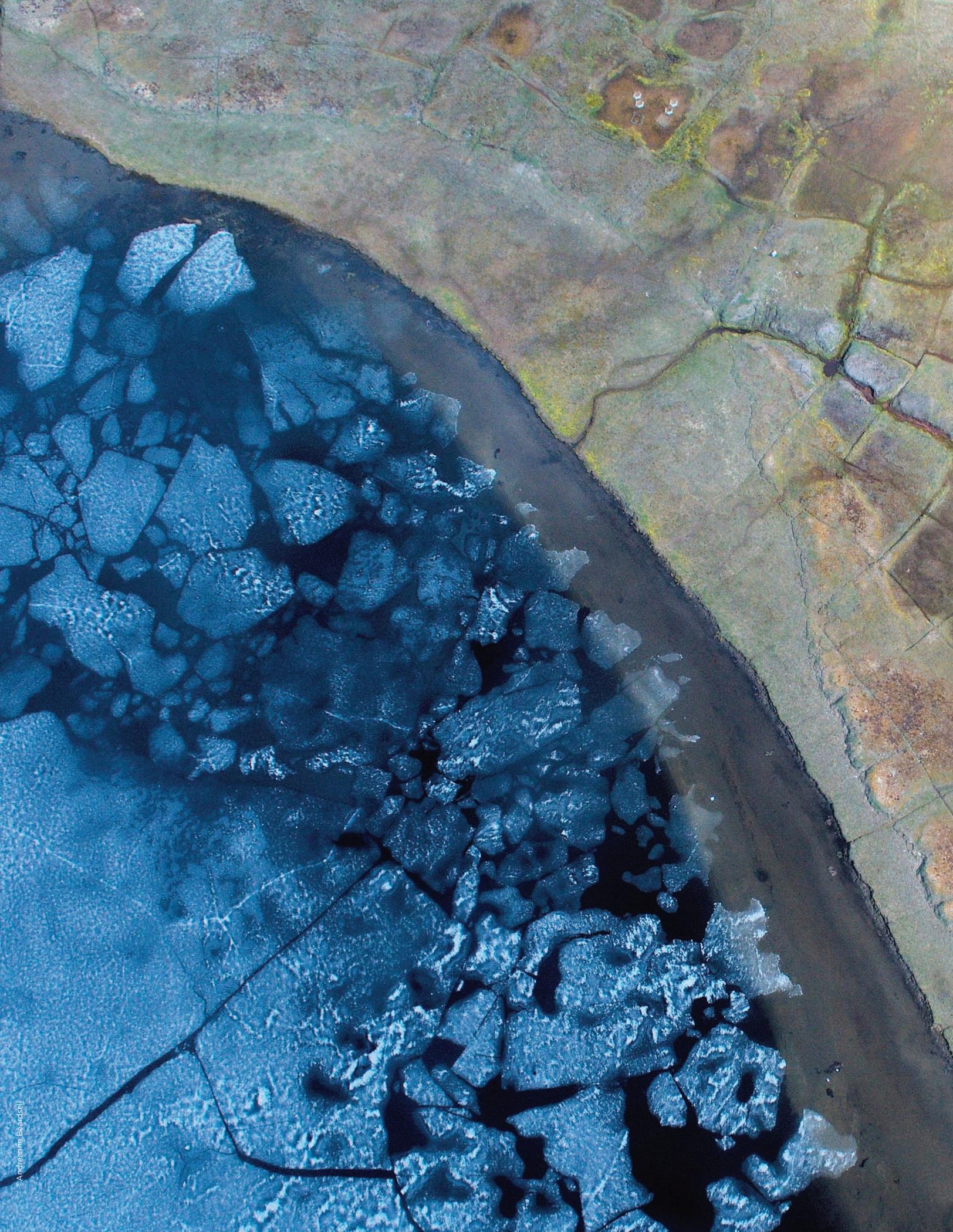




**Institut nordique  
du Québec**  
Together for the North

# STRATEGIC PLAN 2020-2025







# Table of Contents

Message from the Chair of the Executive Committee	4
Message from the Directors	5
Context	6
INQ at a glance	8
Vision, Mission, and Values	11
Guiding principles	12
Strategic objectives and priority actions	14
1. Research	14
2. Training	15
3. Networking and partnerships	16
4. Knowledge mobilization, technology transfer and innovation	17
5. Infrastructures	18
6. Communication and outreach	20
7. Governance and financing	21
The Strategic Plan at a glance	22
Appendix A	25
INQ Research Priorities	25

# Message from the Chair of the Executive Committee



As Chair of the Executive Committee, it is with pride and enthusiasm that I present Institut nordique du Québec's (INQ) first strategic plan, which marks the passage from its implementation phase to its full expansion.

INQ was established in 2014 on the foundation of more than 50 years of evolution in northern and Arctic research, largely at Université Laval and, more broadly, in the majority of Quebec's universities.

Thanks to the father of Canadian nordicity, Louis-Edmond Hamelin, the emeritus researcher Louis Fortier, and many other pioneers, northern and Arctic research naturally became a niche of excellence and a priority research and training field allowing Quebec to shine throughout Canada and internationally.

INQ is already a hub, a crossroads that brings together 16 member institutions, more than 250 affiliated researchers, and numerous public and private partners representing northern populations—including Indigenous peoples—governments and northern businesses.

Through its ambitious vision, INQ is charting its course and its vision of a better North for future generations, based on the integration of knowledge into all aspects of life in northern and Arctic environments.

Through its mission, orchestrated with all of its partners, INQ defines itself as a place where the pillars of northern and Arctic research are brought together and integrated, focusing on the development of knowledge, innovation and synergy between researchers and research users.

Being well acquainted with today's northern and Arctic reality, versed in the issues and challenges of the North, and having developed networks of contacts at provincial, national and international levels, INQ members are in a position to make a significant contribution to the North's sustainable development, through the extensive and diversified cutting-edge expertise they represent and through the priority actions they plan to carry over the next few years.

