

YUKON MINERAL DEVELOPMENT STRATEGY AND RECOMMENDATIONS

15 April 2021

Yukon Mineral Development Strategy and Recommendations

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Preface

In early 2017, the Yukon Minister of Energy, Mines and Resources, the Grand Chief of the Council of Yukon First Nations and the Chiefs of Yukon's eleven Self-Governing First Nations signed the Mining Memorandum of Understanding. The Mining Memorandum of Understanding commits the Yukon Government and Yukon's Self-Governing First Nations to the long-term responsible management of Yukon's mineral resources and to supporting a healthy mining industry that adheres to high environmental standards. The Yukon Mineral Development Strategy is the result of that initiative. The Strategy attempts to balance competing needs so that exploration and mining can be done in a profitable manner that benefits all Yukoners while minimizing adverse social and environmental consequences.

Additional First Nations have interests in, and are affected by, mineral development in the Yukon, including the three Yukon First Nations that have not yet signed modern treaties (Liard First Nation, Ross River Dena and White River First Nation), three Transboundary First Nations (Acho Dene Koe First Nation, Taku River Tlingit and the Gwichin Tribal Council) as well as the Inuvialuit Regional Corporation (pursuant to the Inuvialuit Final Agreement). Although these First Nations and the Inuvialuit Regional Corporation are not signatories to the Mining Memorandum of Understanding, the Mineral Development Strategy has attempted to be respectful of their rights and interests.

This report is the final product of the Mineral Development Strategy Panel (MDS Panel) that began work in September 2019. MDS Panel members include Angus Robertson (Chair), Math'ieya Alatini and Doug Eaton. The completion of the Yukon Mineral Development Strategy marks just the beginning of the transformation of the legislation, regulations, policies and practices that will guide the Yukon's mineral industry in years to come, to ensure that benefits from the industry are enjoyed by all Yukoners. Timely implementation of the recommendations in order to achieve the transformation will require effective collaboration and accountability by all governments, with input from industry so that changes to the regulatory regime do not erode the competitiveness of the Yukon's mining sector.

The Yukon Mineral Development Strategy respects the broader recognition of Indigenous rights that has evolved in the quarter century since the Umbrella Final Agreement and the Yukon Transboundary Agreement were signed in the early 1990's. Reconciliation with Yukon First Nation people is at the heart of the place-based approach embodied in the Yukon Mineral Development Strategy. As noted in the 2019 Canadian Minerals and Metals Plan and accompanying 2020 Action Plan, the mining industry has a clear role to play in regard to reconciliation, especially in remote and northern communities.

Yukon Mineral Development Strategy and Recommendations

Until the mining industry, the Yukon Government and Yukoners in general understand and accept the unique and powerful rights that Yukon First Nations have through constitutionally protected modern treaties, legislation, case law or bilateral contractual agreements, misunderstandings and friction will continue to impair efforts to complete the overhaul of the regulatory regime that the MDS Panel can see is so clearly needed. Meaningful progress that allows for a flourishing mining sector can only be accomplished if Yukon's First Nations are truly seen as the partners they are and not as opponents.

The Yukon Mineral Development Strategy is the result of an extensive engagement process conducted over 16 months. Through the engagement process, the MDS Panel identified seven principles to guide the development of Yukon's mineral resources for the benefit of all Yukoners. Adoption and integration of the seven principles is intended to create a foundation for a healthy Yukon mineral industry within an attractive investment climate. The 95 recommended actions outlined in this report are presented within the context of six Strategic Priorities and include a wide range of legislative, policy and administrative initiatives.

The MDS Panel is confident that this Yukon Mineral Development Strategy and Recommendations report fulfills the desire of many engagement participants for a bold, transformative approach to Yukon mineral development now and into the future. The Panel has attempted to find balance among the different perspectives of engagement participants to build a framework for sustainable mineral resource development within a positive context of economic, social and environmental reconciliation.

The MDS Panel is also confident the mining industry will finally be able to see a clear development pathway and know the goal posts at each stage of the mineral exploration and development cycle. A comprehensive and contemporary regulatory regime coupled with accelerated land use planning is intended to alleviate many concerns that have led to the costly and time-consuming mine development delays seen in recent years. Full implementation of the Strategy will create the certainty sought by the mining industry and spark the flow of investment dollars needed for industry development.

Yukon First Nations with Modern Treaties	Yukon First Nations under the <i>Indian Act</i>
Carcross/Tagish First Nation	Liard First Nation
Champagne & Aishihik First Nations	Ross River Dena
First Nation of Na-Cho Nyak Dun	White River First Nation
Kluane First Nation	First Nations with Transboundary Interests
Kwanlin Dūn First Nation	Acho Dene Koe First Nation
Little Salmon/Carmacks First Nation	Gwich'in Tribal Council
Selkirk First Nation	Taku River Tlingit
Ta'an Kwäch'än Council	Entities with Transboundary Interests
Teslin Tlingit Council	Inuvialuit Regional Corporation
Tr'ondëk Hwëch'in	
Vuntut Gwitchin First Nation	

Yukon Mineral Development Strategy – The Independent Panel



Angus Robertson, Panel Chair

Angus Robertson has held a number of leadership positions with federal, provincial and territorial governments. He started his career in 1980 with the Department of Indian and Northern Affairs and held a variety of posts in Yukon, Northwest Territories, and Ottawa. He then served the B.C. Government in several positions including Assistant Deputy Minister of treaty negotiations with the Ministry of Aboriginal Affairs. Robertson joined the Yukon Government's Executive Council Office in 1997 serving as Yukon's Chief Devolution Negotiator and assistant deputy minister of intergovernmental relations for four years. He was deputy minister of the Department of Economic Development for almost two years and then deputy minister of the Department of Energy, Mines, and Resources for nine years. Robertson holds a Bachelor of Arts and a Master of Arts from the University of British Columbia.



Math'ieya Alatini, Panel Member

Math'ieya Alatini's name might come to mind when you think of innovations and advances in northern governance, renewable energy, and partnerships. She's a capable and experienced leader, known for trailblazing in her community of Burwash Landing. Her no-nonsense approach allows her to get results in the sectors of mining, economic expansion, and tourism with a focus on community wellness.



Doug Eaton, Panel Member

Doug Eaton obtained a Bachelor of Arts degree from the University of Alberta in 1971 and a Bachelor of Science degree in Geology from the University of British Columbia in 1980. He has been with Archer, Cathro & Associates (1981) Limited since 1971 and has been a principal of that consulting firm since 1981. He has exceptional knowledge of Yukon geology and has contributed to several important discoveries. Mr. Eaton has served as a director and officer of numerous public companies on the TSX Venture Exchange since the mid-1980s.

Yukon Mineral Development Strategy and Recommendations

Introduction

The Mining Memorandum of Understanding

The Yukon Minister of Energy, Mines and Resources, the Grand Chief of the Council of Yukon First Nations and the Chiefs of Yukon's Self-Governing First Nations signed the Mining Memorandum of Understanding in early 2017.

The Mining Memorandum of Understanding commits the Yukon Government and Self-Governing Yukon First Nations to the long-term responsible management of Yukon's mineral resources and to supporting a healthy mining industry that adheres to high environmental standards. Through the Mining Memorandum of Understanding process, Self-Governing Yukon First Nations and the Yukon Government have together selected and empowered the MDS Panel to create this Mineral Development Strategy, with industry input. The Strategy attempts to consider the needs, values and interests of all Yukoner's, including Yukon First Nations that have not yet signed modern treaties, as well as Transboundary First Nations. The Strategy is a long-term plan for a robust and responsible Yukon mining industry.

The Yukon Mineral Development Strategy speaks to placer and quartz mining activities on Crown Lands and Category 'B' Lands. On Category 'A' Lands, the Yukon Mineral Development Strategy refers only to mineral claims staked prior to completion of the modern treaties. Mining activities on Category 'A' Lands outside of mineral claims staked prior to negotiation of the modern treaties are subject to regulation by individual Self-Governing Yukon First Nations. The new mineral management regime will ideally establish, subject to alignment with each First Nation's legislation, a consistent and compatible mineral management regime for both Crown Land and First Nations Lands. When bilateral agreements relating to mineral tenure and development are negotiated with Yukon First Nations under the *Indian Act*, priority should be given to coordinating and aligning the resulting mineral management regimes with regimes in place in the remainder of the Yukon.

The Yukon Mineral Development Strategy encompasses all aspects of the mineral resources development cycle including target research, claim staking, prospecting, exploration, development, production, reclamation, closure and post-closure management in a manner that:

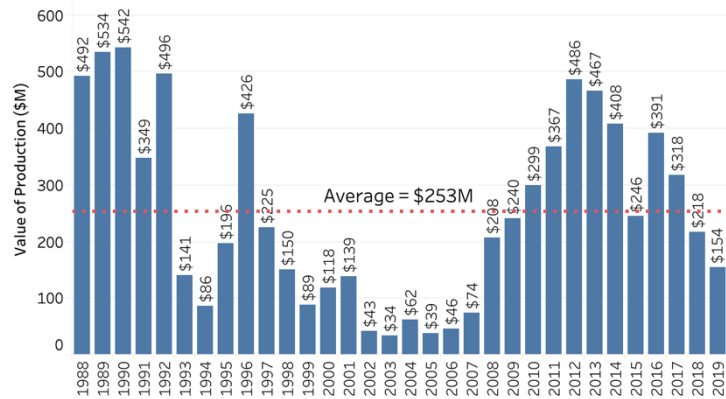
1. respects the special relationship between the Yukon Government and Yukon First Nation governments that sets Yukon apart from other jurisdictions; and,
2. creates jobs, strengthens and diversifies our economy, respects environmental stewardship and balances the development of a thriving and prosperous mining industry that benefits all Yukoners and recognizes and respects the Yukon First Nations' special relationship with the land and resources within their respective Traditional Territories.

Yukon Mineral Development Strategy and Recommendations

Mineral Development and the Yukon Economy

The Yukon's mining industry is a key contributor to the Yukon economy. As shown in the chart to the right, the total value of mineral production in the Yukon over the period 1988 to 2019 ranged from a low of \$34 million in 2003, to a high of \$542 million in 1990, and averaged \$253 million per year. The total values include production from both quartz and placer mines in Yukon.

Total Value of Yukon Mineral Production (\$M)
1988 to 2019

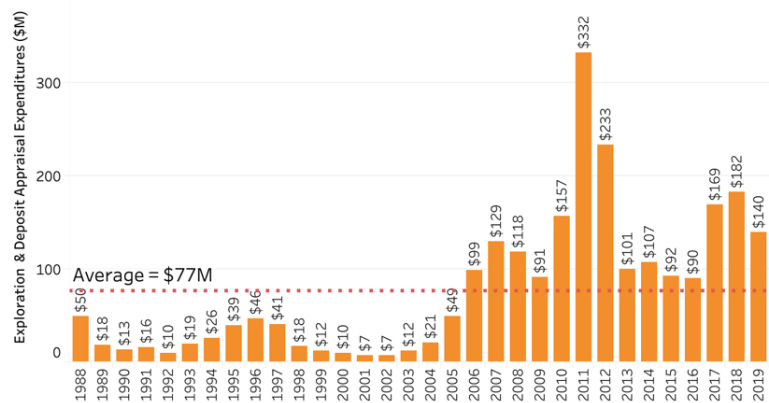


Source: Natural Resources Canada.

Peak production years in the chart correspond with the size and number size of mine operations. The high levels of production in the late 1980's are attributable to the large-scale Faro mine. Peak production levels around 2012 are attributable to multiple operating mines including Minto, Bellekeno and Wolverine. The variation in mineral production levels also demonstrates the 'boom and bust' nature of the Yukon's quartz mining industry. In contrast, Yukon's approximately 100 placer mines were steadier contributors to mineral production over the 1988 to 2019 time period, with the value of annual production ranging between \$23 million and \$116 million.

Mineral exploration activities also make a significant contribution to the Yukon economy on an annual basis. As seen from the chart to the right, Yukon mineral exploration and deposit appraisal expenditures over the period 1988 to 2019 ranged from a low of \$7 million in 2001 and 2002, to a high of \$332 million in 2011, and averaged \$77 million per year.

Yukon Mineral Exploration and Deposit Appraisal Expenditures (\$M)
1988 to 2019



Source: Natural Resources Canada.

The significant contribution of mineral development activities to the Yukon economy can also be demonstrated in terms of Gross Domestic Product. Over the 12-year period 2008 to 2019, the mining sectors' share of Yukon Gross Domestic Product averaged 10.3% and has historically ranged much higher. The importance of Yukon's mining industry is further magnified by the substantial number of spin-off jobs created in other economic sectors including transportation, accommodation, construction and retail sales which are not included

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in the Gross Domestic Product accounts for the mining sector. It also bears noting that the mining industry's geographic presence creates economic benefits throughout the Yukon and not just in the Whitehorse area. The impact of mineral development on the Yukon economy is especially noteworthy during the construction and expansion phases of mine development. Much of the road and energy infrastructure now used by all Yukoners was originally developed to support mineral development.

