWT answered question 1 by saying that “Engaging and developing exploration/collaboration agreements with Indigenous communities” made sense for the organization. Another company said, in answer to the same question, that a working group to support proposed development that included the regional Indigenous organization, the territorial government and the Chamber of Mines, would work best for their goal of advancing their project. This company suggested that equity participation for the Indigenous organization was important.

For question 2, one company cited the need to be careful not to be distracted from their main goals as an exploration and development company.

Government organizations talked about forming partnerships with many groups, again depending on the goals of their organizations. For some departments, finding partnerships to aid in community or business development was part of their mandate. Other government departments said developing partnerships to facilitate planning, research, promotion, and education or to collect information about minerals and mining, was beneficial to the public service in general. Overall, this topic elicited many thoughtful responses from participants.

For Topics 2 and 3, participants offered many comments. Participants from government agencies said partnerships made it easier to identify projects that they could support. Another participant talked about how federal government funding used to be available to build infrastructure in the north such as the Pine Point railway line and the Taltson power dam. Creative ways to make partnerships and fund infrastructure was needed in the North to facilitate exploration and development. Others mentioned incentives and tax breaks to develop and enhance agreements and partnerships, saying “make it pay to be a responsible company”.

Many saw education as important and talked about partnering with the ECE to find ways to focus on mining and employment among Indigenous students in NWT schools.

For more comments from participants, please see the Appendix.

All participants’ comments from the virtual workshop that appear in the report or in the Appendix are reproduced verbatim.

VIII NEXT STEPS

The GNWT’s Department of Industry Tourism and Investment is developing an Action Plan to guide its investments and next steps in the exploration and development of the NWT’s critical mineral resources.

The input received, through this workshop, and captured in this report will be foundational to the creation of this Action Plan. Further consultation and engagement with academia, Indigenous governments, and stakeholders from across industry are planned as the GNWT works to define the role critical minerals will play in future resource development in the NWT.

NOTES

A series of horizontal dashed lines for taking notes, spanning the width of the page.

If you would like this information in another official language, call us.
English

Si vous voulez ces informations dans une autre langue officielle, contactez-nous.
French

Kīspin ki nitawihitīn ē nīhīyawīhk ōma ācimōwin, tipwāsīnān.
Cree

Tłıchq̄ yatı k'ę̄ ę̄. Dı wegodı newq̄ dę̄, gots'ō gonede.
Tłıchq̄

ꞑerihł'ís Dēne Sų́lné yatı t'a huts'elkēr xa beyáyatı theꞑ̄ ꞑat'e, nuwe ts'ę̄n yółtı.
Chipewyan

Edı gondı dehgháh got'ıje zhatıé k'ę̄ ę̄ edat'éh enahddhę̄ nıde naxets'ę̄ edahí.
South Slavey

K'áhshó got'ıne xadā k'ę̄ hederı ꞑedjhtl'é yerıniwę̄ ní dé dúle.
North Slavey

Jii gwandak izhii ginjik vat'atr'ijáhch'uu zhit yinothtan ji', diits'at ginohkhii.
Gwich'in

Uvanittuaq ilitchurisukupku Inuvialuktun, ququaqłuta.
Inuvialuktun

ᑕᑲᑦᑲᑦ ᑲᑲᑦᑲᑦ ᑲᑲᑦ ᑲᑲᑦᑲᑦ ᑲᑲᑦᑲᑦ ᑲᑲᑦᑲᑦ ᑲᑲᑦᑲᑦ ᑲᑲᑦᑲᑦ ᑲᑲᑦᑲᑦ ᑲᑲᑦᑲᑦ.
Inuktitut

Hapkua titiqqat pijumagupkit Inuinnaqtun, uvaptinnut hivajarlutit.
Inuinnaqtun

Indigenous Languages and Education Secretariat: 867-767-9346
ext. 71037 Francophone Affairs Secretariat: 867-767-9343

