



Recommendation:

That the federal government demonstrate support for the Kivalliq Hydro- Fibre Link (KHFL), a nation-building green infrastructure and connectivity project, by allocating \$1 Billion in Budget 2023 to the Project's development and construction.

Introduction

Nukik Corporation is an Inuit-owned company headquartered in Rankin Inlet (Nunavut). Its owners are the Kivalliq Inuit Association (KIA) and Sakku Investments Corporation (Sakku). The KIA is a designated Inuit Organization under the *Nunavut Final Agreement* land claims settlement. Sakku is KIA's 'Business Arm' and deemed an Inuit Birthright Corporation. Together they created Nukik Corporation to lead the development of the Kivalliq Hydro-Fibre Link under 100% Inuit ownership and control.

The Kivalliq Hydro-Fibre Link (KHFL) is a nation building project that will be Nunavut's first infrastructure link to Southern Canada and will provide clean, renewable power and fibre-optic internet capacity for the Kivalliq region for generations to come. It will be a critical part of Canada's Arctic sovereignty agenda to ensure the Territory is physically connected to the rest of Canada with vital infrastructure.

The Project has the support of Inuit leadership within the region and Territory, namely the Kivalliq Inuit Association, Nunavut Tunngavik Incorporated (NTI), and nationally by the Inuit Tapiriit Kanatami (ITK). The Project has been progressing in collaboration with the Canada Infrastructure Bank (CIB), also supportive of the Project vision and with whom Nukik has a Development Funding Agreement.

Currently almost all electricity needs in Nunavut are met with diesel generating plants; as a result, Nunavut's electricity generation has the highest carbon intensity in Canada. Similarly, the mining operations in the mineral rich region of the Kivalliq are fully dependent on burning diesel for power and heating needs.

The Project is in lock step with the Government of Canada’s goal to connect regions to clean power – “*Support de-risking and accelerating the development of transformational, nation-building inter-provincial transmission lines that connect supplies of clean power to locations that currently rely heavily on fossil fuels for power generation*”, Canada 2030 Emission Reduction Plan (2022).

It is also aligned with key Ministers’ mandate letters, namely Minister Vandal, Minister LeBlanc, Minister Wilkinson and Minister Guilbeault.

Despite being Canada’s largest territory – Nunavut represents about 20% of the country’s total land mass - the Territory is effectively land locked, with no infrastructure connection to the rest of Canada. This means that multiple times each year, Nunavut must ship in hundreds of millions of litres of crude diesel fuel through environmentally sensitive Arctic waters to meet the energy needs of its residents and businesses. The Project will displace 138 million liters of fuel annually by connecting to Manitoba’s renewable electrical grid.

The fact that Nunavut is not grid-connected is something that the federal government could and should address as part of its commitment to the environment, the economy and the people.

Inuit and Nunavummiut would like to share in the same economic and societal opportunities as the rest of Canada. Grid-connecting and bringing high speed fibre-optic internet and telecommunications to the region will drastically improve tele-health services, education, create new business opportunities for Inuit and help address years of infrastructure deficit in the region and help close the infrastructure gap by 2030.





Project Description

The KHFL is a linear 1,200km high-voltage transmission line, connecting to over 370km of lower voltage 'feeder' lines leading to five communities in the Kivalliq Region of Nunavut and two operating gold mines. The project will be rated at 150 megawatts of electricity transmission capacity and will have fibre-optic bandwidth capacity of 1,200 gigabits per second (Gbps).

Project Benefits

The Project alone will meet Nunavut's 2030 GHG emissions reduction target¹. It is a once-in-a-generation opportunity to decarbonize communities and mines in Nunavut

The KHFL will grid-connect Nunavut for the very first time, paving the way for two-way electricity trades in the future, unlocking Arctic renewable resources and helping Canada meet its 2050 net zero emissions economy-wide target

It will sustainably unlock the mineral potential of the region (home to the some of the best untapped critical minerals in the country) and advance the electrification of this emission-intensive industry.

