Smith MBA NATIONAL CASE COMPETITION



## CASE PACKAGE

For participating teams



## Competition Mission & Theme

#### **Our mission**

The Smith National MBA Case Competition brings together top MBA minds to tackle one defining national challenge each year, pushing students to design real solutions for a stronger, more inclusive and competitive Canada.

#### **Competition theme**

### "Forging Canada's Future, One Idea at a Time"

Canada is at a turning point: facing economic uncertainty, technological disruption and growing social divides. As trust erodes and citizens question their future here, one critical question emerges:

"How can individuals and businesses contribute to building a more prosperous, livable and united Canada?"

Each year's case will explore a key area of national impact, selected from topics such as economic growth, national competitiveness, healthcare improvements, social cohesion or talent retention. Your solution should reflect bold innovation and integrated thinking that drive real change.





### 2025 competition topic

## The Arctic Bridge: Canada's Nation-Building Opportunity

The Canadian Arctic is emerging as one of the world's most strategically important regions. Melting ice is opening new shipping routes through the Northwest Passage, creating the potential for faster trade connections to Europe and Asia. Beneath the permafrost lie critical minerals essential for the green energy transition, while northern communities stand at the forefront of climate change adaptation and Indigenous economic leadership. Canada has an opportunity to define the Arctic not as a remote frontier, but as a cornerstone of national prosperity, resilience, and global influence.

Your team has been appointed to design a 20-year strategic blueprint for a new public—private partnership (PPP) mandated to advance Canada's vision in the North. This initiative is not just about infrastructure or resource development; it is about nation-building. The Government of Canada has signaled its intent to prioritize reconciliation, economic resilience, clean energy, and sovereignty in its Arctic and Northern Policy Framework (ANPF). The challenge is to integrate these priorities into a cohesive plan that mobilizes government, Indigenous partners, and private sector actors to achieve outcomes none could accomplish alone.

The question before you is clear: How can Canada leverage a PPP to turn the Arctic Northwest Passage into a defining nation-building project of the 21st century?

The blueprint must balance ambition with responsibility. Teams must evaluate the case for infrastructure investment (eg. deep-water ports, shipping corridors, digital connectivity), identify pathways for sustainable resource development, and propose models for Indigenous co-ownership and governance. Equally critical is developing a geopolitical and environmental strategy that positions Canada as a responsible Arctic power, safeguarding sovereignty while protecting fragile ecosystems.



### Context

### Arctic & Northern Overview

"The Arctic is warming nearly three times faster than the rest of the planet." Canada's Changing Climate Report (2019)[1]

Canada's Arctic and North are transforming at an unprecedented pace. Climate change has accelerated warming in the region, altering sea ice coverage and extending navigation windows through the Northwest Passage.<sup>[2]</sup> Canada controls roughly 40% of the Arctic landmass and ~75% of Canada's coastline.<sup>[3]</sup> Compared with peers, Canada currently lags in the Arctic's hard infrastructure while other states have invested heavily: Russia has expanded icebreaker and port capacity, and China has articulated a "Polar Silk Road."<sup>[4],[5],[6]</sup>

According to the Arctic and Northern Policy Framework (ANPF, 2019), nearly two-thirds of Arctic and northern communities rely exclusively on diesel for energy, and many communities are only accessible year-round by air, or seasonally by ice roads or waterways. The ANPF was co-developed with Indigenous, territorial, provincial, and Northern governments and residents, setting out a long-term strategic vision toward 2030 and beyond. Its goals include enhancing sovereignty, sustainable infrastructure, economic opportunity, climate resilience, and reconciliation. Key priority areas identified include improving broadband connectivity; developing multi-modal transportation corridors; ensuring energy security and integrating clean energy solutions; and upgrading weather, climate, and monitoring infrastructure.

However, significant gaps remain. Transportation and marine infrastructure deficits constrain trade and basic service delivery in many northern communities. Many settlements are isolated, and high costs and logistical challenges make it difficult to move goods and people. And while climate vulnerability is high, existing infrastructure often lacks resilience to changing environmental conditions.<sup>[7]</sup>

<sup>[1]</sup> Canada's Changing Climate Report (2019), Environment and Climate Change Canada

<sup>[2]</sup> Arctic Monitoring and Assessment Programme (AMAP), Arctic surface warming analysis

<sup>[3]</sup> Wilson Center, Canada's Arctic & Northern Policy Framework

<sup>[4]</sup> CSIS, Russia's Arctic build-up

<sup>[5]</sup> RAND, Russia's Arctic build-up

<sup>[6]</sup> China's Arctic Policy White Paper (2018), Polar Silk Road

<sup>[7]</sup> Arctic and Northern Policy Framework (2019)



#### Context

## Stakeholder Landscape

"Nothing about us, without us." Principle reflected ANPF.