A long-life to Institut nordique du Québec!

A handwritten signature in black ink that reads "Eugénie Brouillet".

**Eugénie Brouillet**

Vice Rector of Research, Creation and Innovation  
Université Laval

# Message from the Directors



It is with great pleasure that we present INQ's first strategic plan, inspired by the inclusive vision and expanded mission that define INQ, both scientifically and operationally. The six major principles that will guide our activities and action priorities are outlined in this plan. It is structured around seven major orientations defined by seven strategic objectives and 45 priority actions.



Through these guidelines, objectives and priority actions, INQ intends on supporting research and training; fostering networking and partnerships; promoting knowledge mobilization, technology transfer and innovation; developing and increasing access to northern research infrastructures; ensuring communication with members, partners and users; ensuring the dissemination of knowledge and INQ's influence at provincial, national and international levels; and guaranteeing the organization's governance and the financing of its operations and activities.

To achieve these ambitious goals and to carry out priority actions, we rely on the collaboration and commitment of all associated members and partners. It is together that we will be able to further develop INQ, meet our objectives, exercise leadership throughout Quebec, Canada and internationally, and adequately support the sustainable development of Northern Quebec and the Canadian Arctic, particularly through our research and training activities.

We would also like to thank those who have worked closely together to achieve this strategic plan, particularly INQ working groups and the participants of the reflection workshop held at Monastère des Augustines. INQ was built through the participation and commitment of many people from academia, northern communities, Indigenous nations, and the public and private sectors, all convinced that we must work together to develop a sustainable North. We continue to build on this momentum!

A handwritten signature in black ink, appearing to read 'Jean-Éric Tremblay'.

**Jean-Éric Tremblay**  
Director, INQ

A handwritten signature in black ink, appearing to read 'Brigitte Bigué'.

**Brigitte Bigué**  
Executive Director, INQ

# Context

Our civilization will not be able to wean itself off fossil fuels in time to avoid dramatic warming of the planet's oceans and lower atmosphere. The spectacular symptoms of this warming are already observable in Arctic and sub-Arctic regions: melting of the ice pack and thawing of permafrost; accelerated runoff of the Greenland ice sheet and a global rise in sea levels; tundra fires; death toll of hyperspecialized Arctic animal species; northward migration of boreal species; shifting ecosystems and the erosion of the traditional services they provide to local populations. The list goes on.

For societies in the North and South, the consequences of this transformation are multiple: new maritime routes; intensification of destination and intercontinental traffic; exploitation of oil and gas reservoirs in Siberia and Alaska; militarization of the Arctic and resurgence of Cold War geopolitical tensions; access to a new Arctic blue economy (tourism, fisheries, navigation, mining); and the colossal economic potential of certain regions that are now more accessible, including Northern Quebec.

The indicators are unanimous: despite some reassuring successes, the Canadian Arctic is economically and socially underdeveloped compared to other northern regions of the world. The decolonization process is lagging. However, this unfortunate situation presents an opportunity to avoid the anarchic exploitation of resources with its negative impact on local societies, as observed in certain regions of the circumpolar world. It is, on the contrary, fundamental to foresee a harmonious and sustainable development of the Canadian Arctic and Northern Quebec. This is the vision of Institut nordique du Québec (INQ).

Supported by strategic inter-university groupings that have a long tradition of working in the North such as the Centre for Northern Studies (CEN, 1961) and Québec-Océan (1970), Quebec researchers have taken the lead in major Canadian and international northern research initiatives. In terms of major infrastructures, the Canadian research icebreaker CCGS Amundsen and CEN network of Arctic and sub-Arctic research stations cannot go unmentioned. The list of major initiatives led by Quebec researchers includes several strategic research networks funded by the Natural Sciences and Engineering Research Council of Canada (NSERC), Canada's Networks of Centres of Excellence (NCE), as well as NSERC's Discovery Frontiers program and the Canada First Research Excellence Fund program (CFREF).



The spectacular transformation of the Arctic and its consequences for our civilization represent a historical event that marks the beginning of the new epoch. For Canada, Quebec, and Arctic and northern states, the stakes of this transformation are eminently strategic. The objective of sustainable development of Northern Quebec and Canada, the aspirations of northern Indigenous peoples as well as the political objectives expressed in Canada's new *Arctic and Northern Policy Framework* and Quebec's *Plan Nord* are at the very foundation of INQ'S inception. The Institute brings together northern expertise to provide scientific support to communities, and the private and public sectors to inform decisions and the formulation of northern strategies and policies.

Over the next five years (2020-2025), INQ will undertake a series of actions aimed at achieving seven major strategic objectives corresponding to the following themes:

- > research;
- > training;
- > networking and partnerships;
- > knowledge mobilization, technology transfer and innovation;
- > infrastructure;
- > communication and outreach;
- > governance and funding.



# INQ at a glance

Founded in 2014 by Université Laval, McGill University and Institut de la recherche scientifique (INRS), INQ underwent an initial planning phase from 2014 to 2018, to which the Quebec government—under the coordination of Société du Plan Nord—universities, Indigenous nations of Northern Quebec (Cree, Naskapi, Innu, Inuit), colleges, and the private and public sectors actively participated. Today, INQ brings together the expertise of 15 Quebec universities.

## Emergence of INQ - a brief historical overview

The creation of Institut nordique du Québec, a multidisciplinary and inter-institutional institute emerged from strategic thinking and key events, to address the challenges of northern and Arctic regions.

## Milestones - from creation to expansion

Since its inception in 2014, INQ has been working to bring together academic, government, Indigenous and private sector partners through individual and group meetings to present the project. Enthusiasm was immediately palpable. The idea of collectively developing a sustainable North appealed to the many stakeholders who committed themselves to the project. As such, the Implementation Committee was established in 2015, providing opportunity for all these voices to speak in unison. This was one of the major milestones of INQ's implementation phase (2014-2018).

