



NUNAVUT CLIMATE
CHANGE SECRETARIAT
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Climate Change Secretariat

2018-2019 Activities Report

Government of Nunavut

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Introduction

The North is experiencing the impacts of climate change three times faster than the rest of the world. It is causing significant changes to Nunavut's environment, communities, and Nunavut's health and well-being. Inuit have been documenting these changes for generations through *Inuit Qaujimagatuqangit* and these observations are now also supported by western science. As more greenhouse gases are added to the atmosphere, the Arctic will continue to warm, increasing the likelihood that Nunavummiut will experience greater climate change impacts. It is in this spirit that the Climate Change Secretariat (CCS), housed within the Department of Environment (DOE), works to support climate change action across the territory.

CCS, established in 2016, coordinates climate change action across the Government of Nunavut (GN) and advises departments and agencies on how to incorporate climate change initiatives into their work.

CCS is guided by the following documents, as they relate to Nunavut's commitments on climate change adaptation and mitigation: *Upagiaqtavut* - the GNs climate change adaptation strategy; the *Pan-Territorial Adaptation Strategy*; and the clean energy-related aspects of *Ikummatiit* - the GNs energy strategy.

What We Do

CCS performs three activities that work collaboratively to coordinate climate change initiatives in Nunavut:

Adaptation: Planning for current and future climate change impacts,

Mitigation: Reducing greenhouse gas emissions, and

Outreach: Increasing climate change awareness amongst Nunavummiut.

CCS provides critical services to the GN by:

- Encouraging the exchange of knowledge and information about climate change based on science and *Inuit Qaujimagatuqangit*.
- Coordinating climate change action across GN Departments and Agencies.
- Guiding GN Departments and Agencies and Nunavut communities in accessing relevant climate change information.
- Connecting GN Departments and Agencies and Nunavut communities with key climate change partners and funding.
- Representing the GN in regional and national climate change discussions and events.
- Supporting programs, policies and partnerships that help Nunavut in adapting to and minimizing the impacts of climate change.

- Leading the interagency development of exploratory options to reduce greenhouse gas emissions and lessen the territory's reliance on imported fossil fuels.
- Encouraging the exchange of knowledge and information about climate change based on science and *Inuit Qaujimajatuqangit*.
- Increasing Nunavummiut's knowledge of climate change through the development of educational resources.

Who We Work With

CCS has strong partnerships and relationships with many stakeholders with overlapping interests. CCS uses these partnerships to access the best possible research to inform decision-making and share information with all Nunavummiut. We work with Inuit organizations, federal agencies, research institutes, non-governmental organizations, community groups, and GN departments and agencies. We combine scientific information with traditional knowledge to expand our knowledge base, and provide education and engagement opportunities for Nunavummiut, including youth, decision-makers, and elders.

Activities

CCS General Activities

CCS worked on the following activities during the fiscal year 2018-2019.

2018 Report of the Auditor General of Canada to the Legislative Assembly of Nunavut - Climate Change in Nunavut

As identified in DOE's business plan, CCS put significant time and resources into the Office of the Auditor General of Canada (OAG) audit process as mandated by the federal government:

- Preparing witness statements regarding the Report of the Auditor General of Canada to the Standing Committee on Oversight of Government Operations and Public Accounts - Climate Change in Nunavut, which was submitted in March 2018.
- Participating as witnesses in the Standing Committee on Oversight of Government Operations and Public Accounts (OGOPA) Review of the 2018 Report of the Auditor General of Canada to the Legislative Assembly of Nunavut- Climate Change in Nunavut in April 2018.
- Producing the GN Response to the OGOPA Standing Committee report on the Auditor General of Canada's report on climate change in Nunavut in the Legislative Assembly in August 2018.

Reporting to the Government of Canada

Pan-Canadian Framework on Clean Growth and Climate Change

- In 2018-19, CCS, acting as GN lead, coordinated the GN's contribution to the Pan-Canadian Framework on Clean Growth and Climate Change (PCF) Third Annual Progress Report, with support from the Department of Executive and Intergovernmental Affairs.
- CCS continues to work on three of four of the sections of the PCF:
 1. Reducing Greenhouse Gas Emissions,
 2. Adaptation and Climate Resilience,
 3. Clean Technology, Jobs, and Innovation, and
 4. The fourth section, Carbon Pricing, is being led by Nunavut's Department of Finance with support from CCS.

GHG National Inventory Report

By ratifying the United Nations Framework Convention on Climate Change (UNFCCC) in 1992, Canada committed to submit a yearly national inventory of sources and sinks of greenhouse gases (GHGs). All provinces and territories must work with the Government of Canada to complete this report every year to submit it to the UNFCCC.

In 2018, CCS initiated a collaboration with Environment and Climate Change Canada (ECCC) to address the data gaps for Nunavut in the National Inventory Report (NIR).