The Project will constitute a significant step toward Arctic sovereignty and security with the ability to bring baseload power and reliable connectivity to remote Arctic bases

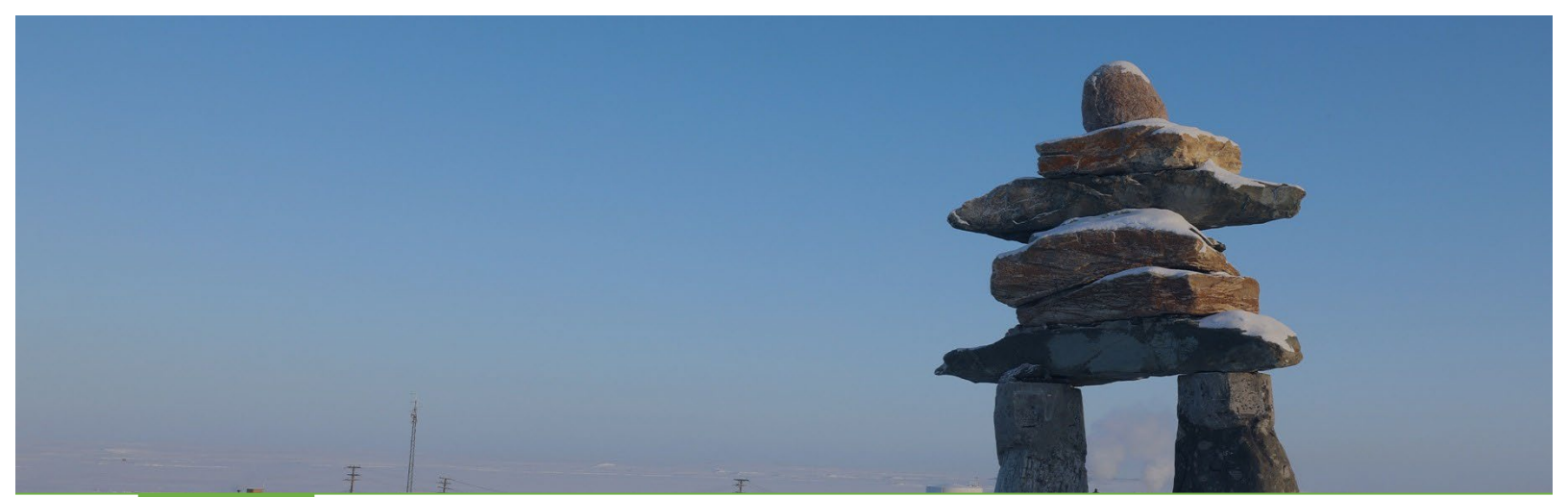
It will advance reconciliation, create employment (15,625 person-years of employment from construction), business and equity opportunities for Inuit. The Project will improve education and critical services such as enabling tele-health in the region

The Project represents a significant business opportunity for Manitoba to secure a long-term Power Purchase Agreement and help advance Canada's aspirations for a Pan-Canadian connected electricity grid

Revenues stemming from the Project are estimated to be \$8 billion over 50 years and \$3.2 billion contribution to GDP during construction alone. Construction and operation of KHFL is projected to generate \$0.7 billion in federal taxes over 50 years. Considering all the above, a federal grant could be recovered in the first decade following commissioning

¹ 371,000 tonnes of GHG emissions reduction per year





Progress to Date

The KHFL is not a new undertaking; it has been discussed by Inuit and northern Manitoba leaders for decades. In 2015, recognizing the strategic importance of clean energy and faster internet services, the Kivalliq Inuit Association restarted feasibility work to advance the KHFL. This effort has been supported by funding and partnerships from the Canadian Northern Economic Development Agency and Crown-Indigenous Relations, Northern Affairs Canada and considerable direct investments from the Inuit and their private sector Development Partners.

Under the leadership of the KIA, the Project has advanced early engagement with communities and stakeholders and conducted baseline fieldwork studies along the entire Project corridor in northern Manitoba and Nunavut. This preliminary engagement and baseline information was a key input into a feasibility scoping study completed in 2020.

The study evaluated technical routing options, electrical load, environmental and socioeconomic factors and determined that the KHFL was technically and economically feasible should the Project secure further partnership agreements with the Government of Canada.

Based on the findings from the feasibility study and the community support during the engagement process, KIA and Sakku Investments incorporated Nukik Corporation to lead the development of the project. Nukik and KIA entered into a Development Funding Agreement with the Canada Infrastructure Bank and selected its Development Partners through an Expression of Interest process in 2021.