<b>May 2011</b>	The Government of Québec launches the first Plan Nord, a 25-year vision for the sustainable development of Northern Québec that integrates economic, social and environmental dimensions, and a first five-year action plan.
<b>June 2012</b>	Université Laval proposes a scientific foundation for the sustainable development of the North in the document <i>Mobilizing for a Sustainable North: Research Issues and Priorities</i> . This document is the result of an unprecedented consultation exercise that brought together, on a voluntary basis, some 65 northern researchers and experts.
<b>September 2012</b>	Fonds de recherche du Québec organizes a day focused on northern research, with more than 115 researchers attending. Université Laval is invited to present its approach for mobilizing northern expertise.
<b>October 2014</b>	Université Laval, McGill University and Institut national de la recherche scientifique (INRS) publicly announce their intention to jointly create INQ. The Government of Quebec provides \$3 million for the project's start-up.
<b>December 2014</b>	The four Indigenous peoples living in Northern Quebec, namely the Cree, Naskapi, Innu and Inuit, become founding members of INQ on the same level as the three founding universities.
<b>February 2015</b>	INQ collaborates in the organization of <i>Symposium international sur le développement nordique</i> , which brings together academics, decision makers, as well as representatives from business and northern communities.

<b>April 2015</b>	<p>The Quebec government unveils the document: <i>The Plan Nord toward 2035</i>. It identifies the creation of INQ as a priority for action in the field of scientific knowledge.</p> <p>The INQ's Implementation Committee is officially constituted.</p>
<b>July 2016</b>	Louis Fortier is named INQ's Director of Science and Innovation
<b>November 2016</b>	INQ launches three research chairs dedicated to the North. They focus on renewable energy production, wildlife conservation and food security, and sustainable development.
<b>March 2017</b>	A forum on the research needs of First Peoples is organized at UQAT's Pavillon des Premiers-Peuples in Val-d'Or. It results in the identification of the research interests and aspirations of Indigenous peoples, which are subsequently included in the document presenting INQ's scientific program.
<b>April 2017</b>	A retreat to discuss INQ membership is held at Forêt Montmorency with the members of the Implementation Committee. Issues related to the process and type of membership are discussed. The responsibility and obligations of future members, as well as membership benefits are addressed.
<b>September 2017</b>	INQ's scientific program is published as the conclusion of a colossal, exhaustive and inclusive consultation process that brought together more than 150 researchers and representatives from some 40 different organizations. This research program capitalizes on the solid northern expertise acquired over many years by various centres of excellence in partnership with northerners and many researchers from the private and government sectors, in Quebec, Canada and internationally.
<b>December 2017</b>	The <i>Research Guidelines</i> developed by INQ's First Peoples Working Group (FPWG) is published. This document is the first produced by the FPWG, which wanted to provide the entire scientific community with a guide to good research practices in the North. Ethical principles concerning research are described, the importance of indigenous knowledge is highlighted, and recommendations are presented.
<b>February 2018</b>	INQ welcomes 15 Quebec universities as regular members.
<b>August 2018</b>	The funding and construction of INQ's science complex, a flagship building for northern and Arctic research, is announced on August 17, 2018, at Université Laval. The innovative project is supported by the Government of Canada (\$25.5 million), the Government of Quebec (\$27.5 million) and the City of Québec (\$5 million). Université Laval and its partners provide the balance of the funding.
<b>April 2019</b>	<p>INQ, UQAR and the Uapishka Station sign an agreement that expands the network of northern research stations and enriches research projects in the northeastern part of Quebec's boreal forest. Created by the Innu Council of Pessamit and the Manicouagan-Uapishka World Biosphere Reserve, Uapishka Station is the only research station of its type on the North Shore. It is one of the territorial components included in the infrastructure plan implemented by INQ and Société du Plan Nord as part of the Plan Nord.</p> <p>INQ partners with Sentinel North launch two joint calls for projects to its members. Inter-institutional and interdisciplinary research projects that include social sciences, health sciences, natural sciences and engineering are prioritized. The projects submitted are required to have tangible benefits for northern communities.</p>

# Forging New Traditions

## Active participation in the Arctic Circle Assembly in Iceland

An INQ delegation had been actively participating in the Arctic Circle Assembly, held in Reykjavik, Iceland, since 2014 when Sophie D'Amours, then vice-rector of research and creation at Université Laval, presented the INQ project to the international community. Every year since, INQ has been active at the Assembly, organizing workshops on various themes in collaboration with the Quebec government (more specifically, Société du Plan Nord and the Ministère des Relations internationales et de la Francophonie).

## Northern Days

From 2014 to 2016, INQ organizes thematic forums. In 2014, the Secrétariat aux affaires autochtones du Québec asked INQ to organize a scientific day on northern housing. INQ joined forces with the Centre d'études nordiques (CEN), ArcticNet and the Centre interuniversitaire d'études et de recherches autochtones (CIERA) to coordinate this forum. In 2015, INQ organizes a forum to provide a better understanding of northern research and to present the Institute's mission and perspectives. In 2016, the Northern Health Forum provides an opportunity for exchange on the major health issues facing northern Indigenous communities at the dawn of a major transformation in land use.

The first INQ Science Day is held on June 6, 2017, at the Musée de la civilisation in Quebec City. Open to all partners interested in northern issues, as well as to the general public, this gathering is an opportunity to present INQ's scientific program and some 30 research projects. A second edition is held at McGill University in Montreal in January 2018. The third Science Day is held on November 28, 2018, at the Institut national de la recherche scientifique (INRS) in Quebec City, and the fourth is held on May 23, 2019, at the Musée de la civilisation in Quebec City.