The economic contributions of the Yukon's mineral exploration and development sector are achieved despite challenges and risks not faced by other industries. Yukon's relatively remote location and cold climate result in higher capital and operating costs than are found in most other jurisdictions. The unique risks and constraints under which mineral exploration and development companies operate in the Yukon are summarized in the box below.

Mineral Exploration and Development Risks and Constraints

Location: "You have to mine it where you find it" – the location of a mine is primarily determined by geology rather than cost-effective access to infrastructure, availability of workforce or proximity to customers.

Discovery: The probability of successfully establishing a mine is very low. A common metric is that of 1,000 grassroots exploration projects, only 100 will receive detailed exploration, fewer than 10 will proceed to advanced explorations phase, and only one will result in a mine.

Geological: The probability of discovery may be low, but chances of finding a deposit of superior quality are even lower. Mine developers focus on projects with projected profit margins in the top 25% of mines for the same mineral.

Infrastructure: While many parts of Yukon are accessible by tote roads and trails, most mineral discoveries are located significant distances away from existing highway corridors. Haul road access is required if deposits are to be developed as rail service is not currently a transport option for mine operators in Yukon. Base load electrical energy is in short supply and is becoming more expensive in the Yukon.

Seasonality: Undertaking exploration and development activities in remote areas with harsh and highly seasonal climates such as the Yukon can add several years to development timelines, making Yukon projects more expensive than in other geographic locations.

Time-frame: The long duration of the exploration and development phases means that there is an extended period of negative cash flows before revenues begin to accrue from production.

Economic: The long time frame and large capital costs means that exploration and mining firms are very sensitive to uncertainties about the regulatory regime, taxation regime, commodity prices, operating costs, etc.

Environmental: Once in production, mines are subject to the effects of a changing climate and natural disasters, in addition to risks associated with large scale industrial operations located in geographically remote regions such as the Yukon.

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Yukon Mineral Development - The Statutory Landscape

Under provisions of the Devolution Transfer Agreement which came into force in April 2003, the Yukon Government holds administrative responsibility for Yukon's mineral, forestry, land and water resources. Notwithstanding that 17 years have elapsed since the Devolution Transfer Agreement came into force, the *Forest Resources Act* is the only example of comprehensive and modern natural resource legislation to be developed in Yukon since 2003.

The basic design of the both the *Quartz Mining Act* and the *Placer Mining Act* can still be directly traced to the Quartz and Placer Regulations in the *Dominions Lands Act*. The Quartz and Placer Regulations were enacted in 1898 at a time when Canada's north was considered to be empty of everything except natural resources. Over the intervening 122 years, a patchwork of amendments have rendered the Yukon's mineral resource legislation difficult to enforce and unresponsive to evolving industry and community circumstances.

Modern treaties have been established with 11 of 14 of Yukon's First Nations. The treaties are truly comprehensive and designate approximately 9% of Yukon's land area as Settlement Land and afford Self-Governing Yukon First Nations province-like governance powers. The Yukon's modern treaties are comprised of two parts, Self-government Agreements and constitutionally protected Final Agreements.

The Yukon treaties establish legislated fiscal arrangements and provide direct taxation powers to Self-Governing Yukon First Nations. Beyond Settlement Land, the modern treaties with Yukon First Nations also establish roles and responsibilities for the joint stewardship of the First Nation Traditional Territories by Yukon First Nations and the Yukon Government.

Not all Yukon First Nations have concluded modern treaties. The Yukon Mineral Development Strategy is meant to be inclusive of the three Yukon First Nations who have yet to sign modern treaties. The Strategy acknowledges contemporary case law, both within and outside of the Yukon, which guides development activities on the Yukon's unceded Traditional Territories and the interests of the Yukon's Transboundary First Nations. The *Yukon Court of Appeal decision Ross River vs Yukon 2012 YKCA 14* is an example of such case law, having led to the implementation of a staking moratorium on the unceded Kaska Dena Traditional Territories in southeastern Yukon.

The Yukon Mineral Development Strategy respects the broader recognition of Indigenous rights that has evolved in the quarter century since the Umbrella Final Agreement and the Yukon Transboundary Agreement were signed in early 1990's. Specifically, the Yukon Mineral Development Strategy has been developed within the context of Article 32 of United Nations

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Declaration of the Rights of Indigenous People and Call to Action No. 92, issued by the Truth and Reconciliation Commission of Canada:

Article 32 of United Nations Declaration of the Rights of Indigenous People states:

- 1. Indigenous peoples have the right to determine and develop priorities and strategies for the development or use of their lands or territories and other resources.*
- 2. States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources.*
- 3. States shall provide effective mechanisms for just and fair redress for any such activities, and appropriate measures shall be taken to mitigate adverse environmental, economic, social, cultural or spiritual impact.*

Call to Action No. 92, issued by the Truth and Reconciliation Commission of Canada states:

"We call upon the corporate sector in Canada to adopt the United Nations Declaration on the Rights of Indigenous Peoples as a reconciliation framework and to apply its principles, norms, and standards to corporate policy and core operational activities involving Indigenous peoples and their lands and resources. This would include, but not be limited to, the following:

- Commit to meaningful consultation, building respectful relationships, and obtaining the free, prior, and informed consent of Indigenous peoples before proceeding with economic development projects.*
- Ensure that Aboriginal peoples have equitable access to jobs, training, and education opportunities in the corporate sector, and that Aboriginal communities gain long-term sustainable benefits from economic development projects.*
- Provide education for management and staff on the history of Aboriginal peoples, including the history and legacy of residential schools, the United Nations Declaration on the Rights of Indigenous Peoples, Treaties and Aboriginal rights, Indigenous law, and Aboriginal–Crown relations. This will require skills-based training in intercultural competency, conflict resolution, human rights, and anti-racism."*

The Province of British Columbia passed the *Declaration on the Rights of Indigenous Peoples Act* in November 2019 to implement the United Nations Declaration of the Rights of Indigenous People. Bill C-15, the federal *United Nations Declaration on the Rights of Indigenous Peoples Act*, was tabled in Canada's House of Commons in December 2020. Canada's Truth and Reconciliation Commission has confirmed the United Nations Declaration of the Rights of Indigenous People as the framework for reconciliation in Canada.

Reconciliation with Yukon First Nation people is at the heart of the place-based approach embodied in the Yukon Mineral Development Strategy. The overall objectives of the Yukon Mineral Development Strategy are closely aligned with the Canadian Minerals and Metals Plan

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published in 2019 by the Ministers responsible for mining in Canada’s provincial and territorial governments, including the Yukon’s Minister of Energy, Mines and Resources. As noted in the Canadian Minerals and Metals Plan:

"Mining also offers a pathway to address one of our top domestic priorities—improving the relationship with Indigenous Peoples based on rights, respect, co-operation and partnership. The industry holds great potential to advance reconciliation and Indigenous participation in the economy." (page 3).

Place-based Development

In the future, unlocking the resource potential in Canada’s North must follow a different path than history would suggest.

The Stage 1 diagram shown to the right is a representation of ‘staples theory’ or the ‘core – periphery’ model of regional economic development. Natural resources in raw form (e.g., mineral ores) are extracted in the northern hinterland (or periphery) and shipped to smelters in the south. The now ‘value-added’ products would then be used as inputs for manufacturing in centralized ‘core’ locations, typically large Canadian urban centres.



Stage 1: Hinterland to Core
(prior to mid 1970's)

The traditional hinterland-to-core model of regional economic development was “spatially blind” — it focused mainly on the potential value of resource wealth and the transportation infrastructure needed to get raw resources to Canadian markets. Stage 1 prevailed in Canada’s north until the mid-1970’s. When regional development is spatially blind, the specific attributes of an area or place – people, culture and governance – are discounted and ignored.

In the 1970’s, recognition began to grow that Canada’s northern “hinterland” has always been home to Indigenous peoples of diverse cultures, languages and traditions having in common an unassailable connection to the land. The idea of “homeland” was articulated to a wide audience in 1977 by Justice Thomas Berger in *Northern Frontier, Northern Homeland: The Report of the Mackenzie Valley Pipeline Inquiry*. A new and relatively shortly-lived stage of northern economic development – homeland-to-core – saw a slowdown in northern resource development with most projects having entered the development pipeline many years prior.

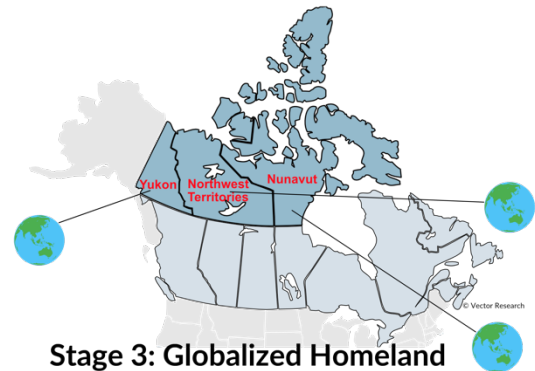
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It was also during the homeland-to-core stage that the practice of environmental assessment began to be applied to northern resource development projects. Whereas federal regional economic development showpieces such as the Faro Mine in the Yukon and the Pine Point Mine in the Northwest Territories were built without screening for adverse environmental effects, projects which followed have faced a much higher level of environmental and regulatory scrutiny.



Stage 2: Homeland to Core
mid 1970's to 1999

In Stage 3, beginning in the late 1990's, the homeland-to-core approach to economic development was replaced by a new reality – globalized homeland. The globalized homeland approach recognizes that Indigenous people have always lived in Canada's north and, through modern treaties, have a constitutionally protected say in how natural resources are developed and how the land is to be returned to its natural state after resources have been extracted.



Stage 3: Globalized Homeland
1999 and forward

The globalized homeland stage of northern economic development is also characterized by the rapid pace of technological change in Canada's north. Internet connectivity and other technological innovations mean that successful resource development is no longer simply a matter of "getting there first" before your competitors do. Ownership of resource development companies has become globalized and resources are shipped to locations far away from Canada for processing.

Mineral Strategy Development Process

The Yukon Mineral Development Strategy is the result of an exceptionally extensive engagement process with Yukon people, governments and organizations as well as companies, individuals and entities with a stake in the Yukon's mining industry.

The MDS Panel adopted a broad-based approach to engagement and invited participants to speak openly about how mineral development has affected the Yukon. Seeking broad views on what matters to Yukon people about mineral development has allowed the MDS Panel to gain a comprehensive understanding of the impacts of mining, both positive and negative, on Yukoners and other people living in Canada's north. The MDS Panel also received valuable input from miners and mineral explorers about what aspects of Yukon's mineral development regime are working well and what aspects need improvement.

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The engagement was conducted outside of the Yukon Government's *Engage Yukon* template and so resulted in the collection of a significant volume of qualitative evidence used to directly inform the Yukon Mineral Development Strategy. Over the course of the engagement process the MDS Panel conducted comprehensive research on mining policies, management infrastructure and practices in other jurisdictions within and outside of Canada.

Prior to the COVID-19 pandemic, the MDS Panel attended the 2019 Yukon Geoscience Forum in Whitehorse, the 2020 Association for Mineral Exploration Roundup in Vancouver and the 2020 Prospectors and Developers Conference in Toronto. At the three events, the MDS Panel met and learned from people involved in all aspects of mineral development (e.g., prospectors, junior and senior mining companies, investors and government officials). The MDS Panel hosted six focus groups with Yukon businesses directly and indirectly involved in mineral development. Roughly 35 businesses attended the focus groups, which were coordinated by the Yukon First Nations Chamber of Commerce.

In response to the COVID-19 pandemic declared in March 2020, the MDS Panel modified the public engagement options, based on feedback from Yukon First Nations and municipalities. To ensure all Yukon people could participate, the MDS Panel:

- hosted eight regional online open houses;
- set up a toll-free phone line for people to leave recorded messages;
- hosted a two-day session with Yukon First Nation elders; and
- hosted over 90 meetings, both in-person (prior to the COVID-19 pandemic) and using Zoom (during the COVID-19 pandemic).

Through the various engagement efforts, the MDS Panel received input through:

- 90+ interviews and meetings with individuals and groups;
- 63 written submissions;
- three days of focus groups;
- eight online open houses; and,
- 2,900 survey comments.

Public engagement closed on 8 September 2020 after a three-month extension due to the COVID-19 pandemic. The engagement period with Yukon First Nations remained open until late November 2020 to help ensure the MDS Panel could hear the perspectives of Yukon First Nation people to the greatest extent possible while still meeting the timeline for completion.

The final draft of the Yukon Mineral Development Strategy and Recommendations was released for public comment on 28 December 2020. Written public feedback was received until 22 February 2021, with an extension granted to First Nations organizations to 1 March 2021.