Developing the Arctic goes beyond an economic or engineering exercise; it involves governance, rights, and partnerships.

- **Federal Government:** Through the ANPF and related legislation, Canada's federal government has committed to setting policy frameworks that align national priorities with Indigenous rights, climate strategy, and Arctic security. It has a critical role in funding, regulation, international representation (projecting sovereignty), and in enabling or derisking large projects.
- Indigenous Governments and Organizations: Inuit, First Nations, and Métis communities are rights-holders. Their perspectives, traditional knowledge, governance structures, and priorities must be integrated, not sidelined. This includes co-development of infrastructure, environmental stewardship, benefit-sharing, and decision-making aligned with reconciliation obligations. The co-developed nature of the ANPF is an example of this approach. [8],[9]
- **Private Sector:** Companies in mining, infrastructure, shipping, and technology see growing opportunity, particularly for critical minerals, trade routes, and logistics. But they face high upfront capital requirements, regulatory complexity, a low-margin logistics industry, and risk from climate and environmental factors. Public-private partnership (PPP) models are increasingly considered ways to leverage private expertise and capital, while sharing risk and aligning with public goals. [10],[11]
- International Actors: As Arctic ice recedes and global trade dynamics shift, Arctic access has gained interest from foreign states. Russia has been particularly aggressive in investing in icebreakers, northern ports, and resource development. China, via its "Polar Silk Road" ambitions, is also asserting interest. Meanwhile, the U.S. and NATO allies view Arctic stability, sea-lanes, scientific research, and defense capability as strategically important. Canada must navigate cooperation and competition in this context. [12],[13]

<sup>[8]</sup> James Bay and Northern Quebec Agreement (1975)

<sup>[19</sup> Nunavut Land Claims Agreement (1993)

<sup>[10]</sup> Canada's Critical Minerals Strategy (2022) - Natural Resources Canada

<sup>[11]</sup> Investing to Make Canada a Global Critical Minerals Superpower

<sup>[12]</sup> NORAD Modernization

<sup>[13]</sup> NATO Arctic Posture



## Opportunity & Challenge **Economic Opportunity**

"The clean energy transition is built on critical minerals." Natural Resources Canada.

The Arctic offers several compelling economic levers for Canada, especially if plans are aligned with sustainability and Indigenous partnership.

- **Critical Minerals:** Global demand for critical minerals such as nickel, cobalt, rare earth metals, lithium, and graphite, is expected to grow sharply as the clean energy transition accelerates. Canada's Critical Minerals Strategy (2022), backed by ~\$3.8 billion in federal investment, is designed to position Canada as a "global supplier of choice" for responsibly sourced critical minerals.<sup>[14],[15]</sup>
- Infrastructure as an Enabler: Initiatives in the ANPF highlight multi-modal transportation, energy corridors, clean energy, and broadband connectivity as essential components. Investments will make northern trade, resource extraction, and community economic development viable. For example, many northern communities lack reliable broadband and depend on diesel generators and periodic diesel deliveries for energy; improving connectivity and clean energy would reduce costs and environmental impacts.
- **Trade Route Potential:** New or more reliable shipping windows via Arctic routes could reduce transit times between Asia, Europe, and North America. While there are legal, environmental, and safety challenges; the potential savings in time, fuel, and distance are significant.<sup>[16]</sup>
- Jobs, Value Chains, and Regional Growth: There is an opportunity to build value along the critical mineral pipelines beyond just extraction, but also; processing, manufacturing, and recycling. This could produce high-quality jobs in remote and Indigenous communities. The Critical Minerals Infrastructure Fund (CMIF) is already funding projects in transportation and energy infrastructure to support this growth.<sup>[17],[18]</sup>

<sup>[14]</sup> The Canadian Critical Minerals Strategy

<sup>[15]</sup> International Energy Agency – Critical Minerals Market Outlook (2021)

<sup>[16] &</sup>lt;u>Arctic Council – Arctic Shipping Assessments</u>

<sup>[17]</sup> Advancing Canada's Critical Minerals Strategy to Strengthen Supply Chains and Global Competitiveness at PDAC 2025

<sup>[18] &</sup>lt;u>Critical Minerals Infrastructure Fund (2023–25) – Natural Resources Canada</u>



## Opportunity & Challenge Challenges & Constraints

"The Arctic is both opportunity and responsibility." Arctic Council.[19]

While the opportunities are real, there are multiple constraints and risks that any strategic blueprint must address.