## My Northern Project

The provincial component of *My Northern Project* science outreach competition was launched in 2017, as part of INQ's Science Day. Jointly organized by INQ and the Fonds de recherche du Québec, this contest is an opportunity for graduate students to present their northern or Arctic research project in five minutes. An experienced jury selects six winners who are invited to present their projects at the annual Arctic Circle Assembly meeting, alongside finalists from the Scandinavian countries. For this international dimension of the competition, INQ now partners with UArctic. Together, the two organizations establish the rules and schedule of the yearly contest.

## MOOC on Northern Quebec

In 2016, Université Laval, INQ and a team led by Thierry Rodon, a professor in Université Laval's Department of Political Science, collaborated to create a free, open-access online course - or Massive Open Online Course (MOOC) - entirely dedicated to knowledge of the North and northern issues. Entitled *Northern Quebec: Issues, Spaces and Cultures*, the MOOC has been offered annually in French since 2016 and in English since 2017.

---

## VISION

Striving for clean energy, healthy ecosystems, viable infrastructures, prosperous economy, living cultures, and adapted education and health systems we aim at shaping a Canadian Arctic and Northern Quebec for generations to come based on the integration of scientific and community knowledge, including indigenous knowledge, and in partnership with the public and private sectors.

---

## MISSION

The mission of Institut nordique du Québec is to federate forces in northern and Arctic research (natural sciences and engineering, health sciences, social sciences and humanities), to foster innovation, and to create a synergy between researchers and research users, in order to provide governments, northern communities and the private sector with the knowledge and qualified workforce needed for the sustainable development of Northern Quebec and the Canadian Arctic.

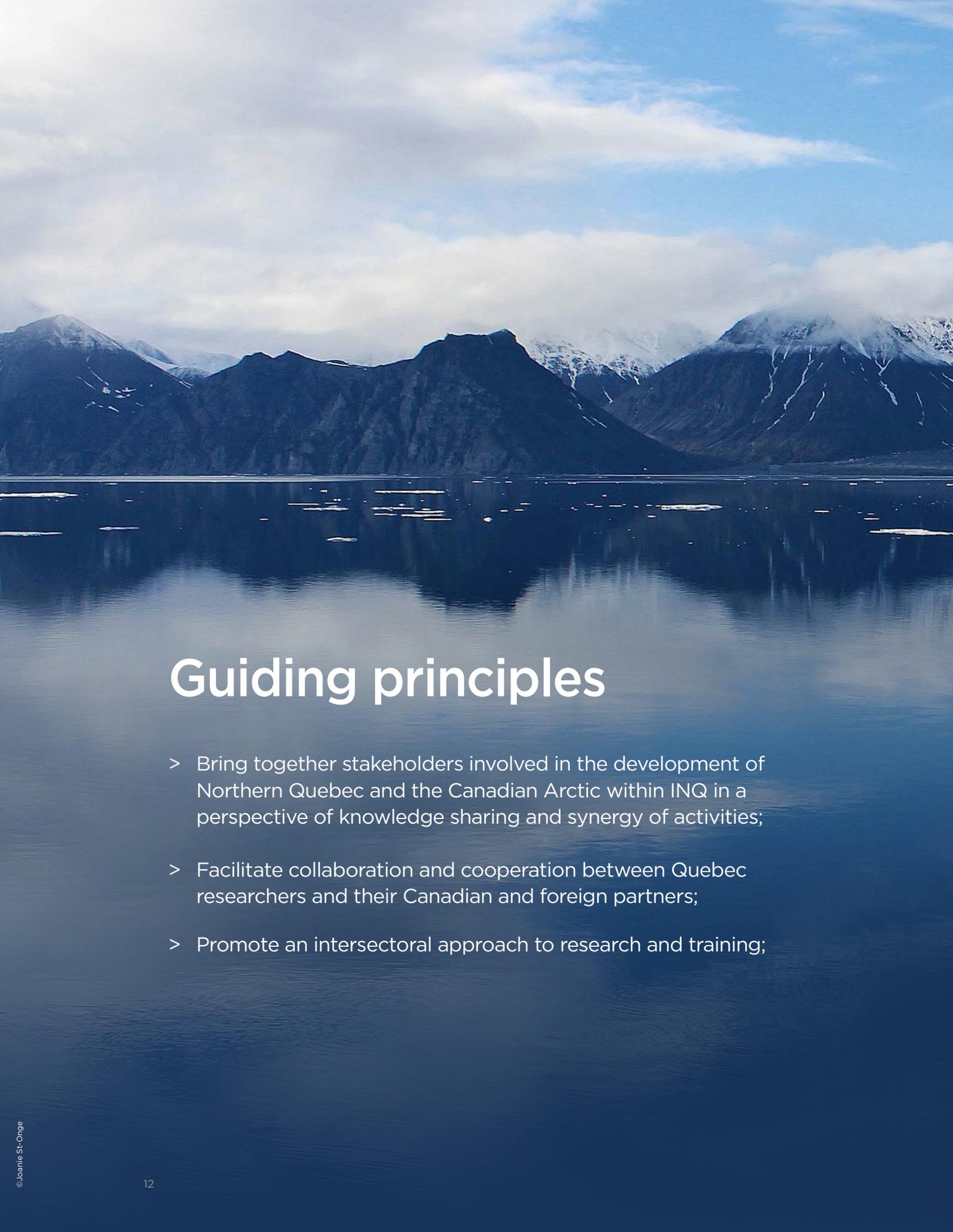
---

## VALUES

INQ's actions are motivated by the following values:

- > Excellence in research
- > Scientific rigour
- > Inclusion of partners
- > Sharing of resources





# Guiding principles

- > Bring together stakeholders involved in the development of Northern Quebec and the Canadian Arctic within INQ in a perspective of knowledge sharing and synergy of activities;
- > Facilitate collaboration and cooperation between Quebec researchers and their Canadian and foreign partners;
- > Promote an intersectoral approach to research and training;



- > Systematically apply the principles and objectives of sustainable development in all of INQ's actions;
- > Harness technological, social and environmental innovations for the benefit of organizations, the public and private sectors and northern communities;
- > Involve northern Indigenous nations in the management and implementation of INQ's programs and integrate Indigenous knowledge in research and training.