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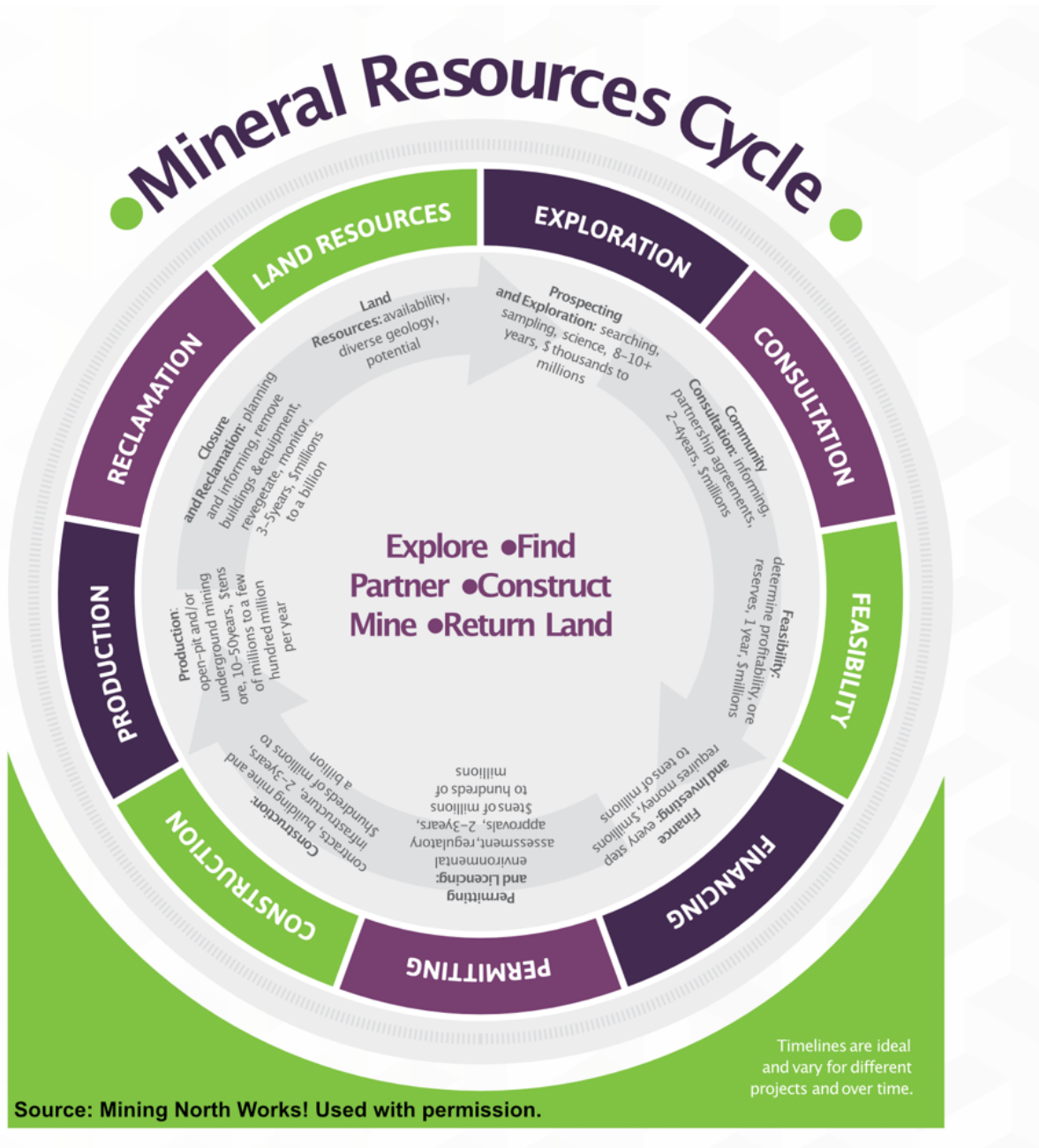
To the end of the public comment period, a total of 311 written submissions and a total of 272 responses to the public comment survey were received for consideration by the MDS Panel. The MDS Panel is very appreciative of the time and energy shared by the many commentators whose insights have helped to correct several oversights and errors and to strengthen the Yukon Mineral Development Strategy and Recommendations.

The Yukon's exploration and mining industry has played a crucial role in sustaining positive economic development and employment opportunities in Yukon during the COVID -19 pandemic. Yukon's mining sector will be instrumental in securing the Yukon's economic recovery in a post-pandemic world by delivering direct and indirect employment opportunities and generating economic spin-offs in communities throughout the Yukon. The Yukon Mineral Development Strategy and Recommendations acknowledge the historical importance of the sector and provide a roadmap for enhancing the future economic and social contributions of the Yukon's mining industry.

Vision

The Yukon Mineral Development Strategy lays the foundation for the collaborative and place-based development of Yukon mineral resources in a way that benefits all Yukoners and ensures a robust and balanced mining industry. The Strategy envisions a future where:

- all mineral development activities will respect First Nation values, honour modern treaties with Yukon and Transboundary First Nations and acknowledge the Constitutional Rights and Title of First Nations yet to sign modern treaties;
- all mineral development projects earn and maintain a social licence to operate through positive contributions to the social, cultural and economic well-being of all Yukoners;
- the mining industry operates in Yukon without leaving adverse environmental legacies;
- the Yukon's mineral exploration and development industry can attract global investment as a leader in ethical and sustainable mining practices; and,
- mines can be developed and operated in a timely and profitable manner within a transparent and stable regulatory regime.



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Guiding Principles

Through its extensive engagement with a full cross-section of Yukoners, it is clear to the MDS Panel that Yukoners and other northerners understand the economic importance of the mining industry and also want the industry to be accountable. The MDS Panel identified seven principles to support accountability and guide the development of Yukon's mineral resources for the benefit of all Yukoners. Adoption and integration of the seven principles will create a foundation for a healthy Yukon mineral industry within an attractive investment climate.

1. Collaboration	A better Yukon built through effective collaboration among all governments (federal, Yukon and Yukon First Nation) and industry to ensure all Yukoners understand and benefit from mineral resource development activities.
2. Honouring Our Ancestors	All mineral development activities reflect the spirit and intent of Yukon's modern treaties and bilateral agreements with Yukon First Nation peoples, Transboundary treaties, the United Nations Declaration of the Rights of Indigenous Peoples and the findings of Canada's Truth and Reconciliation Commission.
3. Sustainability	Resource development based on environmental impact levels acceptable to Yukoners as resource stewards and responsive to the impacts of climate change and evidence of cumulative effects.
4. Future Generations	Holistic consideration of the social, economic and environmental effects of development on future generations of Yukoners through all stages of mineral development.
5. Respect	Respect for the Yukon's natural and human environment informed by Traditional Knowledge and evidence-based decision making.
6. Transparency and Trust	Mining industry expansion founded on transparency and trust to create social viability and durable economic prosperity for all Yukoners.
7. Certainty and Clarity	Legislative and regulatory certainty for access to Yukon lands for mineral exploration and development with clarity and transparency in the permitting, monitoring and enforcement processes.

Strategic Priorities

The MDS Panel's vision for the Yukon's mineral exploration and development industry will be achieved according to the principles outlined above and through implementation of the six strategic priorities listed below:

1. Establish a modern mineral resource management regime aligned with the modern treaties with Yukon First Nations, Transboundary treaties, Canada's *Constitution Act*, court-guided agreements (e.g., *Ross River vs Yukon* 2012 YKCA 14), the principles of reconciliation enshrined in the *United Nations Declaration on the Rights of Indigenous Peoples* and the recommendations of Canada's Truth and Reconciliation Commission;
2. Create substantive and sustained Yukon socio-economic returns from resource development that benefit Yukon First Nations, local communities and all Yukoners today and in the future;
3. Establish effective, efficient and transparent environmental and socio-economic assessment and regulatory processes;
4. Operate within an attractive investment climate which supports competitive, innovative and socially-responsible mineral development enterprises;
5. Demonstrate environmental responsibility and preparedness to adopt practices to address climate change including utilization of green energy; and,
6. Provide support for leading edge workforce development and public awareness initiatives.

In the next sections of the Yukon Mineral Development Strategy, the MDS Panel presents a summary analysis of each of the six priorities and recommends a series of action items. It is the hope and intent of the MDS Panel that, taken together, the action items will result in the Yukon achieving the MDS Panel's vision of a responsible and sustainable mineral exploration and development industry in a manner consistent with the Guiding Principles of this Yukon Mineral Development Strategy.

**Strategic
Priority
No. 1**

Establish a modern mineral management regime aligned with the modern treaties with Yukon First Nations, Transboundary treaties, Canada's *Constitution Act*, court-guided agreements (e.g., *Ross River vs Yukon* 2012 YKCA 14), the principles of reconciliation enshrined in the *United Nations Declaration on the Rights of Indigenous Peoples* and the recommendations of Canada's Truth and Reconciliation Commission.

It is time to thoroughly modernize Yukon's mineral management regime and replace the *Quartz Mining Act* and the *Placer Mining Act* with new mineral resource legislation. The new legislation should align the development of Yukon's mineral resources with the modern treaties established with Yukon and Transboundary First Nations over 25 years ago. The new legislation should also complement current federal and Yukon legislation and policies and bring or keep Yukon's mining practices in line with practices in competing jurisdictions. Entities and agencies established or mandated for co-management of Yukon lands and resources as part of the modern treaties should be fully recognized in the new legislation, including the Yukon Environmental and Socio-economic Assessment Board, the 11 Renewable Resource Councils, the Yukon Water Board and the Yukon Land Use Planning Council.

The new legislation will replace the patchwork of amendments that have rendered the Yukon's century-old mineral resource legislation unresponsive to evolving industry circumstances and difficult to enforce. The roles and responsibilities of government decision makers and front line staff will also be clarified in the new legislation.

The modernized mineral resource legislation must be developed collaboratively on a government-to-government basis with Yukon First Nations, including First Nations that have not yet established a modern treaty. For greater certainty, the process must be inclusive of all First Nations with asserted or established Aboriginal and Treaty Rights in Yukon. An early example of a collaborative approach to the development of natural resource legislation can be found in the *Yukon Forest Resources Act*. The 2008 *Act* is consistent with Yukon First Nation Final Agreements, meets the requirements of Section 35 of the *Constitution Act, 1982* and is aligned with the Truth and Reconciliation Commission's Call to Action No. 92.

The Yukon's mining industry is deeply rooted in Yukon history. Modernizing Yukon's mineral resource legislation holds unprecedented potential to advance economic, social and environmental reconciliation between the Yukon Government and Yukon First Nations. A collaborative approach to legislative development is also in keeping with commitments found in the 2003 *Devolution Transfer Agreement* between the federal and Yukon governments. To gain wide acceptance, the new mineral resource legislation must be developed in a transparent

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manner that allows for participation of all affected stakeholders especially the Yukon's mining industry and representative entities.

The role of the Yukon mining industry in the development of the new legislation will be in keeping with the "*Collaborative Framework*" affirmed by the Yukon Government, the Council for Yukon First Nations and the Yukon Chamber of Mines in 2017. The "*Collaborative Framework*" was developed to guide and support mining industry participation in enacting amendments to Yukon's various mining related legislation and regulations.

MDS Panel deliberations on developing a modern mineral management regime for the Yukon were guided by the *Canadian Minerals and Metals Plan*. The Plan was published by the Ministers responsible for mining in Canada's provincial and territorial governments, including the Yukon's Minister of Energy Mines and Resources in 2019. The Canadian Minerals and Metals Plan is an ambitious generational initiative designed to drive a competitive, sustainable and responsible minerals and metals industry. The Plan presents a vision for Canada as the world's leading mining nation and states that:

"An objective of reconciliation is improving the relationship between Indigenous and non-Indigenous Peoples. This is an important factor in considering ways to create more mutually beneficial relationships in how mineral resources are managed and how benefits are shared." (page 17).

The MDS Panel was also inspired by the 'whole of government' approach to the implementation of the United Nations Declaration on the Rights of Indigenous Peoples adopted by the Government of British Columbia. Through passage of the *Declaration on the Rights of Indigenous Peoples Act* in November 2019, the Government of British Columbia set out a process for aligning provincial legislation in British Columbia, including the *Mineral Tenure Act* and the *Mines Act*, with the United Nations Declaration on the Rights of Indigenous Peoples.

The work of the MDS Panel was also informed by similar initiatives in other Canadian jurisdictions. An example is the B.C. Mining Jobs Task Force established by the B.C. Minister of Energy, Mines and Petroleum Resources to review exploration and mining in the province and find ways to strengthen the industry. The Task Force noted in its 2019 Final Report that:

"Mining is at the forefront of advancing reconciliation with Indigenous peoples and implementation of the United Nations Declaration on the Rights of Indigenous Peoples." (page 4).