Coordinating Efforts to Access Federal Funding Opportunities

Climate Change Preparedness in the North Program

- In 2018-2019, CCS negotiated the GN's involvement in Crown Indigenous Relations and Northern Affairs Canada (CIRNAC)'s \$1.7 million Climate Change Preparedness in the North program.
- CCS solicited proposals from GN Departments and worked with CIRNAC to fund three projects over the next four years.
- CCS coordinated the spending of these funds and provided climate change adaptation support and expertise to project leads.
- The three projects are:
 1. SmartICE project in Arctic Bay
 - Led by Economic Development and Transportation.
 - Purpose is to develop a community-based sea ice monitoring program using both *Inuit Qaujimaqatuqangit* and scientific methods.

2. Kugluk Territorial Park Erosion Project:
 - Led by Nunavut Parks and Special Places.
 - Purpose is to Identify concerns and implement adaptation measures for river erosion and permafrost thaw in Kugluk Territorial Park near Kugluktuk.
3. Consideration of the development of a Youth Advisory Committee on Climate Change:
 - Led by CCS.
 - Purpose is to engage youth on climate change and to build capacity in the territory.

The Low Carbon Economy Fund

- CCS led the coordination of the Low-Carbon Economy Leadership Fund (LCEF) to ensure that GN departments may take full advantage of this funding opportunity.
- The Government of Canada allocated \$31 million dollars through this fund for infrastructure projects that would reduce greenhouse gas emissions in Nunavut.
- Three projects were put forward by the GN:
 - Qulliq Energy Corporation (QEC): Installation of new district heating systems in Sanikiluaq and Taloyoak.
 - Nunavut Housing Corporation (NHC) – Accelerated Public Housing Modernization & Improvement Project.
 - Department of Community and Government Services (CGS)– South Baffin Energy Management Project.
- By the end of the fiscal year 2018-19, QEC and NHC's projects were accepted by the fund and the LCEF secretariat was still analyzing the project from CGS, which was the third and final project submitted in 2018.

Infrastructure Canada's Disaster Mitigation and Adaptation Fund (DMAF)

CGS in partnership with CCS submitted an Expression of Interest letter to the DMAF in July 2018 for the \$20 million "Disaster Mitigation for Grise Fiord" project, which would include capital investments to deal with the thawing glacier as the water source, coastal erosion, and landslides.

CCS Financial Information

In 2018-19, CCS received federal funds to support two positions: the Climate Change Mitigation Specialist and the Climate Change Adaptation Specialist. CCS received the following federal funds to support internal climate change capacity:

- CIRNAC Northern Responsible Energy Approach or Community Health and Electricity (REACHE) Program:
 - \$150,000 for salary dollars for the Climate Change Mitigation Specialist position in 2018-19
- CIRNAC Climate Change Preparedness in the North Program:
 - \$150,000 for salary dollars for the Climate Change Adaptation Specialist position in 2018-19
- Natural Resources Canada's Clean Energy for Rural and Remote Communities Fund:
 - CCS submitted a letter of intent for \$400,000 for a multi-year project to develop Community Energy Plans for Nunavut communities.

Adaptation Section: Planning for Current and Future Climate Change Impacts

As mentioned above, CCS has three sections that work collaboratively to coordinate climate change initiatives in Nunavut: adaptation, mitigation, and outreach. The following are activities for each section.

Pan-northern Permafrost Hazard Mapping Meeting

- In 2018-19, CCS prepared a report summarizing the Pan-Northern Permafrost Hazard Mapping Meeting, which took place in March 2018.
- The goal of the workshop was to share and improve permafrost hazard mapping information across the North including the use of these maps in decision-making.
- Participants from the Yukon, Northwest Territories (NWT), Nunavut, and Nunavik provided recommendations on how to better integrate permafrost hazard mapping into infrastructure decision-making.
- CGS currently leads the development of permafrost hazard maps for the GN and have developed maps for seven Nunavut communities. These maps are used to identify suitable land for future development.

Northern Infrastructure Standardization Initiative

- CCS worked with the Department of Community and Government Services to host infrastructure and climate change training in December 2018 in Iqaluit, for 34 GN and City of Iqaluit staff who work in the infrastructure sector.
- This training introduced participants to the federally led Northern Infrastructure Standardization Initiative (NISI), which is developing standards for addressing climate change concerns surrounding northern infrastructure.
- This training was funded by the federal government.
- GN technical staff from the CGS and NHC sit on the development committees and contribute to the development of existing standards.
- CCS continues to provide input on dissemination and engagement around the release of the standards.

Northern Adaptation Strategy

- CCS provided input into CIRNAC's Northern Adaptation Strategy, which will identify northern climate change adaptation priorities and guide future programs and funding.
- CCS is working closely with the other two territories to ensure that CIRNAC develops this strategy in line with existing pan-territorial climate change adaptation priorities.
- CIRNAC is also engaging regional northern indigenous groups to provide input into the strategy.

Climate Change Risk Assessments in Nunavut

- CCS explored options for the development of a GN-wide climate change risk assessment. This involves:
 - Looking pan-territorially to see how the governments of Yukon and the NWT are assessing risks from climate change;
 - Reviewing literature on the Inuit perspective of risk; and
 - Discussing with various federal departments who collect climate data on what is available for Nunavut.