# Strategic objectives and priority actions

## Research

### **OBJECTIVE 1**

**Implement an inter-institutional and intersectoral research program based on northern and Arctic issues and respond, through research projects, to priority needs identified by external partners.**

Research is at the heart of INQ's mission. The Working Group on Research and Innovation established five main priorities for INQ's intersectoral research program based on sustainable development of the North: societies and cultures; health; ecosystem functioning and environmental protection; infrastructure and technologies; and natural resources. The First Peoples Working Group also helped to integrate First Peoples' research interests and aspirations into each of the priorities during the Forum on the Research Needs of First Peoples. Appendix A (page 25) provides a brief overview of each of these research priorities. The scope of INQ's research program will depend largely on the success of the membership and governance in securing funding from diverse sources (see Objective 7).

The following actions will ensure the expansion of this program:

- 1.1. Implement INQ's scientific program through calls for projects. These will support interdisciplinary or intersectoral research as a response to sustainable development issues in Northern Quebec and the Canadian Arctic. They will include the concerns of northern communities (Indigenous and non-Indigenous);
- 1.2. Promote access by affiliated centres and researchers to national, international and philanthropic funding programs for northern and Arctic research;
- 1.3. Preserve INQ's current research chairs and promote the emergence of new chairs related to INQ's program in member institutions;
- 1.4. Recognize the many northern research initiatives of member institutions within INQ research programs;
- 1.5. Encourage affiliated researchers to implement the recommendations of the Research Guidelines document developed by the First Peoples' Working Group.

# Training

## **OBJECTIVE 2**

**Disseminate, organize and support training activities aimed at equipping students, researchers and stakeholders called upon to intervene in northern and Arctic environments, and to train local workers in the North and develop expertise in northern issues.**

In addition to the credit courses offered by higher education institutions, INQ plans on setting up a training program to provide Quebec with highly qualified personnel capable of building the North of tomorrow. It also intends on working with Indigenous communities to support them in their quest for post-secondary training. A structured training program will be established in harmony with—and without duplicating—courses already offered in member institutions. The following milestones will be established over the next few years:

- 2.1 Develop an inventory of credit courses related to the North at INQ's member institutions;
- 2.2 Encourage post-secondary research training for Indigenous students through participation in field research projects, microprograms and certificates;
- 2.3 Develop intensive and targeted training activities for northern community stakeholders, organizations working in the North, and public servants involved in the North;
- 2.4 Participate in training initiatives organized by INQ's member institutions;
- 2.5 Evaluate the possibility of developing a university curriculum in which recognized experts in northern research from Quebec or elsewhere could collaborate in partnership with universities and interested partners;
- 2.6 Organize intensive training adapted to young researchers and researchers from the private and public sectors to introduce them to northern research and issues.

# Networking and partnerships

## OBJECTIVE 3

**Bring together Quebec and Canadian research expertise on northern and Arctic issues, and to involve northern Indigenous, community, private and public partners with the goal of promoting sustainable development in Northern Quebec and the Canadian Arctic.**

The preferred approach is based on the involvement of all northern stakeholders. Since the fall of 2018, 15 Quebec universities have become INQ institutional members. They oversee some 80 northern research centres or chairs that bring together more than 250 researchers. These centres, chairs and researchers are affiliated with INQ.

Research users in northern communities and in the public and private sectors are invited to join the INQ network as partners. The priority actions stemming from this objective are as follows:

- 3.1 With the support of partners already involved, to inventory, meet and engage within INQ the actors of the public and private sectors already involved in northern development;
- 3.2 Create the *Consortium de recherche en innovation nordique du Québec* (CRINQ) to stimulate and increase collaboration between the research community and northern industries (e.g., mining, energy, forestry, tourism, bio-food);
- 3.3 Create opportunities for researchers to meet among themselves, with public and private decision makers and with communities through conferences or other types of events.



# Knowledge mobilization, technology transfer and innovation

## **OBJECTIVE 4**

**Scientifically inform actors and organizations involved in the improvement of living conditions, the conservation of ecosystems and the development of human, natural and technological potential in northern regions.**

The climatic, political, ecological, economic, social and health issues heightened by the environmental transformation and modernization of the North require solutions and decisions based on scientific knowledge and the knowledge of northern experts. Beyond its research and training mission, one of INQ's main objectives is to put the expertise of its members at the service of the sustainable development of the land, water and communities of Northern Quebec and the Canadian Arctic. To do so, it will invest in existing and future knowledge mobilization and technology transfer mechanisms. It will rely on the innovation capital of its members in the development of new technologies adapted to the realities of the North and in social innovation aimed at providing solutions developed jointly with northern stakeholders.

The following actions will ensure achievement of this objective:

- 4.1 Building on the CRINQ, to implement a cross-sectoral research program (natural, health, social and engineering sciences) co-funded by the public and private sectors that responds to the industry's research needs (e.g., mining, energy, forest and marine resources, tourism, bio-food) and promotes sustainable development in the North;
- 4.2 Encourage INQ-affiliated centres and researchers to contribute to other existing major knowledge mobilization initiatives in northern and Arctic research;
- 4.3 Collaborate, through research projects, in the work of Société du Plan Nord and its partners;
- 4.4 Participate with northern and Arctic partners in efforts to develop and optimize the use of renewable energy (wind, geothermal, solar, biomass, etc.) in communities and businesses in the Arctic and territory covered by Plan Nord;
- 4.5 Propose innovative solutions to logistical, environmental, social and health issues in the North;
- 4.6 Explore the possibility of developing knowledge transfer tools based on ArcticNet's Integrated Regional Impact Assessment of Coastal Marine and Terrestrial Societies and Ecosystems (IRIS) model over the entire territory covered by Plan Nord;
- 4.7 Continue organizing annual INQ scientific conferences that bring together researchers and research users from across Quebec;
- 4.8 Develop in collaboration with partners an innovation platform that will in time become an INQ Northern Innovation Technopole.