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To achieve Strategic Priority No. 1, the MDS Panel recommends that the Yukon Government:

Develop a modern mineral management regime for the Yukon by:

- Completing, together with Yukon First Nation governments, a comprehensive engagement with mineral industry representatives and interested Yukoners to confirm the design parameters for the new mineral resource legislation for quartz and placer mining. The specific features of the new mineral resource legislation are outlined in strategic priorities two through six of this Yukon Mineral Development Strategy.
- Drafting and bringing into force the new mineral resource legislation and regulations within the next four years (by the end of 2025). Achieving such an aggressive timeline will require all involved to declare the work a priority and to dedicate the necessary resources.
- The new mineral management regime will ideally establish, in conjunction with First Nations' legislation, a consistent and compatible mineral management regime for both Crown Land and First Nations Land.
- Initiating negotiations with Yukon First Nations under the *Indian Act* to create agreements relating to mineral tenure and development. Completion of the agreements is intended to resolve uncertainty of mineral tenure and allow for the removal of staking bans in Kaska Dena Traditional Territories. Agreement completion is also intended to resolve issues related to the assertions of the White River First Nation regarding the extent of its Traditional Territory. Other issues to be addressed in the bilateral agreements should include:
 - determining where and how free entry can be allowed within Traditional Territories;
 - the assessment, approval and monitoring of exploration and mining projects; and,
 - resource revenue sharing.
- Developing consequential amendments to the *Yukon Waters Act* to ensure a seamless statutory fit with the modernized mineral resource legislation, *Yukon Environmental and Socio-economic Assessment Act*, Yukon First Nation and Transboundary Final Agreements and bilateral agreements.
- Developing consequential amendments to the *Historic Resources Act* to modernize its language and ensure that its enforcement and compliance tools are fully harmonized

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with the new mineral resource legislation, Yukon First Nation and Transboundary Final Agreements and bilateral agreements.

- Ensuring the new mineral resource legislation and regulations are aligned with Yukon’s modern treaties, *Canada’s Constitution Act*, the *United Nations Declaration on the Rights of Indigenous Peoples* and current case law by:
 - acknowledging the *United Nations Declaration on the Rights of Indigenous Peoples* principle of Free, Prior and Informed Consent;
 - modifying the free entry staking system to be consistent with Yukon’s modern treaties, court-guided agreements and case law;
 - requiring the negotiation of participation and benefit agreements for advanced mineral exploration and development activities conducted under the revised *Quartz Mining Act*;
 - providing for the full delegation of regulatory enforcement powers to mining lands officers reporting to Yukon First Nation entities subject to guidelines for officer qualifications and lines of accountability to ensure the unified approach to enforcement is effective;
 - supporting Yukon Energy, Mines and Resource’s proposal to add reconciliation, subject to clear criteria, to the list of reasons the Yukon Government may use to justify a prohibition of entry order for prospecting, staking and mining under the Yukon’s mineral resource legislation; and,
 - including provisions to distribute royalties to Yukon First Nations under the *Indian Act*, particularly for projects located in their Traditional Territories.
- Championing a “whole-of-government” approach in responding to the *United Nations Declaration on the Rights of Indigenous Peoples* and the recommendations of Canada’s Truth and Reconciliation to ensure the new mineral management regime is well-placed within the Yukon’s broader social responsibility to advance reconciliation with Canada’s Indigenous peoples.

The MDS Panel recognizes that some of the recommended actions in the Yukon Mineral Development Strategy must be preceded by modernized mineral resource legislation and that other actions should be completed before the new legislation is finalized. While modernized mineral resource legislation is under development, the MDS Panel recommends that the Yukon Government implement the following interim measures to establish a respect-based foundation with Yukon First Nations for future mineral sector development:

- Creation and expansion of programs to better fund participation by Yukon First Nations in the development of the new mineral resource legislation, including possible consequential amendments to the *Waters Act* and the *Historic Resources Act*, as well as

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improved participation in environmental and socio-economic assessment and monitoring processes.

- Encouragement and strengthening of early engagement pathways between industry and Yukon First Nation governments.
- Recognition and co-leveraging of opportunities for Yukon First Nations including equity participation in infrastructure development for quartz mining projects.
- Development of a semi-annual report card on overall Yukon progress, including progress by the Yukon's mineral sector, towards honouring the principles contained in the *United Nations Declaration on the Rights of Indigenous Peoples*.
- Design and implementation of resource revenue sharing measures that provide meaningful and steady revenue flows to all Yukon First Nations aligned with land-based resource activities.
- Funding support for First Nation participation in the development of the modernized mineral resource legislation and related legislative changes, including possible consequential amendments to the *Waters Act* and the *Historic Resources Act*.
- Dedication of resources to ensure the principles of reconciliation are applied across government and are embodied in the modern mineral regime to improve regulatory certainty for all stakeholders.

Strategic Priority No. 2

Create substantive and sustained Yukon socio-economic returns from resource development that benefit Yukon First Nations, local communities and all Yukoners today and in the future.

The socio-economic viability of Yukon depends on exploration and mining activities being carried out in a sustainable manner. The MDS Panel heard that true sustainability involves more than strong economic performance and good environmental stewardship. Mining must also be inclusive and build positive, healthy relationships with its workers and Yukoners in general. Social and economic sustainability of the Yukon's mining industry are also key to Yukon's overall economic health and the well-being of Yukon communities.

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Social sustainability requires effective consultation and consideration of how people and families in Yukon communities are affected by mining projects and must reflect the special relationship between First Nations people and the land. Recognition that the adverse effects of resource development are borne locally, while many of the benefits are exported outside the Yukon, is crucial to social sustainability. Positive aspects beyond employment opportunities such as whole-career human capital development, cultural resilience and social well-being need to be discussed and enhanced. Social sustainability must also include plans to minimize the negative impacts of boom-bust cycles that affect all resource sectors, including the mineral industry.

Economic sustainability means profitable mines as well as helping Yukon businesses and individuals be positioned to take advantage of opportunities presented by mineral sector development such as camp support, construction, transportation, logistics, drilling, equipment operation and maintenance, accounting, human resource management and environmental monitoring. Early and open conversations about how Yukon businesses can participate in mineral development opportunities are essential to ensuring Yukoners and communities benefit to the greatest extent possible.

Economic sustainability also means that taxes and fees paid by mining operations are used to provide public services needed by Yukoners and that money spent by mining companies and workers is retained and circulated within the Yukon economy. Key to improving the recirculation of spending within the Yukon economy will be ensuring that First Nation development corporations and businesses are aware of project plans and have the time and financial support needed to capitalize on the development opportunities. Participation and benefit agreements between project proponents and Yukon First Nation governments will also help to improve spending recirculation for the benefit of all Yukoners.

Resource royalties are intended to provide a payment to the owner of the resource for use of the resource. In Canada, minerals are owned by the Crown on behalf of the people resident in a province or territory. As such, resources royalties are collected for the benefit of Yukon people as payment for the extraction of Yukon's non-renewable resources.

Since the power to collect royalties was devolved from the federal government, the Yukon Government has collected only a small amount of resource royalties on behalf of Yukon people. Over the period 2006/07 to 2019/20, the Yukon Government collected an average of \$23,218 per year in placer gold royalties. Excluding the \$33.4 million in royalties collected by the Yukon Government from the Minto Mine on behalf of the Selkirk First Nation, the Yukon Government received a total of \$724,113 in *Quartz Mining Act* royalties (\$65,828 per year), over

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the eleven years between 2007 and 2017 from production at the Bellekeno and Wolverine mines.

The Yukon's modern treaties allow Self-Governing Yukon First Nations to receive royalty payments in respect of mineral production on Category 'A' Lands. When royalties collected by the Yukon Government on behalf of the Selkirk First Nation (the owner of the mineral rights for the Minto Mine which is situated on Category 'A' Land) are included, the Yukon Government was responsible for the collection of \$34.1 million in *Quartz Mining Act* royalties (\$3.1 million per year) over the eleven years between 2007 and 2017.

The Victoria Gold Mine came into commercial production in 2020 and is located on Crown Lands near the community of Mayo. Production at the Bellekeno Mine, located on Crown Lands in the Keno Hill area, was restarted in November 2020. Publication of *Quartz Mining Act* royalties paid by both mines is expected to show a significant boost in the value of *Quartz Mining Act* royalties collected by the Yukon Government for 2020 and later years.

Companies operating in Yukon's mining sector contribute to Yukon Government revenues with payments for mining fees for recording grant and license applications, recording work for renewal certificates, claim tags, claim transfers, quartz leases, abstracts, registered documents, payment in lieu renewals, groupings, land use applications and security payments related to quartz and placer tenure. On the basis of data compiled by Yukon Energy, Mines and Resources, the value of mining fees paid by Yukon mining companies totaled \$28.1 million over the eleven years between 2007 and 2017, an average of \$2.6 million per year.

All Self-Governing Yukon First Nations share in resource royalties collected by the Yukon Government in respect of mineral production on Crown Lands and Category 'B' Lands under the Chapter 23 provisions of the Umbrella Final Agreement. Under current Chapter 23 provisions, however, the majority of *Quartz Mining Act* royalties have been paid to one Yukon First Nation in respect of a mine located on Category 'A' Lands. As a result, only a small amount of resource royalties collected in respect of Crown and Category 'B' Lands has been available to share with all other Self-Governing Yukon First Nations.

With placer and quartz royalty revenues collected by the Yukon Government in respect of mineral production on Crown Lands and Category 'B' Lands averaging less than \$100,000 per year, only a negligible amount of royalties have been available for sharing with the Yukon's 11 Self-Governing Yukon First Nations. Yukon First Nations under the *Indian Act* and Transboundary First Nations have not received any share of resource royalties.

It is important to note that increasing royalty rates or changing allowable deductions in order to collect a higher level of royalty payments is in itself not enough to ensure sustained and

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sizable resource revenues for Yukoners. In order for mining royalty payments to rise significantly, new financially robust mines must be opened, and existing mines must be profitable. Changes to the Yukon's resource royalty scheme should include a review of the current royalty arrangement with Canada and must be balanced within a package of measures to maximize Yukon socio-economic returns from resource development.

Any changes to royalty and tax structures should be carefully considered to ensure Yukon's mining sector is competitive relative to other jurisdictions. For example, possible royalty and tax structure changes must be bench-tested before being implemented to assess the impacts of variability in mineral prices, exchange rates and operating costs. Royalty and tax regimes that are too rigid can result in mine closures and even bankruptcies, which can have adverse ripple effects in the broader economy.

The MDS Panel intends that the overall bundle of regulatory streamlining initiatives, revenue measures and exploration and development incentives will collectively benefit most Yukon mining industry entities. Continued mining industry competitiveness will require ongoing recognition that Yukon's relatively remote location and cold climate result in higher capital and operating costs than is the situation in most other jurisdictions. Adjustments to the bundle of incentives, revenue measures and regulatory initiatives are to be made through detailed discussions with First Nation governments and the mining industry.

To achieve Strategic Priority No. 2, the MDS Panel recommends that the Yukon Government:

- Adopt the 2017 recommendation of the Yukon Financial Advisory Panel that the Yukon Government:

Undertake a comprehensive review of resource-sector policies, with a particular emphasis on ensuring fair and efficient royalty rates, fee structures, permit and licensing costs, tax exemptions, and minimum work requirements. (Download available here: <https://yukon.ca/en/yukon-financial-advisory-panel-final-report-2017>)

- In consultation with Yukon's mining industry, modify Yukon's quartz royalty and fee regime in the modernized mineral resource legislation to ensure all Yukoners receive fair, meaningful and transparent financial returns from mining activities while also ensuring competitiveness with other Canadian jurisdictions.
- In consultation with Yukon's mining industry, implement the Yukon Financial Advisory Panel's suggestion to introduce a profit-based placer gold royalty. Yukon citizens can then receive rents due from the extraction of a publicly owned resource by profitable

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mine operators while placer operations that are truly marginal in terms of profitability will continue to pay essentially no royalties. Consideration should be given to a placer royalty system that favours local operators over non-Yukoners.

- In collaboration with the federal government (e.g., CanNor or other public sector agencies), initiate and fund baseline socio-economic studies for all Yukon communities so that information is readily available to support socio-economic assessments of mining or other major projects. The socio-economic data produced by the studies should be accessible by all levels of government and could be used to inform the completion of the remaining Regional Land Use Plans (Dawson, Northern Tutchone, Kluane, Whitehorse, and Teslin).
- As part of the socio-economic baseline studies, evaluate the readiness of individual Yukon communities to benefit from resource development activities by assessing:
 - current community interest and desire to host resource development activity within proximate Traditional Territories, including the potential hosting of itinerant workers.
 - the current capacity of the community to effectively capture significant benefits from resource development activities.
 - the interest and pathways for skill development for community members joining the labour market.
 - possible impediments to community participation in mining projects, such as inadequate infrastructure in the form of housing, child care, education, training and health care.
- In collaboration with the Yukon Chamber of Commerce, the Yukon Chamber of Mines and the Klondike Placer Miners' Association, sponsor a study of the direct and indirect costs and benefits of mineral development in the Yukon that goes beyond conventional measures such as Gross Domestic Product.
- Consider creating an alternate avenue for Yukon citizens to receive rents due from the extraction of publicly owned resources through the imposition and collection of an industrial water tax by the Yukon Water Board (or another delegated authority). The industrial water tax would apply to all industrial water users (not just mine operators) and for the first time place an economic value on Yukon's water resources and provide a new resource revenue source to be shared with Yukon First Nations, similar to the approach recently adopted in British Columbia. Placing a non-zero value on Yukon's extensive fresh water resources will also help to advance opportunities to adapt to the effects of climate change in Canada's north. The industrial water tax could be designed

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to encourage innovative and sustainable resource extraction activities. For example, the tax rate could be made variable and adjusted according to water quality at producing quartz and placer mines such that the lower the volume and higher the quality of discharged water, the lower the effective rate of tax. Extensive consultation should occur with placer miners and operators of quartz mines before an industrial water tax is introduced to ensure that all implementation-related issues are well understood.