Mitigation Section: Reducing our Greenhouse Gas Emissions

Clean Energy Rebate Program in Nunavut

- CCS is working with other GN Departments and agencies to reduce reliance on diesel fuel in the Territory through program development. In 2018-19, this work included:

- Coordinating departmental efforts to access clean energy federal funding opportunities that could help the GN design and implement clean energy programs,
- Receiving advice and training from experienced stakeholders working in the field of alternative energy in the North to see how their programs could apply to Nunavut,
- Organizing workshops with GN departments and agencies to discuss creating clean energy programs within the GN, and
- Gathering lessons learned from organizations and individuals who have already tested clean energy technology systems in Nunavut to start building an “Alternative Energy Database”.

Energy and Mines Ministers Conference (EMMC)

- The EMMC is meeting of federal, provincial and territorial Ministers of Energy and Mines held every summer in a different location across Canada.
- The GN hosted the EMMC in Iqaluit in August 2018.
- The overarching theme of the EMMC in 2018 was “Connecting Northern, Remote and Isolated Community Infrastructure”
- CCS participated in five working groups responsible for producing energy-related deliverables in preparation for EMMC 2018;
 1. Steering Committee for Energy Efficiency;
 2. Electricity Working Group;
 3. Energy Technology Working Group;
 4. Markets and Trade (Oil and Gas–led by EDT); and
 5. International Collaboration Working Group.

ENERGY STAR® Initiative in Nunavut

- CCS aims to promote energy efficiency through the ENERGY STAR program.
- The ENERGY STAR initiative is a North American labelling program that promotes energy efficient products and energy efficiency programs. It allows consumers to easily identify which products will save energy by looking for the ENERGY STAR logo.
- CCS is now officially a participant of the ENERGY STAR initiative which provides resources such as:
 - Tools and resources to develop a green procurement policy,
 - Participation to working groups on energy efficient products and homes, and

- Examples of energy efficiency rebate programs and lessons learned from other provinces and territories.

Ikummatiit: Nunavut's Energy Strategy

- Community Energy Planning has been determined to be the most suitable option for Nunavut to form community leadership around sustainable energy and support in developing an energy strategy and a climate action plan.
- Some progress has been made towards the goals and actions of *Ikummatiit*, including:
 - CCS chaired an ad-hoc working group titled “Nunavut Clean Growth Working Group” to coordinate LCEF funds and other related Pan-Canadian Framework on Clean Growth and Climate Change funds. The working group included management and directors from CGS, NHC, DOE, Executive and Intergovernmental Affairs (EIA), Finance, and QEC.
 - The Nunavut Renewable and Alternative Energy Resources Inventory.
 - An updated energy end-use database; and
 - Energy audits conducted in Iqaluit, Arviat, Cambridge Bay, Kugluktuk and Rankin Inlet consisting of 57 residential and 7 commercial buildings.

Carbon Pricing

- CCS provided climate support to the Department of Finance, who leads this file.
- In 2018, Canada has announced their intention to set a national price on carbon starting in 2018.
- The GN has requested special considerations to reflect the territory's reliance on high-carbon activities, like diesel generators for electricity, air transportation for cargo, and our limited access to greener energy alternatives.

Community Energy Planning for Nunavut

- CCS has started to plan for the development of community energy plans (CEPs) within Nunavut communities.
- CCS submitted a formal project application to the Clean Energy for Rural and Remote Communities (CERRC) federal funding stream to develop and implement CEPs in four Nunavut communities over the next four years.
- Community Energy Planning engagement sessions have been held across the GN and with community Senior Administrative Officers.
- CEP is a tool to help communities achieve their energy goals and visions for both the short and long-term.

- CEP helps communities create a roadmap which defines their unique energy goals and priorities that are grounded in the realities of the energy system in the territory.
- CEP is an inclusive planning process which intends to cultivate community buy-in and leadership to promote the likelihood of successful implementation of clean energy projects such as renewable energy, microgrids, and energy efficiency.

Awareness and Outreach Section: Increasing Climate Change Awareness Amongst Nunavummiut

Energy Wise

- CCS, in partnership with QEC and NHC, continued to host Energy Wise, an energy awareness campaign that promotes energy savings in Nunavut households.
 - The campaign included: radio ads, TV commercials, and social media outreach via Facebook (www.facebook.com/EnergyWiseNunavut).
 - Topics of focus were on individual actions that can reduce GHG emissions at an individual level such as turning off the lights when leaving the room and turning down the thermostat.
- This long-term initiative will continue to expand, with additional materials and resources to enhance the campaign's reach and best support Nunavummiut who want to take action against climate change and reduce their GHG emissions.

Youth Advisory Committee on Climate Change

- Initiated activities to begin early development of the committee
- The idea for this project came directly from recommendations from youth participants at the Building Nunavut's Climate Resilience meeting that was held in early 2017.
- This committee will help build capacity in the territory by engaging youth on climate change

Maintaining Nunavut Climate Change Centre website

- CCS developed new content for the website, including starting an Alternative Energy database and community map
- CCS managed the climatechange@gov.nu.ca email address, responding to public inquiries