The Government of Canada has recognized the nation-building nature of the Project and the critical urgency to connect Nunavut to the rest of the country. As a result, the KHFL was included in the 2021 Federal Budget which allowed for key development activities to proceed.

Federal Support

The Project is now in its Development Phase as a shovel-worthy national green infrastructure major project. It has completed its preliminary Business Case and has identified a significant funding gap which is the purpose of this Submission. The preliminary capital cost is \$3 billion. The Project expects to secure financing from private equity and from the CIB based on available credit-worthy cashflows. Despite potential private equity and CIB investments, there remains a funding gap which the Project is seeking support from the Federal government in the amount of \$1 Billion.

The Federal government will see a return on its investment within the first decade of the Project's commissioning through tax revenue from construction, operations and mining. Nukik Corporation and its Inuit leadership have committed to fund the Development Phase (2022-2023) thanks in part to the Government of Canada support secured earlier in 2022, and also thanks to the Territory's investment in the project from NTI.

Beyond the Development Phase that will be completed by the end of 2023, there is no identified funding for the project to proceed through final engineering design and no financing certainty that will give Development Partners, investors and the Project proponent enough confidence that the project will proceed.

A Federal commitment in Budget 2023 will allow the KHFL to complete the Engineering and Procurement phase (end of 2023- 2026), undertake full Environmental Assessment Licensing and put shovels in the ground in 2026 for construction, with the goal to commission and energize the line by the end of 2030.

The federal partnership required for this major project is in line with other contributions made by Ottawa over the years to enable similar transmission projects to proceed and allow remote communities to get off diesel by bringing baseload, reliable non-emitting power to the North (e.g., Wataynikaneyap project in the 2018 federal budget). Moving away from subsidizing fossil fuels to supporting green infrastructure and non-emitting power supply is what the federal government has committed to do, and needs to do, if we are to reach net-zero emissions economy-wide by 2050.

The Project has established prospective anchor customers which include Qulliq Energy Corporation (QEC) - the power utility for Nunavut - and one of Canada's largest gold mining producers: Agnico Eagle Mines' (AEM) with two active mines in Nunavut.

Additionally, major telecoms and existing Internet Service Providers have shown their full support to purchase and distribute the fiber-optic within the region. This will also free up satellite bandwidth improving service across the Arctic.

Once the line is built and operational, the Project will likely attract more industrial customers to the region and would allow for additional sustainable development, business and economic opportunities for the region and Nunavut as a whole.

The KHFL aligns closely with several federal government priorities, such as climate action, Indigenous leadership and reconciliation,

job creation, connectivity and education, and regional economic development, including critical mineral priorities. The Project directly supports the 2035 net-zero electricity target that was reinforced in Budget 2022 – *“Investments to support the expansion of clean electricity in Canada to support predevelopment activities of clean electricity projects of national significance such as interprovincial electricity transmission projects [...]”*, Budget 2022. It also addresses the key priority to reduce reliance on diesel in remote and Indigenous communities, as stated in the *2030 Emission Reduction Plan* (2022).

More broadly, the Project will be a cornerstone of Canada's electrification efforts. Nunavummiut want to develop their Arctic renewable resources; grid-connecting Nunavut for the very first time will enable two-way electricity trades in the future, establishing Canada as a world leader in the fight against climate change.

Conclusion

Given a firm commitment of \$1 Billion as a non-repayable contribution from the federal government, this Project will offer the investment certainty to allow the project to proceed with detailed engineering and procurement and complete construction by the target in-service target date of 2030. It will completely transform Canada's energy map and create a suite of sustainable development opportunities for the region and nationally.

The bottom line is that if this significant investment in the Project is not made, it will be a considerable missed opportunity for Canada to reliably connect to the largest last remaining territory.

To date, the Government of Canada has already partnered with the Inuit to lead the Project to this critical stage. It is time to take the next step to get it across the finish line. The KHFL needs the Government of Canada as a committed partner to successfully complete this nation-building project.

One province, one territory, one country working together. A true story of national reconciliation, visionary green infrastructure investment to connect the Nunavut Arctic for the very first time.

The Inuit are bringing forward an almost shovel-ready project which has been extensively studied by financial and technical advisors. Years of community early engagement have been completed and not proceeding with the KHFL would set Nunavut back in a cycle of recurring infrastructure deficit and lack of overall equity with the rest of the country.