# Infrastructures

## OBJECTIVE 5

**Increase northern research infrastructure in Quebec and Canada, facilitate its access for INQ-affiliated researchers and partners, and maximize its use in support of INQ's mission and the development of research.**

From CEN research stations to Polar Continental Shelf Program (PCSP) aircraft and the icebreaker CCGS Amundsen, Arctic and sub-Arctic research require heavy logistical resources that are generally beyond the reach of individual laboratories. INQ will therefore support its partners in the creation of new research stations in northern Quebec. These stations will be distributed over the territory's four main geographic areas: Nunavik, Eeyou Istchee Baie-James, the North Shore, and northern Saguenay-Lac-Saint-Jean.

INQ will also have a main research pavilion on Université Laval's campus, an emblematic building and a symbol of Quebec's nordicity. This building will be a hub for Quebec centres of excellence in northern sciences in the fields of social science and humanities, natural sciences, health and engineering. It will meet the needs of members and partners in terms of logistics, intersectorality, training and hosting capacity.

To optimize the use of infrastructures, INQ will pursue the following actions:

- 5.1 Establish a northern science complex that meets the needs of researchers and allows for the intersectoral and concerted approach required to address the ecosystemic issues raised by the transformation of the North;
- 5.2 Develop service agreements with major infrastructure programs and operators to facilitate access to northern and Arctic research infrastructures for INQ-affiliated researchers, their students and their research partners;
- 5.3 Periodically update Lab-O-Nord, a digital platform listing all research infrastructures (large-scale facilities, laboratories, equipment) that can be made available to INQ members by establishing agreements for scientific collaboration and infrastructure sharing;
- 5.4 Support the creation of research stations in northern Quebec and encourage their use by INQ members;
- 5.5 Collaborate in the development of the Uapishka research station, located in the heart of the Groulx Mountains, under the coordination of UQAR;
- 5.6 Collaborate in the improvement and expansion of Université Laval's CEN station in Umiujaq, Nunavik;



- 5.7 Collaborate in the development of a research infrastructure on the territory of Eeyou Istchee Baie-James, under the potential coordination of UQAT;
- 5.8 Collaborate in the development of a research infrastructure in the northern Saguenay-Lac-Saint-Jean region, under the coordination of UQAC;
- 5.9 Contribute to the network of research stations and northern logistics bases of the Canadian Network of Northern Research Operators (CNNRO);
- 5.10 Contribute, to the extent possible, to the scientific community's ongoing efforts to renew major Arctic research infrastructures such as the research icebreaker CCGS Amundsen;
- 5.11 Collaborate in the establishment of two research stations in the villages of Pond Inlet and Qikiqtarjuaq, Nunavut, in partnership with these communities; a multi-agency project jointly led by the Takuvik Joint International Laboratory and CEN.



# Communication and outreach

## **OBJECTIVE 6**

**Inform INQ members, partners and users of INQ's activities; to collaborate in the dissemination of knowledge and research results in the North and the Arctic; and to publicize and promote INQ at provincial, national and international levels.**

INQ's ambition to become a major centre for northern and Arctic research in North America involves developing and consolidating its reputation, making its work and results known and disseminating them appropriately, as well as creating a brand image through strategic positioning and enhanced visibility in Quebec, Canada and internationally.

The partnership approach put forward by INQ also involves establishing dynamic and ongoing communication with its members, partners and knowledge users.

Finally, the participation and commitment of INQ, both in the context of initiatives emerging from northern and Arctic communities, businesses and authorities and in national and international forums, are essential to its positioning and influence on the international scene of Northern and Arctic research.

In terms of communication and outreach, INQ will pursue the following actions:

- 6.1 Establish a communication plan in consultation with its partners, including the implementation of dissemination and communication tools aimed at a wide audience;
- 6.2 Develop, disseminate and promote a directory of the expertise and organizations associated with INQ's activities;
- 6.3 Update, in collaboration with all INQ members, the Atik<sup>u</sup> Northern and Arctic Knowledge Portal;
- 6.4 Participate in meetings and events to raise awareness of northern issues and share information and knowledge on northern and Arctic development;
- 6.5 Take advantage of collaborative opportunities to position INQ during national and international conferences (e.g., ArcticNet's Annual Scientific Meeting, Arctic Circle Assembly, Arctic Frontiers, etc.);
- 6.6 Implement a communication strategy to promote INQ as a hub for northern and Arctic research in North America;
- 6.7 Promote the northern and Arctic scientific expertise of INQ member universities, research chairs and affiliated research centres to the general public, particularly through presentations and popularized scientific publications.

# Governance and financing

## **OBJECTIVE 7**

**Consolidate INQ's governance and organizational structure and articulate a financial framework that builds on existing research funding sources, private sector partnerships and diverse funding initiatives, including philanthropy.**

Since the announcement of INQ's creation in 2014, its founders, supported by the Government of Quebec, have worked hard to make INQ a flagship project in northern and Arctic issues, while ensuring a balance among activity sectors related to the economy, humanities and social sciences, health, engineering, natural sciences and the environment.

INQ is now moving from its implementation phase toward expansion and consolidation phases by materializing a governance structure characterized by a broad membership and a dynamic permanent organizational structure.

Moreover, INQ's field of activity is primarily territorial and, as a result, multi-sectoral and multi-institutional. This makes it possible for INQ to access a multitude of funding sources for its activities, a situation from which it intends to take advantage.

