

# The Innavik hydro project

The Innavik Hydro Project is a small hydro project initiated by the Pituvik Landholding Corporation who chose Innergex Renewable Energy Inc., an independent power producer, to develop the project. It is a **50-50 partnership driven by the community** that will ensure a new source of revenue generation while supporting the community by focusing on current needs and investing in long-term sustainable development initiatives.

Construction begun in 2019 and is scheduled to be complete in 2023, when a 40-year Power Purchase Agreement with Hydro-Quebec will enter into force.

#### **About the Pituvik Landholding Corporation**

Incorporated in 1979, the Pituvik Landholding Corporation holds title to lands classified as Category "I", associated with the Inukjuak territory, on behalf of the community beneficiaries. It is a non-profit organization with regards to the land regime in Chapter 7 of the James Bay and Northern Quebec Agreement and the Act respecting the land regime in the James Bay and New Québec territories.

As the community-based corporation that launched the Innavik Project, it will be a 50% partner with Innergex. The Project will ensure a new source of revenues for its mission of supporting the community by focussing on current needs and investing in long-term sustainable development initiatives. Pituvik had led the Project since inception, based on the community's willingness to reduce its environmental impact while making the Innavik Project a lever for community development that will enable numerous socio-economic initiatives.

#### **About Innergex Renewable Energy Inc.**

Innergex Renewable Energy has long recognized the important role its host communities play in every project. Innergex has a successful track record of developing and maintaining long-term relationships. Whether through shared economic benefits, employment opportunities, shared ownership, partnership agreements or community investment, we recognize our responsibility to help bring socio-economic opportunities to local and Indigenous communities.

Founded in 1990, Innergex is an independent renewable power producer which develops, acquires, owns and operates hydroelectric facilities, wind farms, solar farms and energy storage facilities. Innergex has reached agreements with over 30 Indigenous groups throughout Canada. Respecting the environment and balancing the best interests of the host communities is at the heart of the Innergex's development strategy.

You have questions or concerns about the project?
We'd love to hear you! Please contact us at info@innavikhydro.com



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# INNAVIK HYDRO PROJECT A project initiated by the community for the community

The Innavik project is a 7.5 MW run-of-river hydroelectric facility that will also bring significant social, environmental and economic benefits for the residents of Inukjuak.

- Preservation of the **Inuit way of life**
- Preservation of water quality and the environment
- Job creation during construction and operational phases
- Reinvestment in the community of profits of the scale of **tens of millions of dollars** over a 40-year period by Pituvik Landholding Corporation
- Commissioning expected in 2023

# Replacing diesel by renewable energy

The project will replace nearly all diesel requirements for electricity and heating for the community of Inukjuak. It stems from the 1,800 inhabitants community's willingness to reduce greenhouse gas emissions and reduce the risks of diesel spills, while improving local and indoor air quality.



### **Benefits of the project**

### Supporting social and economic development



The project's revenues will enable the creation and funding of a Community Legacy Fund to support youth and elders.



The social support fund stemming from the project will be devoted to community social initiatives.



The project will also fund programs to promote local entrepreneurship.



The facility will create 2 permanent jobs for local operators, and will draw further temporary workforce for regular maintenance and upkeep.

#### Replacing diesel with hydroelectricity

Along with the switch from diesel to hydroelectricity for the community's electricity need, a program has been implemented to convert the residences' heating and hot water systems from diesel to electricity. It is assumed that diesel consumption will reduce by 80%, and this switch will avoid emissions of 700,000 tonnes of  $CO_2$  over 40 years.

## **Ensuring safe drinking water**

### Water will remain safe to drink

Water quality was carefully studied through the Environmental Impact Assessment process and examined by the Kativik Environment Quality Commission and the Ministère de l'Environnement et de la Lutte contre les changements climatiques (Ministry of the Environment and the Fight against Climate Change). Due to the long distance between the water intake for drinking supply and the construction sites, modelling and simulations conducted by an independent environmental consultant, have pointed out that the water quality of the Inukjuak River won't be affected.

# Water quality will be closely monitored

Maintaining water quality during both the construction and operational phases of the project is our main priority. Throughout the construction period, a water quality monitoring system has been applied, and reports and results are being communicated to the Kativik Regional Government, who is in charge of ensuring safe drinking water, as well as members of the community.

A hydroelectric project does not affect the quality of the water, it only uses the natural force of the water to spin the turbine and then returns the water back to the river.



- A hydro facility does not affect water quality
- Emergency Action Plan to be enforced at the start of construction
- Alternative water intake source have been identified to ensure safe drinking water at all times
- The community will be kept informed should an incident occur

### Maintaining fish habitat is a priority

#### The Innavik project will improve the fish habitat over time

Fish are an important staple of the local diet, and environmental impacts on fish habitats have been considered from the very beginning. Fishing and fish habitat were examined, and elders were also consulted to gain from their traditional knowledge of the river and fishing. As a result, fish habitat will be improved and new habitats will become available for fish in the small headpond once the facility is in operation. Fish that historically migrate downstream will still be able to, through the spillway.

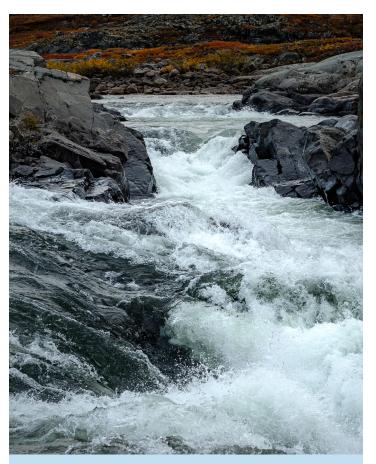
During construction, our impact on fish habitat is being mitigated by using clean material and controlling water flows.

# Water quality under control

# Run-of-river facilities do not affect mercury levels in water and fish

With limited flooded areas and stagnant water, run-of-river projects such as Innavik, by ensuring a more natural constant flow of water, lead to less soil decomposition, and therefore much lower mercury releases compared to large hydro projects with wide reservoirs. The project also benefits from having a small headpond in which fish will briefly transit. The high rate of dilution and the fact that flooded areas are mainly located on bedrock rather than soil are all factors connected to lower risk of mercury contamination.

A fish contamination monitoring program has also been implemented for the Project to determine and monitor potential changes in mercury concentrations in fish tissue over a 15-year period after initial flooding of the headpond. Pre-construction monitoring has been conducted to gather baseline data of the current situation. Communication will be maintained with the Régie régionale de la santé et des services sociaux (Board of Health and Social Services), and the community will be informed if fish consumption guidelines are to be updated.



- There are no trees upstream of the facility to clear
- Decomposition rates are slow in colder climates
- The clearing of remaining vegetation would have a detrimental effect on water