- Ensure that Yukon First Nations receive a fair financial and social return from mining and exploration within Traditional Territories by strengthening the connection between revenue flows and Indigenous interests in the land itself by:
 - introducing, in collaboration with Self-Governing Yukon First Nations, a First Nation Resource Charge based on Self-Governing Yukon First Nations power of direct taxation. The First Nation Resource Charge would add to the limited amount of resource revenues being collected by the Yukon Government and shared with Self-Governing Yukon First Nations. The First Nation Resource Charge would involve a set of pre-specified charges (e.g., a water use fee or land rental fees) and be linked to tax room currently occupied by other governments.
 - Similar Resource Charges are currently collected by many First Nations in British Columbia. The First Nation Resource Charge would help to offset costs incurred by First Nations to review mineral project proposals and monitor mining and exploration activities. If First Nation Resource Charges are introduced, the Yukon and federal governments will have to consider reductions to taxes and fees they collect from the mineral sector, to ensure that the competitiveness of the Yukon's mining sector is not eroded.
 - creating statute-based templates requiring project proponents to negotiate bilateral participation and benefit agreements with affected Yukon First Nations. Advanced-stage quartz exploration and development activities (e.g., Class 3 and higher) would require participation agreements. Quartz mine development, construction, production and decommissioning activities would require impact and benefit agreements. All benefit agreements would include a range and depth of measures proportional to the scope of the exploration or mine development project. The templates would be guidelines designed to simplify negotiations and would not be intended to limit the flexibility of proponents and First Nations to reflect the size and scope of the project and the unique needs, values and priorities of First Nation governments and citizens. Measures could include opportunities for training, employment, contracting, community infrastructure and equity project participation. Establishment of a legislated and independent dispute resolution body with a mandate to adjudicate any negotiation impasses

- will streamline the drafting of benefit agreements. Such benefit agreements are becoming the norm across Canada and many leading examples already exist in the Yukon. Negotiation and implementation of benefits agreements for all advanced exploration and development projects will help ensure collaboration between First Nations and developers and also help to build trust and understanding.
- improving the flow of information between placer miners undertaking exploration activities in previously un-mined areas and Yukon First Nations prior to the submission of a Form 1 project proposal to the Yukon Environmental and Socio-economic Assessment Board. Improved information sharing will allow Yukon First Nations to share environmental and social concerns and take part in discussions on possible mitigation measures. Discussions will also allow miners and First Nations to identify possible business and employment opportunities. Early engagement will also help build trust and assist placer operators to prepare more responsive project proposals for the Yukon Environmental and Socio-economic Assessment Board, possibly reducing project assessment delays.
 - designing, in collaboration with Yukon First Nations, measures to enable Yukon First Nations to acquire equity positions in quartz mining projects and related infrastructure initiatives. Seek funding support from Canada and model the measures on initiatives such as the Ontario Aboriginal Loan Guarantee Program and the Alberta Indigenous Opportunities Corporation.
 - exploring, in collaboration with the federal government (e.g., CanNor or other public sector agencies), joint venture and public-private partnership opportunities with Yukon First Nations for investments in energy and infrastructure projects that enable mineral development and provide First Nations with opportunities to acquire secure returns on equity investments.
- Ensure that all Yukoners receive a fair fiscal return from mining and exploration within the Yukon by retaining and circulating more of the potential financial benefits from mineral development activities by:
 - introducing a tax measure, similar in intent to the measure enabled by the Northwest Territories *Payroll Tax Act*, that applies to all non-resident workers in the Yukon to better recognize the location of the jurisdiction where the income was earned. Currently, personal income tax on the earnings of non-resident workers living outside the Yukon accrues entirely to the province or territory where the worker is resident on December 31 of the year. If a measure similar to the NWT payroll tax were to be implemented, payroll taxes paid by Yukon residents would be subtracted from income taxes due but would not generate a tax credit in other jurisdictions, thus creating an incentive for workers to reside in the Yukon. The

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Yukon Government could subsidize the cost of the payroll tax in the initial years until such time as Yukon-based training programs delivered through the Centre for Northern Innovation in Mining have increased the supply of skilled local labour so that most workers at Yukon mines are Yukon residents. A payroll-type tax measure would also support the efforts of mining companies like Victoria Gold that are striving to repatriate Yukon-raised workers. Alternatively, federal tax collection methods could be modernized to allow the allocation of personal income tax revenues between more than one jurisdiction, similar to how corporate income taxes are divvied up according to the permanent establishment rules.

- enhancing procurement opportunities for Yukon businesses and First Nation Development Corporations using an approach similar to that used in the Northwest Territories which genuinely favours northern businesses while respecting the same trade agreements to which Yukon must abide. Acknowledge and act on the exemptions already contained in Canada's interprovincial and international trade agreements specific to municipalities and Indigenous entities. Make the case for the abandonment of the current Yukon Government approach of ten \$1 million exemptions (which by design can only benefit less than 0.5% of Yukon businesses) to broaden the reach of procurement-enabled business support.
- Ensure that future generations of Yukoners receive a fair fiscal return from the extraction of non-renewable resources by establishing a Yukon Resource Heritage Fund. The Fund would allow for the intergenerational transfer of wealth such that some of the royalties, fees and payroll taxes derived from non-renewable resource extraction are paid forward to provide opportunities for future generations of Yukoners.

A Yukon Resource Heritage Fund would provide a visible link between mining activity and long-term prosperity in Yukon, thereby enhancing sustainability and the industry's social license to operate. The Fund could be used to minimize social and economic impacts resulting from the boom-bust cycles of the mining industry.

- Since 2012, the Yukon Government has had the option to change its approach to resource revenue offsets under territorial formula financing arrangements to match the approach used in the Northwest Territories. Under the Yukon's current arrangements, the offset rate is 0% on the first \$6 million and 100% thereafter, meaning that the maximum amount of resource revenues the Yukon can collect and keep is \$6 million, an amount too low to capitalize a Yukon Resource Heritage Fund.

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Under the NWT fiscal arrangements, the offset rate is 50%, capped at 5% of the Gross Expenditure Base used to calculate the Territorial Formula Financing grant.

Implementing the NWT approach would significantly raise the cap on the amount of resource revenues the Yukon could potentially collect and keep. With the Yukon's Gross Expenditure Base valued at \$1.3 billion in 2020/21, the cap would increase to approximately \$65 million, opening the door to a financially viable Yukon Mining Heritage Fund without increasing the royalty burden faced by industry.

Exercising the option to change resource revenue offsets will become increasingly attractive for the Yukon as more and larger mines come into production. It also alleviates a disincentive to mine development because more of the benefits of mining are retained in the Yukon to help pay for public services.

**Strategic
Priority
No. 3**

Establish effective, efficient and transparent environmental socio-economic assessment and regulatory processes.

In a globally competitive mining industry, a transparent and predictable environmental assessment and regulatory system is critical to attracting financing for mineral exploration and development. Conversely, regulatory complexity and uncertainty can lead to unanticipated delays in project assessment and deter investment in exploration and development.

Borne of the modern treaties with Yukon's Self-Governing First Nations, the Yukon's environmental and socio-economic assessment process was advertised as being part of an integrated "one window" approach to environmental assessment and resource regulation. As the Yukon Water Board is not a Decision Body under provisions of the *Yukon Environmental and Socio-economic Assessment Act*, the Yukon continues to feature a dual-window approach to assessment and resource regulation. The lack of harmonization can result in overlaps and/or gaps in assessment and regulatory processes and extended project review timelines.

As all placer and quartz mining projects require water licenses, the Yukon's mining sector is disproportionately affected by the duplication of regulatory efforts. Increasingly louder calls by the mining industry to streamline the Yukon's environmental and regulatory processes will not solve the underlying dual-window structural issue.

Recent studies commissioned by the Yukon Minerals Advisory Board (Price Waterhouse Coopers) and the Yukon Government (Gowlings) polled industry representatives and made

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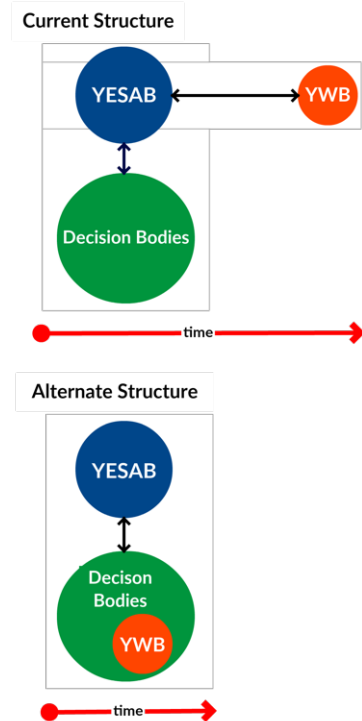
recommendations aimed at improving the Yukon's regime for resource regulation. While neither study involved engagement with Yukon First Nations or the Yukon public, the MDS Panel found both studies to include potentially useful measures to modernize and coordinate existing regulatory pathways.

In addition, designation of the Yukon Water Board as a Decision Body by the Yukon Government will go a long way to establishing a more integrated and expedient approach to the environmental and socio-economic assessment and regulation of Yukon mineral exploration and development projects. A more integrated approach will rapidly advance constructive discussions about how to streamline the Yukon's environmental assessment process for mineral exploration and development projects in a way that is aligned with Yukon's modern treaties. A greater emphasis on utilization of established best practices would also streamline environmental assessments and preparation of decision documents.

Beyond the question of assessment and regulatory efficiency, the MDS Panel also suggests that more attention must be focused on monitoring and inspections following the issuance of permits. Additional financial and human resources are needed to achieve consistency and transparency for inspection and monitoring activities.

Effective progress towards reconciliation with Yukon First Nation peoples will require meaningful engagement with Yukon First Nations and communities beyond the initial permitting stage. Having permits in hand should not mean the end of conversations started to acquire mining and land use permits. Early and ongoing conversations, including First Nation roles in the monitoring and inspection of mining activities, help build trust and understanding and are important steps in engaging and consulting with Yukon First Nations. The Yukon Environmental and Socio-economic Assessment Board's mandate to address potential impacts on asserted Aboriginal Rights and Title also needs to be clarified.

More focus and financial support are required to bring environmentally positive technological innovations to mine sites. Remote technologies are changing how the environmental integrity of mining projects can be monitored in real time to avoid or reduce adverse environmental impacts. Applying new technologies and solutions, including solutions developed at Yukon



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University's Research Centre, will help make the Yukon a leader in practical and effective mining and remediation practices.

To achieve Strategic Priority No. 3, the MDS Panel recommends that:

- The Yukon Government should amend the *Waters Act* to designate the Yukon Water Board as a Decision Body under the *Yukon Environmental and Socio-economic Assessment Act* to establish a more coherent, integrated and harmonized approach to the environmental and socio-economic assessment and regulation of mineral exploration and development. The designation is expected to result in a more transparent process and also address financial and human resources capacity concerns noted by many engagement participants through elimination of the overlaps and duplication of Yukon Environmental and Socio-economic Assessment Board and Yukon Water Board processes. The MDS Panel does not contemplate that designating the Yukon Water Board as a Decision Body would necessitate changes to the Board's independent, quasi-judicial regulatory stature.
- The Yukon Government should implement the recommendations in the recent PricewaterhouseCoopers report on regulatory duplication prepared for the Yukon Minerals Advisory Board. Key recommendations consider:
 - improvements to project coordination between the Yukon Government, the Yukon Water Board and the Yukon Environmental and Socio-economic Assessment Board by having the Yukon Government establish a major project manager role to work with quartz project proponents from the time of project proposal submission through to license issuing. The project manager would help proponents understand the assessment and regulatory processes and promote coordination and understanding among assessors and regulators within the public sector.
 - clarified project scoping by the Yukon Environmental and Socio-economic Assessment Board to reduce the potential for overlap and duplication between assessment and regulatory processes.
 - clarified adequacy requirements for project proposals by establishing clear guidelines as to what is required for an "adequate proposal" and clear guidance on when environmental and socio-economic effects are to be considered significant.
 - improved communication opportunities between project proponents and staff from the Yukon Environmental and Socio-economic Assessment Board and the Yukon Water Board, including possible amendments to the *Waters Act* to

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remove restrictions on Yukon Water Board members and staff to communicate directly with project proponents.