INQ will also be able to rely on partnerships to access research funds and to conduct joint calls for projects.

INQ's priority actions with respect to governance and funding will therefore be as follows:

- 7.1 Complete the implementation of governance tools and consolidate INQ's organizational and administrative structure;
- 7.2 Consolidate funding for INQ operations and activities through support from the Government of Quebec;
- 7.3 Diversify INQ's funding sources by drawing on local, provincial, federal, and international granting and government agencies;
- 7.4 Obtain funding from the private sector for knowledge acquisition and research projects through CRINQ (see Objective 3.2);
- 7.5 Articulate and implement a philanthropic funding strategy (scholarships and other activities).

# The Strategic Plan at a glance

## RESEARCH

### Objective 1

Implement an inter-institutional and intersectoral research program based on northern and Arctic issues and respond, through research projects, to priority needs identified by external partners.

#### Actions

- 1.1. Implement INQ's scientific program through calls for projects. These will support interdisciplinary or intersectoral research as a response to sustainable development issues in Northern Quebec and the Canadian Arctic. They will include the concerns of northern communities (Indigenous and non-Indigenous);
- 1.2. Promote access by affiliated centres and researchers to national, international and philanthropic funding programs for northern and Arctic research;
- 1.3. Preserve INQ's current research chairs and promote the emergence of new chairs related to INQ's program in member institutions;
- 1.4. Recognize the many northern research initiatives of member institutions within INQ research programs;
- 1.5. Encourage affiliated researchers to implement the recommendations of the Research Guidelines document developed by the First Peoples Working Group..

## TRAINING

### Objective 2

Disseminate, organize and support training activities aimed at equipping students, researchers and stakeholders called upon to intervene in northern and Arctic environments, and to train local workers in the North and specialists of the North.

#### Actions

- 2.1. Develop an inventory of credit courses related to the North at INQ's member institutions;
- 2.2. Encourage post-secondary research training for Indigenous students through participation in field research projects, microprograms and certificates;
- 2.3. Develop intensive and targeted training activities for northern community stakeholders, organizations working in the North, and public servants involved in the North;
- 2.4. Participate in training initiatives organized by INQ's member institutions;
- 2.5. Evaluate the possibility of developing a university curriculum in which recognized experts in northern research from Quebec or elsewhere could collaborate in partnership with universities and interested partners;
- 2.6. Organize intensive training adapted to young researchers and researchers from the private and public sectors to introduce them to northern research and issues.

## NETWORKING AND PARTNERSHIPS

### Objective 3

Bring together Quebec and Canadian research expertise on northern and Arctic issues, and to involve northern Indigenous, community, private and public partners with the goal of promoting sustainable development in Northern Quebec and the Canadian Arctic.

#### Actions

- 3.1. With the support of partners already involved, to inventory, meet and engage within INQ the actors of the public and private sectors already involved in northern development;
- 3.2. Create the *Consortium de recherche en innovation nordique du Québec* (CRINQ) to stimulate and increase collaboration between the research community and northern industries (e.g., mining, energy, forestry, tourism, bio-food);
- 3.3. Create opportunities for researchers to meet among themselves, with public and private decision makers and with communities through conferences or other types of events.

## KNOWLEDGE MOBILIZATION, TECHNOLOGY TRANSFER AND INNOVATION

### Objective 4

Scientifically inform actors and organizations involved in the improvement of living conditions, the conservation of ecosystems and the development of human, natural and technological potential in northern regions.

#### Actions

- 4.1. Building on the CRINQ, to implement a cross-sectoral research program (natural, health, social and engineering sciences) co-funded by the public and private sectors that responds to the industry's research needs (e.g., mining, energy, forest and marine resources, tourism, bio-food) and promotes sustainable development in the North;
- 4.2. Encourage INQ-affiliated centres and researchers to contribute to other existing major knowledge mobilization initiatives in northern and Arctic research;
- 4.3. Collaborate, through research projects, in the work of Société du Plan Nord and its partners;
- 4.4. Participate with northern and Arctic partners in efforts to develop and optimize the use of renewable energy (wind, geothermal, solar, biomass, etc.) in communities and businesses in the Arctic and territory covered by Plan Nord;
- 4.5. Propose innovative solutions to logistical, environmental, social and health issues in the North;
- 4.6. Explore the possibility of developing knowledge transfer tools based on ArcticNet's Integrated Regional Impact Assessment of Coastal Marine and Terrestrial Societies and Ecosystems (IRIS) model over the entire territory covered by Plan Nord;
- 4.7. Continue organizing annual INQ scientific conferences that bring together researchers and research users from across Quebec;
- 4.8. Develop in collaboration with partners an innovation platform that will in time become an INQ Northern Innovation Technopole.

## INFRASTRUCTURES

### Objective 5

Increase northern research infrastructure in Quebec and Canada, facilitate its access for INQ-affiliated researchers and partners, and maximize its use in support of INQ's mission and the development of research.

#### Actions

- 5.1 Establish a northern science complex that meets the needs of researchers and allows for the intersectoral and concerted approach required to address the ecosystemic issues raised by the transformation of the North;
- 5.2 Develop service agreements with major infrastructure programs and operators to facilitate access to northern and Arctic research infrastructures for INQ-affiliated researchers, their students and their research partners;
- 5.3 Periodically update Lab-O-Nord, a digital platform listing all research infrastructures (large-scale facilities, laboratories, equipment) that can be made available to INQ members by establishing agreements for scientific collaboration and infrastructure sharing;
- 5.4 Support the implementation of research stations in northern Quebec and encourage their use by INQ members;
- 5.5 Collaborate in the development of the Uapishka research station, located in the heart of the Groulx Mountains, under the coordination of UQAR;
- 5.6 Collaborate in the improvement and expansion of Université Laval's CEN station in Umiujaq, Nunavik;
- 5.7 Collaborate in the development of a research infrastructure on the territory of Eeyou Istchee Baie-James, under the potential coordination of UQAT;
- 5.8 Collaborate in the development of a research infrastructure in the northern Saguenay-Lac-Saint-Jean region, under the coordination of UQAC;
- 5.9 Contribute to the network of research stations and northern logistics bases of the Canadian Network of Northern Research Operators (CNNRO);
- 5.10 Contribute, to the extent possible, to the scientific community's ongoing efforts to renew major Arctic research infrastructures such as the research icebreaker CCGS Amundsen;
- 5.11 Collaborate in the establishment of two research stations in the villages of Pond Inlet and Qikiqtarjuaq, Nunavut, in partnership with these communities; a multi-agency project jointly led by the Takuvik Joint International Laboratory and CEN.