- Environmental Vulnerability: The Arctic ecosystem is fragile. Disturbances to permafrost, thawing ice, changing patterns of species migration, and sensitive freshwater systems mean that infrastructure and extraction risks have high potential for unintended ecological damage. Ensuring development aligns with Canada's climate commitments and environmental protection laws is essential.
- Harsh and Remote Conditions: Construction costs are high; logistical chains are complex. Short seasons for building, extreme cold, ice cover, remote supply lines, and lack of existing infrastructure all drive up cost and risk of failure or delay.
- **Financing Barriers:** Projects are capital intensive, often with long payback periods. Private investors are wary of regulatory uncertainty, extreme environmental risk, and cost overruns. The government will likely need to play a role in de-risking projects; for example, through seed funding initiatives, tax credits, guarantees (or matching contributions), or other PPP models. The Critical Minerals Strategy includes moves such as the Mineral Exploration Tax Credit and infrastructure funding (METC, CMIF) to address some of these gaps.<sup>[20]</sup>
- **Geopolitical Risk:** Canada must secure its Arctic sovereignty, balance competing foreign state claims, and navigate growing foreign involvement. As other countries expand Arctic presence, pressure on regulatory, security, diplomatic, and defense fronts increases.
- Indigenous Rights and Reconciliation: Any Arctic development must respect treaty
  rights, land claims, and Indigenous self-determination. Community expectations include
  meaningful partnership, benefit sharing, decision-making control, incorporation of
  traditional knowledge, protection of heritage, and alignment with Truth and Reconciliation
  commitments. Failure in these areas can lead to project delays, legal challenges, and
  reputational risk.

<sup>[19] &</sup>lt;u>Arctic Climate Impact Assessment (2004) – Arctic Council</u>

<sup>[20]</sup> Investing to Make Canada a Global Critical Minerals Superpower



## **Supporting Exhibits**

These exhibits are meant to guide your thinking, but they are not guardrails to constrain your scope or research.

#### Exhibit 1. Arctic Warming Trend [21]

Region	Temperature Increase Since 1948	
Northern Canada (Arctic)	Approximately +2.3°C	
Global Average	Approximately +0.8°C	

#### Exhibit 2. Canada's Arctic & Northern Policy Goals<sup>[22]</sup>

In no particular order:

- Strengthen sovereignty, security, and safety
- Advance reconciliation with Indigenous peoples
- Improve infrastructure, connectivity, and housing
- Foster sustainable and diversified economies
- Support strong Arctic and northern governance
- Protect the environment and enhance climate resilience
- Broadband access for all Northern communities by 2030
- Significant investment in transportation corridors
- Transition from diesel dependence to clean energy systems
- NORAD modernization and Arctic defence investments

<sup>[21] &</sup>lt;u>Canada's Changing Climate Report (2019)</u>, <u>Environment and Climate Change Canada</u> [22] <u>Arctic and Northern Policy Framework (2019)</u>



## **Supporting Exhibits (cont.)**

### Exhibit 3. Projected Global Demand for Critical Minerals (2025–2045)<sup>[23],[24]</sup>

Mineral	2025 Demand (Mt)	2045 Demand (Mt)	Growth Factor
Nickel	2.60	6.50	2.5x
Cobalt	0.14	0.35	2.5x
Rare Earth Metals	0.24	0.60	2.5x
Lithium	0.10	0.40	4.0x
Graphite	1.00	4.00	4.0x

<sup>[23]</sup> Mineral requirements for clean energy transitions

<sup>[24]</sup> The Canadian Critical Minerals Strategy



"Forging Canada's Future, One Idea at a Time"

# We look forward to hearing your brilliant idea

See you in Kingston on November 1, 2025!

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