- In addition to the enhanced project coordination role proposed by PricewaterhouseCoopers for Major Projects Yukon (for Executive Committee screenings) or Mining Lands Officers (for Designated Office evaluations), it is recommended that the project coordination role of Major Projects Yukon be expanded to provide comprehensive information to proponents to facilitate positive First Nation engagement and consultation processes, including arranging introductory meetings between proponents and appropriate First Nation representatives when requested to do so.
- The Yukon Government address the effects of having delegated decision-making authority to more than 12 departments and branches for purposes of Designated Office evaluations. Greater clarity of roles and responsibilities among the Yukon Government's delegated Decision Bodies, the Yukon Environmental and Socio-Economic Assessment Board and the Yukon Water Board is required if assessment efficiency is to be improved. To help achieve greater clarity, the Yukon Government, Yukon Environmental and Socio-Economic Assessment Board and the Yukon Water Board should create project charters and swim lane diagrams at the start of every mine project assessment that define roles, responsibilities and timelines for each agency and the proponent to follow.
- Upon completion of each project, the swim lane diagram and decision documents should be audited by the Yukon Government to identify and prevent mandate creep among Yukon's assessment and regulatory authorities.
- The Yukon Environmental and Socio-Economic Assessment Board should complete and implement the "pre-submission engagement" process currently under development for major projects, in part to help surface any competing priorities. Annual independent audits of the efficacy of the "pre-submission engagement" process should also be conducted to assist both government regulators and project proponents to achieve best-practice standards.
- The Yukon Environmental and Socio-Economic Assessment Board should introduce measures to ensure greater uniformity in Designated Office evaluations and to avoid unintended regulatory creep. Any measures introduced should be preceded by clear communications with the mining industry to allow sufficient time to adapt any project

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proposals under development. Assessments already underway should be conducted under prior assessment practices.

- The Yukon Environmental and Socio-Economic Assessment Board and proponents should adopt the Gowlings WLG 2020 recommendation to broaden the scope of a proposed project to include likely future minor modifications in order to reduce reassessment possibilities for minor project amendments.
- In conjunction with the Yukon Environmental and Socio-Economic Assessment Board and the Yukon Water Board, the Yukon Government should undertake a legislative and regulatory review of the feasibility of establishing a mining camp or zone approach to mining development project assessment and permitting. Such a holistic approach would mitigate the need for Decision Bodies to ask the Yukon Environmental and Socio-Economic Assessment Board to review minor changes to an established mining plan for a camp or zone to permit development of satellite deposits, which may be newly discovered or have become economic in response to higher mineral prices. Such an approach would be restricted to changes involving similar types of mineralization and host rocks, minor changes to the mining or extraction processes and changes which do not result in cumulative environmental impacts that exceed limits set by the decision documents for the established mining plan. Project operators would then be able to capitalize on periodic increases in mineral prices and optimize mining plans without compromising the environmental integrity of a project.
- The positive and negative socio-economic impacts of major mining projects should be addressed by including a requirement for improved assessment of cumulative effects and heritage impacts, either by the Yukon Environmental and Socio-Economic Assessment Board or by Decision Bodies.
- Regulators should be empowered to more effectively address positive and negative socio-economic considerations in licenses and permits in the modernized mineral resource legislation. The accompanying licencing regulations must also enable the use of innovative practices and technologies that support outcome-based, rather than prescriptive, environmental performance indicators.
- While the efforts to improve the transparency of mining inspections by posting the results of water licence-related inspections on the WATERLINE website are acknowledged by the MDS Panel, Yukon Energy, Mines and Resources should go further and post all mining inspection reports online. The online reports, whether posted on WATERLINE or another web-based site, should be project-specific and

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include warnings issued and the operator's compliance/non-compliance with mine permit conditions. Postings should specify whether warnings and compliance issues are acute or preventative in nature and if not acute, should be delayed a reasonable period of time so that compliance or non-compliance with recommended mitigation or changes to procedures can be reported simultaneously.

- Performance standards that apply across Yukon and First Nation governments and require regular, timely and transparent inspections and monitoring of mine operations be established and enforced. Introduce in-field digital data collection and reporting technologies to support the achievement of the performance standards and timely web-based reporting to the public. Provide training support to inspectors to ensure effective adoption of the new performance standards.
- Minimum qualification and experience standards for inspectors (Yukon Government and Yukon First Nation governments) be established and consistently applied to ensure mining inspections are conducted in a fair and consistent manner, especially for large-scale and complex projects.
- A range of enforcement tools, including summary convictions, be built into the modernized mineral resource legislation to allow inspectors to effectively and efficiently address non-compliance with licenses and permits.
- Clear lines of accountability within Yukon Energy, Mines and Resources be established to support context-specific and common-sense decisions made by front line staff including mining inspectors.
- Yukon Energy, Mines and Resources be provided with the resources to evaluate and refine approaches to the co-inspection of permits and mining activities by Yukon Government and Yukon First Nation inspectors, and to expand the co-inspection joint stewardship pilot project to include all interested First Nations.
- Provisions for the training and the full delegation of regulatory enforcement tools from the responsible Yukon Government Minister to qualified Yukon First Nation inspectors should be built into the modernized mineral resource legislation.
- Any residual responsibilities for the promotion of mineral development should be transferred from Yukon Energy, Mines and Resources to Yukon Economic Development. The mandate transfer will address the conflict of interest inherent in the same department have responsibility for both mineral sector development and

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regulation. Reinforce the mandate change with a public communication initiative to improve transparency and competitiveness with other mining jurisdictions.

**Strategic
Priority
No. 4**

Operate within an attractive investment climate which supports competitive, innovative and socially-responsible mineral development enterprises.

The Yukon has tremendous mineral resource potential, but this alone is not enough to guarantee that investment and mineral development will occur. Modernized Yukon mineral resource legislation, respectful and collaborative relationships with Yukon First Nations as well as improved regulatory clarity and certainty are all prerequisites for the Yukon to compete for global investment capital. Innovation must be fostered and changes to the mineral royalty, fee and tax regime must be carefully considered to ensure that Yukon's mining sector is not placed at a disadvantage compared to other Canadian jurisdictions.

Investors hate uncertainty. In recent years, a number of legal and regulatory decisions have resulted in staking moratoriums and delays to Yukon exploration and development projects. Certainty of land tenure and the belief that economically viable projects can proceed with reasonable mitigations are fundamental to investor confidence. Agreements in some form must be signed with Yukon First Nations that have not yet signed modern treaties to resolve issues of mineral tenure and development in their Traditional Territories and to facilitate land use planning. Until land use plans are completed in all parts of the Yukon, mining industry proponents and investors will remain uncertain as to whether or not there are potentially unmitigatable concerns about any given exploration area or mining project. Completion of land use planning will also clarify what constraints might be placed on free entry and give governments and industry greater confidence as to which roads are likely to be needed to support mineral development and which areas need to be avoided.

During the course of engagement, the MDS Panel heard concerns from all corners about the current mineral claim situation in the Yukon. Some presentations from industry suggested that large, relatively unexplored claim blocks often include areas that other explorers might wish to look at for different minerals or deposit types. Others observed that rock-bottom annual work requirements mean that little work is needed to maintain claims in good standing and that low annual payments-in-lieu of work often makes it more cost effective for owners of small claim blocks to do no work at all.

Some mineral deposits and highly prospective placer ground have been held for many years while receiving little or no work. If more claims were to expire, more prospective ground would

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be available for staking by new entities that might develop it or at least explore the targets faster and more thoroughly. First Nations people and others expressed concern that staked claims diminish the value of the land for other uses and that some claims threaten wildlife habitat and cultural sites. Others pointed to claims being staked simply so that roads can be constructed more easily or so that cabins can be built without proper authorization.

It is clear that the Yukon can do much more to bolster the investment climate for the mining industry. Cross-industry initiatives can help make the Yukon a sought-after destination for national and international investments in sustainable and ethical mineral exploration and development. Investors and regulators world-wide are paying increasing attention to the environmental and social policies and practices of companies in all economic sectors, especially companies involved in resource extraction.

One of the most critical factors identified by participants in the Yukon Mineral Development Strategy engagement process was the need for clarity around land access to mineral claims. Improved certainty is required concerning when and where roads and trails can be constructed, conditions of use, and what funding, if any, is available from the different levels of government to assist with construction.

Infrastructure gaps were also noted in many high potential mineral zones in the Yukon. The gaps include the lack of haul roads and cost-effective electrical energy as well as incomplete communications infrastructure. Assured tide-water port access is also an issue that affects nearly all producers and potential developers of mineral resources in the Yukon. The infrastructure gaps have significant impacts on capital and operating costs for companies undertaking exploration and development activities and are considered to be serious impediments to mine development. Infrastructure upgrades would likely be of benefit to all Yukoners, as has often been the case in the past.

The need for incentive programs and supportive taxation regimes was highlighted by engagement participants as being important contributors to the creation of an attractive and competitive investment climate in the Yukon. Participants also referenced the need for reliable, readily accessible and integrated environmental science, heritage and geoscience data. Public-domain geoscience maps, data and reports reduce the cost and risk of exploration by allowing prospectors and companies to avoid areas with high environmental and cultural sensitivity. The same information allows prospectors and companies to identify areas of high mineral potential, reducing the risk of spending time and money exploring sensitive and less prospective ground. Integration of geoscience information with other data sets also informs government policy decisions for land use planning, infrastructure development and environmental protection.

Creating an investment climate which supports competitive and innovative mineral development enterprises requires a multi-faceted approach involving industry support, modernized land access and enhanced strategic knowledge. A positive investment climate will continue to require some form of free entry in specific parts of the Yukon. As modified forms of free entry are found in every jurisdiction in Canada home to a viable mining industry, the entire removal of the free entry approach will be seen by investors as a major impediment to mineral exploration and development.

To achieve Strategic Priority No. 4, the MDS Panel recommends that the Yukon Government:

Land Access and Planning

- Direct additional federal resources to expedite the completion of the remaining Yukon Regional Land Use Plans envisioned in the Umbrella Final Agreement: Dawson (underway), Northern Tutchone, Kluane, Whitehorse, and Teslin. To the extent possible, the remaining regional planning processes should be undertaken concurrently as a top priority for the Yukon government, in collaboration with Yukon First Nations and the Yukon Land Use Planning Council. Until the full set of regional land use plans are completed, considerable opposition to mine access and haul road construction, including some roads proposed under the Yukon Resources Gateway Project, is likely to be encountered.
- Assist the Regional Land Use Planning Commissions by ensuring ease of access to spatial data already collected (e.g., mineral, forestry, wildlife, heritage trails, historic sites) in a centralized geographic information system housed in a manner that utilizes compatible software and is accessible through a common platform. The data system could build on the excellent work underway at GeoYukon. Alternatively, the data warehouse could be administered by a Joint Secretariat structured as a special operating agency co-founded by the Yukon and Yukon First Nation governments, in respect of appropriate data sharing protocols. Ideally, the spatial data warehouse should include data already collected for environmental and socio-economic assessments by entities working on behalf of industry and Yukon First Nations with the objective of minimizing duplication of effort.
- Assist the Regional Land Use Planning Commissions by establishing time-limited staking moratorium parcels to tightly encompass specific high-value environmental, social and cultural attributes, identified by First Nation governments, upon initiation of a Chapter 11 regional land use planning process. The cumulative area of the preliminary parcel-specific staking moratoriums should not exceed 20% of a regional planning area.

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The staking moratorium should be lifted before completion of the Regional Land Use Plan, from all or part of any parcel which will be designated to allow mining development in the Final Regional Land Use Plan, so long as the Parties agree. A proactive approach to identifying staking prohibition zones at the beginning of regional planning processes will reduce a major source of uncertainty for the industry and a significant concern for First Nations, non-governmental organizations and Yukoners in general. A proactive approach will also provide economic stimulus by allowing exploration and development to proceed in areas that are deemed to have low sensitivity while regional land use planning is underway.