## COMMUNICATION AND OUTREACH

### Objective 6

Inform INQ members, partners and users of INQ's activities; to collaborate in the dissemination of knowledge and research results in the North and the Arctic; and to publicize and promote INQ at provincial, national and international levels.

#### Actions

- 6.1 Establish a communication plan in consultation with its partners, including the implementation of dissemination and communication tools aimed at a wide audience;
- 6.2 Develop, disseminate and promote a directory of the expertise and organizations associated with INQ's activities;
- 6.3 Update, in collaboration with all INQ members, the Atik<sup>4</sup> Northern and Arctic Knowledge Portal;
- 6.4 Participate in meetings and events to raise awareness of northern issues and share information and knowledge on northern and Arctic development;
- 6.5 Take advantage of collaborative opportunities to position INQ during national and international conferences (e.g., ArcticNet's Annual Scientific Meeting, Arctic Circle Assembly, Arctic Frontiers, etc.);
- 6.6 Implement a communication strategy to promote INQ as a hub for northern and Arctic research in North America;
- 6.7 Promote the northern and Arctic scientific expertise of INQ member universities, research chairs and affiliated research centres to the general public, particularly through presentations and popularized scientific publications.

## GOVERNANCE AND FINANCING

### Objective 7

Consolidate INQ's governance and organizational structure and articulate a financial framework that builds on existing research funding sources, private sector partnerships and diverse funding initiatives, including philanthropy.

#### Actions

- 7.1 Complete the implementation of governance tools and consolidate INQ's organizational and administrative structure;
- 7.2 Consolidate funding for INQ operations and activities through support from the Government of Quebec;
- 7.3 Diversify INQ's funding sources by drawing on local, provincial, federal, and international granting and government agencies;
- 7.4 Obtain funding from the private sector for knowledge acquisition and research projects through CRINQ (see Objective 3.2);
- 7.5 Articulate and implement a philanthropic funding strategy (scholarships and other activities).



# Appendix A

## INQ Research Priorities

### **PRIORITY 1 | SOCIETIES AND CULTURE**

Improve our knowledge of social and cultural issues of Northern Québec by studying different development models as well as heritage, identities, territoriality, knowledge, living environments, and governance. This priority also emphasizes the planning of research programs, compliance with ethics protocols in Indigenous settings, and the decolonization of research.

- > Development and territoriality
- > Cultural heritage and representations
- > Languages, identities, knowledge transmission, and education
- > Physical and human living environments
- > Law and governance

### **PRIORITY 2 | HEALTH**

In keeping with the themes and priorities identified by people in the North, and using a partnership approach, this priority focuses not only on research into illness and disease, but also on resilience, adaptation, and the positive aspects of health. Intervention research, both clinical and population-based, aims to identify optimal solutions and best practices to improve the health of northern populations and reduce health-related inequities.

- > Health issues
- > Factors shaping health
- > Healing, and health and social services

### **PRIORITY 3 | ECOSYSTEM PROCESSES AND ENVIRONMENTAL PROTECTION**

The ecosystems of high northern latitudes are feeling the combined effect of accelerated socioeconomic development, strong demographic growth, and global warming. This priority examines the consequences of such stresses on marine, terrestrial, and freshwater ecosystems in order to preserve and protect the food security and well-being of people living in the North. The research priority explores global warming, thaw, freshwater, food security, and the greenhouse effect, with an emphasis on coastal environments.

- > Northern terrestrial and freshwater environments
- > Investigation, monitoring, and management of coastal zones and ice-bound seas

## **PRIORITY 4 | INFRASTRUCTURE AND TECHNOLOGY**

Developing Northern Québec requires new technologies and infrastructure adapted to its harsh environment, one characterized by a cold climate, remote communities, and melting permafrost. To address the needs of northern communities, this priority explores issues including the rapid implementation of telecommunications channels, development of environmental technologies to ensure the protection of the potable water supplies of northern communities, the development of infrastructure adapted to harsh environments, and the conversion and management of waste from a health and sustainable development standpoint.

- > Building sustainable infrastructure
- > Information technology
- > Environmental technology

## **PRIORITY 5 | NATURAL RESOURCES**

The North's ecosystems are home to considerable forestry, mineral, hydroelectric, and wind resources. This priority looks at the economic value of natural resources while taking into account the extreme vulnerability of northern ecosystems to climate change and the impact of human activity. In keeping with the aspirations of northern communities, it studies and documents overexploitation, seeks to achieve social acceptability, and encourages the local spinoffs of economic activity. Through optimization and planning, this priority seeks to develop tools that ensure that strategic resources in the North are developed in a sustainable manner.

- > Forest planning and management
- > Responsible mineral development
- > Energy





# Institut nordique du Québec

Together for the North

## **Institut nordique du Québec**

Vice Rector Office, Research and Innovation

Pavillon Alexandre-Vachon  
1045, avenue de la Médecine  
Université Laval  
Québec (Québec) G1V 0A6

[Inq.ulaval.ca/en](http://Inq.ulaval.ca/en)

Financial partner

Québec 