- Ensure that the Yukon Geological Survey has adequate financial and human resources to thoroughly research and document mineral potential in land use planning areas so that land use planners can fully assess the impact of restricting exploration and development in a given planning area.
- Make best efforts to ensure regional planning terms of reference consider the effects of bridge access prohibitions, and other impediments to access, which can render mineral claims valueless in areas of high mineral potential.
- Facilitate the negotiation and implementation of bilateral contract-based arrangements for the management of lands and permitting of resource development activities with First Nations, including Transboundary First Nations and First Nations that have not yet established a modern treaty to improve decision making clarity and certainty. The bilateral arrangements should provide for the development and approval of land use plans outside of the Umbrella Final Agreement process and support the Yukon Environmental and Socio-economic Assessment Board's authority and ability to assess activities that infringe on Aboriginal Rights and Title.
- Introduce clear, consistent and specific constraints on land access and the existing free entry system to provide greater investment certainty and enhance the mining sector's social license to operate. Legislative adjustments, to be developed collaboratively with First Nations and with the participation of the mining industry, must include:
 - free entry in areas where land use planning does not identify significant environmental or heritage sensitivity. Specific constraints on free entry should be established in sensitive areas and should also include prohibitions from prospecting and staking on Category B lands, lands held in fee simple title and lands within municipal boundaries, without the written consent of respective Yukon First Nation, landowner or municipality. Where existing claims are located in a restricted area and a compensation agreement cannot successfully be negotiated, the Yukon

- Government should offer to buy out the claims. Constraints on free entry should also extend to the staking of placer claims over existing quartz claims and vice versa without consent of the prior owner. Where overlapping placer and quartz claims exist, it will be up to the owners to settle any dispute regarding impairment of mining rights.
- clear regulations for the acquisition and ownership of tailings and waste rock from abandoned or decommissioned quartz mining activities, including assumption of liability for damages that might result from exploration and development of the tailings and waste rock.
 - continuation of the Class 1 exploration notice process, with adjustments to exclude from notification “low impact, non-mechanised” prospecting activities on Commissioners’ lands outside of Kaska Dena Traditional Territories. Such non-mechanized activities would include geological mapping, prospecting and geochemical and geophysical surveys conducted without line-cutting.
 - the addition of reconciliation to the list of reasons the Yukon Government may use to justify a prohibition of entry order for prospecting, staking and mining under the *Quartz Mining Act* and the *Placer Mining Act* and the new modernized mineral resource legislation. For example, Part 2 of the *Quartz Mining Act* provides the statutory authority to uphold socio-economic and environmental values and to respect modern treaty rights.
 - a reduction in the maximum size of claim groupings for quartz assessment filings.
 - an escalation of annual assessment work requirements over time for quartz and placer claims and a doubling of escalated payments-in-lieu for quartz claim assessment costs to encourage claim owners to explore more quickly and not sit on large claim blocks without assessing mineral potential.
 - the forced conversion of quartz and placer claims, 30 years after staking, to mineral leases subject to annual advanced royalty payments in place of annual assessment requirements. Existing claims would have a 30-year period starting upon adoption of the new mining legislation. The forced conversion eliminates the need for continued work disturbances on well-explored lands and establishes revenue streams that could be recaptured by the claim owner when production occurs.
 - a prohibition of claim staking solely for the purpose of securing road access or to link separate claim blocks.
- Increase funding for the Yukon Geological Survey to ensure that regional mapping and assessment of mineral resource potential are completed ahead of or in conjunction with land use planning initiatives. Funded activities should be expanded to include identification and categorization of wetlands and areas at high risk of instability due to climate change.

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- Authorise online map staking for quartz claims to bring the Yukon in line with staking practices now prevalent in Canada as part of the modernized mineral resource legislation. Online map staking will provide greater assurance of land tenure, improve safety and be less disruptive to wildlife during critical periods such as rut and birthing. Online staking will also help the Yukon Government to uphold its court-confirmed obligations to provide advance notice to Yukon First Nations of potential on-the-land exploration activities by requiring a delay between staking and initiation of work activities on the claims.
- Given the complexity of introducing a comprehensive electronic system to manage online staking, claims and mining land use, a phased approach for implementation is suggested. The initial phase should focus on quartz claim staking, claim management and permit submissions, followed by placer claim staking and management at a later date when it becomes technologically feasible. Look to the Newfoundland and Labrador system as an example of a tried, tested and improved approach that integrates claim staking, assessment and fee collection as well as inspection functions. The Newfoundland and Labrador system addresses the conversion of existing 2-post claims to digital claims. Assessment credits on two-post claims would automatically be transferred to the corresponding digital claims.
- The new online staking system must also feature mechanisms to prevent nuisance staking, such as a sizable cash deposit that could be reimbursed when actual work is carried out on the claim or held as security bonding for exploration activities.
- The current two-post on the ground staking system should be retained for placer claims for the foreseeable future. Continued use of traditional placer claim staking methods will accommodate the existence of irregular drainages not well-suited to digital grid staking and allow Yukon placer miners to benefit from already being on site in the Yukon. New placer mining legislation should contemplate technological advances that will permit digitization of placer post locations to provide claim owners with enhanced security of tenure if posts are disturbed or destroyed and to permit more efficient claim management.

Industry Support and Incentive Measures from the Yukon Government

- To improve certainty in the exploration industry, establish the Yukon Mineral Exploration Program in regulation and allocate core funding on a multi-year basis (e.g., three year periods) with provisions to increase exploration funding at low points in the mining cycle. Funding should favour prospectors and placer operators resident in the Yukon.

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- Continue to fund the Yukon Mining Alliance, the Yukon Chamber of Mines and the Klondike Placer Miners' Association who are actively promoting the Yukon's mineral potential at the national and international levels. Enhance funding support for Yukon First Nation participation in mining promotion activities.
- Consider designing and implementing tax-based exploration incentives for designated geographical areas of the Yukon, similar to Saskatchewan's Targeted Mineral Exploration Incentive program.
- Consider designing and implementing programs, in cooperation with industry and federal government entities, which further incentivize the use of innovative and environmentally responsible exploration and mining techniques, to compliment and build on existing programs delivered by Yukon University and the Yukon Government's Department of Economic Development.
- Investigate measures to create incentives to explore for critical metals (metals considered rare in supply or of strategic importance), especially metals used in green technology applications.
- Establish clear and fair compensation rules for existing mineral claims stranded by land use planning exercises and changes to the free entry system to protect the Yukon's reputation as a secure jurisdiction for mineral investment.
- Launch a nation-wide branding campaign under a banner of "secure and ethical mining" once an improved regulatory environment is established in the Yukon. The campaign should be created together with the Yukon Mining Alliance, the Yukon Chamber of Mines, the Yukon First Nations Chamber of Commerce and the Klondike Placer Miners' Association and be used to promote the Yukon as a progressive mining jurisdiction where mining rules are transparent and minerals are extracted in ethical and sustainable ways. Positive and successful collaboration between industry and First Nations should be a focal point of the branding campaign.
- In partnership with Yukon First Nation governments and industry, develop a focused business case to pursue federal funding support for infrastructure in the form of electricity generation, roads and telecommunications. The proposed Atlin Hydro Expansion project, a partnership between Yukon Energy and Tlingit Homeland Energy Limited Partnership, is an example of a potential project. Other energy innovation examples with application to the mining industry can be found in the *Canadian Minerals and Metals Plan*.

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- With federal and private sector support, establish a Yukon First Nation Equity Fund to offer low interest loans to Yukon First Nation Development Corporations for investment in energy, communication and other mining-related projects.
- Actively monitor tidewater access opportunities and maintain negotiating positions to secure port access in both Skagway and Haines, Alaska, as well as Stewart, B.C. In addition, proactively pursue strategic alliances with Yukon First Nation governments and industry to ensure the Yukon continues to have access to tidewater ports and international markets.

Strategic Knowledge

- Fund, create and support a central repository for all research reports and documents prepared by proponents for environmental assessments and regulatory reviews. Catalogue and manage the material using compatible software accessible on a single platform. The data repository could be managed by one or more Yukon Government departments or by a Joint Secretariat operated by the Yukon and Yukon First Nation governments. The data bases should be continuously updated and integrated with data sets from other governments and non-governmental organizations where possible.
- Dedicate additional resources to consolidate, standardize and store spatial data in a centralized geographic information system, hosted by either a Yukon Government department or a Joint Secretariat operated by the Yukon and Yukon First Nation governments. Types of spatial data sets to be standardized and stored in a repository include geology, geomorphology, mineral potential, vegetation, wildlife, heritage and when possible, Traditional Knowledge. The spatial data repository should build on the good start already made at the new GeoYukon portal which consolidates publicly-available land, resource and infrastructure data. Improved public access to the data will assist with project assessments, land use planning and regulatory processes. The comprehensive data base will also help mineral explorers utilize artificial intelligence to identify prospective exploration targets and pre-assess sensitivities that might exist within proposed exploration target areas.
- Build an electronic and comprehensive 'cradle to grave' mineral management data system within Yukon Energy, Mines and Resources that includes, or is linked to, a centralized repository of information for forestry, fisheries, water, placer claims, quartz claims, geographical surveys and heritage trails, etc.

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**Strategic
Priority
No. 5**

Demonstrate environmental responsibility and preparedness to adopt practices to address climate change including utilization of green energy measures.

Many people and organizations who engaged with the MDS Panel pointed to the positive impacts of mineral development in the Yukon. Benefits associated with the mining industry include high-income employment as well as direct and indirect economic contributions to the Yukon and national economies. Other specific examples of benefits included sponsorships, scholarships and other direct community supports. The need for minerals used to manufacture the products Yukoners use to support our high quality of life was also noted, especially critical minerals required for the green economy.

Many other people and organizations who engaged with the MDS Panel spoke to a legacy of negative environmental and social effects from past mining activities. Environmental damage and ongoing threats to ecosystems as well as costs to the public purse to clean up abandoned mines were mentioned many times. Water quality is of particular concern. The erosion of Indigenous rights and cultures and adverse social effects, such as violence against women and social and family disruption, were brought forward as examples of adverse social effects from all types of resource development activities.

Industry and its supporters indicated that individuals and companies involved in mineral exploration and development need to be held to high standards to overcome the negative aspects of the sector's legacy. Engagement respondents stressed that the mining industry has made, and is continually making, adjustments to how it operates. Improving the public profile of the mining industry is important so that the general public, especially youth, are informed about the current attitudes and practices in the industry. Increased public awareness extends to recognizing how Canada's climate is changing, especially in the north, and how the industry is reducing its climate change footprint. In addition, a robust financial security mechanism should form a prominent part of the new mineral management regime such that any future public liabilities from mining are minimized. The mechanism should clearly specify requirements on the collection, use and return of security and should also include the appropriate tools to assist regulators when security is not furnished.

To achieve Strategic Priority No. 5, the MDS Panel recommends that the Yukon Government:

- Finalize and implement progressive quartz mine reclamation policies that identify “best practices” and require legally enforceable mine closure plans that are backstopped with adequate and accessible security and bonding plans. The modernized mineral resource legislation must give the Yukon Government the authority to:
 - seize security and bonds before costs are incurred.
 - require an annual corporate profile to assess a company’s financial viability including the adequacy of its insurance coverage.
 - ensure long term maintenance and environmental liability will be vested in the operator.
 - develop bonding requirements on a project specific basis, which include clear conditions and time tables for bond recovery.
 - modify bonding requirements if changes in risk levels are identified during operation or after closure
 - design bonding requirements to encourage progressive reclamation.
- Develop clear and enforceable progressive reclamation policies with financial security provisions, including bonding, for advanced quartz exploration projects, particularly where bulk sampling will be pursued.
- Develop clear and enforceable progressive reclamation policies with financial security, including bonding, for physical disturbances related to placer mining.
- Direct Yukon Energy, Mines and Resources to assess the feasibility of retaining a portion of staking fees (established in the modernized mineral resource legislation) as security for future reclamation work. If claims expire and no reclamation is required, or if advance exploration is proposed and bonding is required, the security amount would be returned to the owner.
- Similar to British Columbia and the Northwest Territories, institute a requirement for all mineral claim stakers and owners to hold a Prospecting License. Creating a roster of active prospectors will allow for effective distribution of regulatory information and educational material (e.g., the Yukon First Nations 101 course) to ensure best practices are implemented from the earliest stages of mineral development. The Prospector License would be renewed annually so that up to date information could be used to improve the flow of information between claim holders and administrators and other parties who may want to contact the claim owner.

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- Recognize that financial security is already within the scope of the *Waters Act*, the *Quartz Mining Act* and the *Placer Mining Act* and establish an integrated process to eliminate any duplication of effort in administering financial security for advanced exploration and mine licensees.
- Work with industry and Yukon First Nations, through the Yukon Minerals Advisory Board and the Mining Memorandum of Understanding table, to expand the involvement of Yukon First Nation entities with the environmental monitoring of closed mines. Expanded involvement could create business opportunities and help to build trust in Yukon communities. Consideration should also be given to allocating a portion of a mine's closure security to support long term monitoring activities.
- End the practice of accepting perpetual care and maintenance of a quartz mine site as part of any mine closure plan. Project proposals must show how proponents are planning to return the mine site to conditions that are as close as possible to the pre-mining state with minimal environmental degradation and no ongoing risk to the environment. Final closure plans must be fully costed and reclamation security amounts sufficient to return the mine site to a balanced environmental state.
- Monitor cumulative effects by launching an initiative within the central research repository, managed by the Yukon Government or the Joint Secretariat with a mandate to track and publish the annual volume of functional land disturbances (surface disturbance and linear density) in Yukon. Make the functional land disturbance data available at no cost for use in environmental assessment and regulatory processes as well as monitoring of all Regional Land Use Plans.
- Build on the recent work led by the Yukon Government and finalize the policy for extractive resource activities in Yukon wetlands founded on the recognition that some wetlands cannot be returned to a pre-disturbance state within seven generations. Fund a second program within the Yukon Geological Survey, with input from non-governmental organizations, to locate, categorize, map and monitor Yukon wetlands.
- Consider initiating public consultations on whether the extraction of certain minerals should be prohibited in the Yukon, specifically uranium and coal.
- In collaboration with the Department of Fisheries and Oceans Canada, continue to undertake comprehensive aquatic surveys of strategic rivers and tributaries where exploration has not yet occurred to determine whether salmon habitat would be at risk if mining was permitted. The results of the surveys would add to data already collected

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under the Placer Stream Classification Model currently used as part of the Fish Habitat Management System for Yukon placer mining.

- Acknowledge and address the community-level tension that follows from the creation of resource roads by amending the Yukon’s Hunting Regulations to restrict hunting via new roads. Collaborate with Yukon First Nation governments to determine whether parallel restrictions could be established for Yukon First Nation hunters.
- Expedite the completion and approval of the Resource Roads Regulation to provide a modern framework for management and enforcement of resource roads from start-up construction and use through to closure and remediation.
- Direct Yukon Energy (through a policy directive, regulation or an Order-in-Council to the Yukon Development Corporation) to assist project proponents to implement renewable energy options such as solar, wind and biomass to advance the objectives of *Our Clean Future*. Where possible, facilitate the connection of renewable electricity infrastructure at mine sites to the Yukon’s electricity transmission grid.

**Strategic
Priority
No. 6**

Provide support for leading edge workforce development and public awareness initiatives.

One of the most significant benefits to Yukoners from the Yukon’s mineral industry over past decades has been the creation of thousands of high-paying jobs. Further multiples of jobs have been created through indirect employment in the firms supplying goods and services to miners and explorers.

Less than half of the Yukon’s mineral industry’s workforce currently resides in the Yukon. Benefits accruing to the Yukon in the form of federal transfers, tax revenues, induced employment and local business revenues are not being maximized. Developing the Yukon workforce is critical to ensure that benefits from the mining and exploration industry remain in the Yukon in the short and long term and are circulated throughout the Yukon’s economy. Future workforce initiatives will need to recognize that First Nation people and women have not traditionally benefited from employment opportunities in the mineral industry to the same extent as other workers. As highlighted by the effects of the COVID-19 pandemic on women in the workforce, the new workforce initiatives will need to be inclusive and embody the social and cultural needs of employees.

Workers need affordable places to live and access to reliable public services. The Yukon and municipal governments will have to make developable lands available and incentivize home

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construction if new workers are to be attracted to the Yukon and to ensure that locals are not crowded out of the housing market. Health and education services will also have to be enhanced in some communities to meet the demands of new resident workers.

The minerals industry has changed dramatically over the past few decades. Unlike the 'pick and shovel' operations of the distant past, modern mining is a highly technical enterprise. Advanced technologies have made exploration far more precise and mineral production has become far more automated. Education and training are the cornerstones of increased participation in the mineral sector workforce by Yukon people.

It is also apparent to the MDS Panel that the level of understanding about mining careers, and mining in general, is uneven at best and that perceptions are coloured by the negative legacy of past mining practices. The public deserves to have a better understanding of the different phases of the mining cycle, the inherent environmental and social risks at each phase and the changes that have been made in recent years to mining practices and regulatory oversight to mitigate those risks. An improved understanding of the mineral industry is in the interests of not only the public but also industry itself, Yukon First Nation governments, non-governmental organizations and regulatory agencies.

In short, greater efforts must be made to advance "mineral literacy" – notably initiatives to build public awareness of the mineral industry activities and benefits, including the introduction of a mining component in the public education curriculum. While it is recognized that there have been public awareness initiatives in the past (such as the Yukon Chamber of Mines campaign, "Our Yukon - In it Together"), the MDS Panel believes that a more concerted, coordinated and sustained effort would be beneficial. Better awareness will lead to increased public knowledge and more informed decision making.

To achieve Strategic Priority No. 6, the MDS Panel recommends that the Yukon Government:

- Create a coordinated communications and education strategy to inform Yukoners of the foundational importance of the mining sector. The strategy should be led by Yukon Economic Development in partnership with umbrella industry organizations (e.g., the Yukon First Nation Chamber of Commerce, the Yukon Chamber of Mines and the Klondike Placer Miners' Association and the Yukon and Whitehorse Chambers of Commerce). The strategy should also strive to enhance public awareness of First Nation involvement in the mining sector by providing opportunities for First Nations to share their own stories of successful mining ventures and positive collaboration with mineral explorers and developers.

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- Direct the Department of Education to ensure that Earth Science and Geology are well represented in Yukon's school curriculum, and government and industry should collaborate to ensure that students from K to 12 are aware of career opportunities in mineral exploration, mining and environmental monitoring. In addition, the Yukon Government should work with the Centre for Northern Innovation in Mining to help funnel interested high school students into local science and trades programming that bolsters the mining industry and keeps expertise within the territory. Engaging early with children and youth is key to opening the sector to a more diverse range of participants and getting young people interested in the innovative, high-tech careers that will build the mining sector of the future. Yukon Women in Mining should be approached to help design programs that highlight opportunities for women in the mining industry, including mining service and support businesses.
- Yukon Economic Development, together with the Yukon First Nations Chamber of Commerce, the Yukon Chamber of Mines, the Klondike Placer Miners' Association and representatives of mining and exploration companies, should host annual open houses in communities to discuss mining employment opportunities with youth and other interested individuals in order to attract new workers to the Yukon's mining industry.
- Develop a response outlining how the Yukon Government as a regulatory authority will support the implementation of the recommendations of the Yukon Advisory Committee on Missing and Murdered Indigenous Women, Girls and Two-spirit+ people to:
 - eliminate violence related to development projects in both workplaces and communities.
 - increase the workforce capacity, mitigate negative impacts, and improve the positive benefits for Indigenous women and Yukon communities.
- Develop and implement, with quartz and placer industry partners, including Yukon Women in Mining, an Action Plan to attract and retain women in mining careers, including innovative measures for work rotation schedules and childcare options.
- Develop multi-media educational materials addressing the topic of cultural sensitivity in the context of mining and exploration. Request that the materials be required viewing for all operators of mines and advanced exploration projects, as well as Prospector Licence applicants.
- To improve awareness about the full range of employment opportunities in the mining industry, update and digitally distribute the Yukon Mine Training Association's 2008 publication *Yukon Mining Careers Handbook*. Create greater public awareness about the

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spin-off jobs in the mining industry such as legal, accounting, bookkeeping, environmental monitoring and human resources services. Highlight that many skills related to exploration and mining are directly transferable to other career paths.

- Provide project funding to the Centre for Northern Innovation in Mining at Yukon University to develop a comprehensive Yukon Mining Innovation Roadmap. The Yukon's mining sector is undergoing a technology-driven transformation led by automation, artificial intelligence, digitization and climate change adaptation. The mining innovation roadmap will serve to coordinate and accelerate the transformation and ensure that emerging technologies are utilized effectively to reduce the industry's environmental footprint in the Yukon.
- Direct and resource Yukon Economic Development, in collaboration with Yukon Energy, Mines and Resources, to expand its program to encourage innovative technologies, specifically targeting new concepts for less invasive exploration practices, progressive reclamation methods and wetlands rehabilitation practices.
- Develop a readiness plan to accommodate growth in demand for housing and public services in Yukon communities proximate to mine developments.

Looking Forward

Based on its assessment of Yukon First Nation and stakeholder input, as well as its own collective experience, the MDS Panel has recommended a wide array of actions needed to support balanced and sustainable mineral development in the Yukon.

The MDS Panel is grateful to have had the opportunity to engage with so many Yukon people, governments and organizations and the Yukon mining industry in the preparation of the Yukon Mineral Development Strategy and Recommendations. We are confident that the depth and breadth of engagement undertaken over the past 16 months has resulted in a series of recommendations that will resonate with all Yukoners and lays a solid foundation for the collaborative and place-based development of Yukon mineral resources in a way that will benefit all Yukoners.

We note, however, that full, effective and successful implementation of the recommended actions will require transformational leadership by the Yukon Government. In the division of powers between the Yukon Government and Yukon First Nation governments, the Yukon Government alone has been delegated administrative responsibility for the Yukon's mineral

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resources by Canada, on behalf of all people in the Yukon. Aligning the mineral development aspirations of all Yukon people will require the Yukon Government to function as a coherent and singular entity. The whole of Yukon Government must embrace the principles of reconciliation and work to build the trust and respect of Yukon First Nation governments, and the entities and agencies borne of the modern treaties and agreements. True collaboration is hard and will be central to supporting the mining industry's pivotal role in the Yukon's post-pandemic economic recovery.

Through the extensive engagement process, the MDS Panel believes that industry will seize the opportunity to respond positively to the further alignment of the mining industry's interests with the interests of the people who call the Yukon home. Establishing the alignment of development interests among all Yukon people will make the Yukon a rare and unique jurisdiction in the world. Such alignment, combined with the Yukon's abundance of mineral resources, will ensure that the Yukon is highly attractive to the global investment capital essential to the long-term success of the mineral exploration and development industry.

With changes to the mineral management regime, the mining industry will finally be able to clearly see the Yukon development pathway and know the goal posts at each stage of the mineral exploration and development cycle. Risks and constraints to mineral resource development in the Yukon will be further reduced by entrenching the transparent pathway in mineral resource legislation. The completion of regional land use planning and the negotiation of agreements with Yukon First Nations under the *Indian Act* will further create the certainty sought by the mining industry and its investors.

The MDS Panel is also confident that Yukon people will respond positively to the alignment of mineral development interests with the interests of the people who live here. The Mineral Development Strategy fulfills the desire of many engagement participants for a bold, transformative and contemporary approach to mineral development in the Yukon. An approach that establishes a framework for sustainable mineral development within a positive context of economic, social and environmental reconciliation.

Certain recommended actions outlined in Mineral Development Strategy exemplify the scale and complexity of the effort that will be required to fully implement the Strategy:

- Co-development by the Yukon and Yukon First Nation governments of modernized mineral resource legislation within the next four years (by 2025). The new legislation will be aligned with the modern treaties with Yukon First Nations, Transboundary treaties, the principles of reconciliation enshrined in the *United Nations Declaration on the Rights of Indigenous Peoples* and the recommendations of Canada's Truth and

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Reconciliation Commission. The new legislation will be developed in a transparent manner that allows for the participation of the mining industry.

- Advancing the development of agreements that address mineral tenure and development in the Traditional Territories of Yukon First Nations who have not yet concluded modern treaties.
- Directing resources to expedite the concurrent completion of the remaining Yukon Regional Land Use Plans envisioned in the Umbrella Final Agreement (Dawson, Northern Tutchone, Kluane, Whitehorse, and Teslin) as a top priority for the Yukon Government in collaboration with the Yukon Land Use Planning Council.
- Introducing changes to royalty revenue offsets and a payroll tax-type measure so that a Yukon Resource Heritage Fund can be established and adequately funded.
- Establishment of regulatory clarity and land access certainty to ensure the Yukon can compete for global investment capital.

Several Mineral Development Strategy recommendations need to be implemented in the near term to build the momentum required to achieve the overall vision of the Mineral Development Strategy and the complete set of Strategic Priorities. Examples of such near-term recommendations, which are largely non-legislative in nature, could include:

- Enhancement of Yukon First Nation capacity funding to strengthen early engagement pathways with industry and ensure appropriate participation in mineral development opportunities.
- Implementation of the recommendations in the recent PricewaterhouseCoopers report on regulatory duplication prepared for the Yukon Minerals Advisory Board and the Gowlings WLG 2020 recommendation to broaden the scope of a proposed project to include likely future minor modifications in order to reduce reassessment possibilities for minor project amendments.
- Establishment of clear and fair compensation rules for existing mineral claims stranded by land use planning initiatives.
- Design and implementation of revenue sharing measures that provide First Nations with meaningful and steady revenue flows aligned with land-based resource activities through some combination of: funding for First Nation equity participation in projects, a First Nation Resource Charge and an industrial water tax.
- Completion and implementation of the Resource Roads Regulation to create a modern framework for management and enforcement of resource roads.

Yukon Mineral Development Strategy and Recommendations

The final recommendation of the MDS Panel is the near-term establishment of a Yukon Mineral Development Strategy Oversight Committee empowered with a systems change mandate. The Oversight Committee would include a senior Yukon Government representative, a Yukon First Nation member of the Mining MOU Table and a representative of the mineral industry. The Oversight Committee would report to the Mining MOU Table and the Yukon Forum. The Oversight Committee would be granted a mandate to uphold the vision of the Yukon Mineral Development Strategy and Recommendations and to facilitate the legislative, policy and administrative initiatives needed to fully implement the Strategy as soon as practical. The Committee would also be tasked with reporting on implementation progress on a quarterly basis at the Yukon Forum and with a web-based scorecard.

Ultimately the success or failure of the Mineral Development Strategy rests with individual Yukoners. Be bold, hold your leaders and the mineral industry to account and know the future is in your hands. Full implementation of the Strategy will create the certainty sought by the mining industry and spark the flow of investment dollars needed for industry development for the benefit of all Yukoners.

Respectfully, Shäwníthän

The Yukon Mineral Development Strategy - Independent Panel

Angus Robertson, Chair

Math'ieya Alatini, Panel Member

Doug Eaton, Panel Member

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