



Affaires autochtones et
Développement du Nord Canada

Aboriginal Affairs and
Northern Development Canada



**Affaires autochtones et
Développement du Nord Canada**

**Aboriginal Affairs and
Northern Development Canada**



ecoENERGY for Aboriginal and Northern Communities Program

Northern Ontario First Nations Environment Conference

September 30, 2014

Canada



Energy Efficiency and Renewable Energy – AANDC Programming Overview



Increasing interest and uptake



ecoENERGY Program Description

(2011-2016, \$20 million over 5 years)

- **Application-based program, once per year**
 - **For fiscal year 2014-15, application period was from February 7 to March 7, 2014**
- **Program Objective**
 - To reduce greenhouse gas emissions from electricity generation and heat production in Aboriginal and northern communities across Canada by supporting development stages of renewable energy projects and implementation of renewable energy projects integrated with community buildings
- **Eligible Resources and Technologies**
 - Residual/district heating systems; Biomass; Ground source/water source heat pumps; Geo-exchange heating/cooling systems; Wind; Solar photovoltaic; Solar hot water; Solar air heating; and Hydroelectricity (less than 50MW)



ecoENERGY Program Description – cont'd

- **Available Funding and Eligible Projects**

- Up to **\$100,000** for implementing a renewable energy project integrated with community buildings
- Up to **\$250,000** for feasibility stages of 'stand-alone' renewable energy projects that produce energy for a group of buildings or an entire community.

- **Priority Given To**

- Projects in off-grid communities;
- Communities that have not received funding from EANCP in the past (going back to 2007);



Off-Grid Communities – Addressing Energy Challenges

| Energy Challenges | Impacts | Integrating local energy benefits communities by |
|--|---|--|
| Community growth | <ul style="list-style-type: none"> • Increasing energy needs • Ongoing load restrictions • Supply reliability issues | <ul style="list-style-type: none"> • Addressing growing energy needs • Alleviating load restrictions • Improving energy reliability |
| Increasing cost of diesel | <ul style="list-style-type: none"> • Increasing O&M costs | <ul style="list-style-type: none"> • Reducing reliance on diesel • Reducing O&M costs |
| Climate change impacts (e.g., failing ice roads) | <ul style="list-style-type: none"> • Increasing transportation costs | <ul style="list-style-type: none"> • Utilizing local resources • Reducing requirement to transport fuel |
| Transportation, storage, transfers of fossil fuels | <ul style="list-style-type: none"> • Environmental damage, remediation costs • Health and safety risks | <ul style="list-style-type: none"> • Reducing risks to human health and the environment |
| Local emissions | <ul style="list-style-type: none"> • Human health impacts | <ul style="list-style-type: none"> • Reducing or displacing greenhouse gas and other emissions |
| Competing priorities | <ul style="list-style-type: none"> • Low capacity and resources | <ul style="list-style-type: none"> • Developing local capacity • Promoting community ownership |
| Inadequate supply, reliability issues | <ul style="list-style-type: none"> • Limiting economic development opportunities | <ul style="list-style-type: none"> • Enabling local economic development opportunities |



Key factors associated with strong ecoENERGY funding applications:

- Demonstrating greenhouse gas reductions;
- Supporting the implementation of a renewable energy technology that is proven commercial in Canada;
- Demonstrating economic benefits for participating community;
- Incorporating social benefits;
- Obtaining community/stakeholder support;
- Linking specific work activities with a reasonable budget;
- Providing completed background studies (including RETScreen); and
- Incorporating a capable project team.



Project Examples

**Feasibility study a Wind-Diesel
Project for the Kluane First Nation, YT**
(Photo credit: JP Pinard)



**Community Heating with Locally
Harvested Biomass Feedstock
for the Tetl'it Gwich'in Council,
NWT**



**Residual heat
recovery in Iqaluit, NU**



**Geothermal
heat at F.H.
Collins
school,
Whitehorse
YT**



**Solar PV in
Wha'Ti, NWT**



**Solar PV on School,
Lennox Island First
Nation, PEI**



**Run-of-river hydro at Canoe
Creek, Tla-o-qui-aht First
Nation, BC**

**Solar PV on Water
Treatment Plant ,
Kingfisher Lake First
Nation, ON**

Projets soutenus par le programme écoÉNERGIE pour les collectivités autochtones et nordiques (PECAN) 2007-2016
Projects supported by the ecoENERGY for Aboriginal and Northern Communities Program (EANCP) 2007-2016

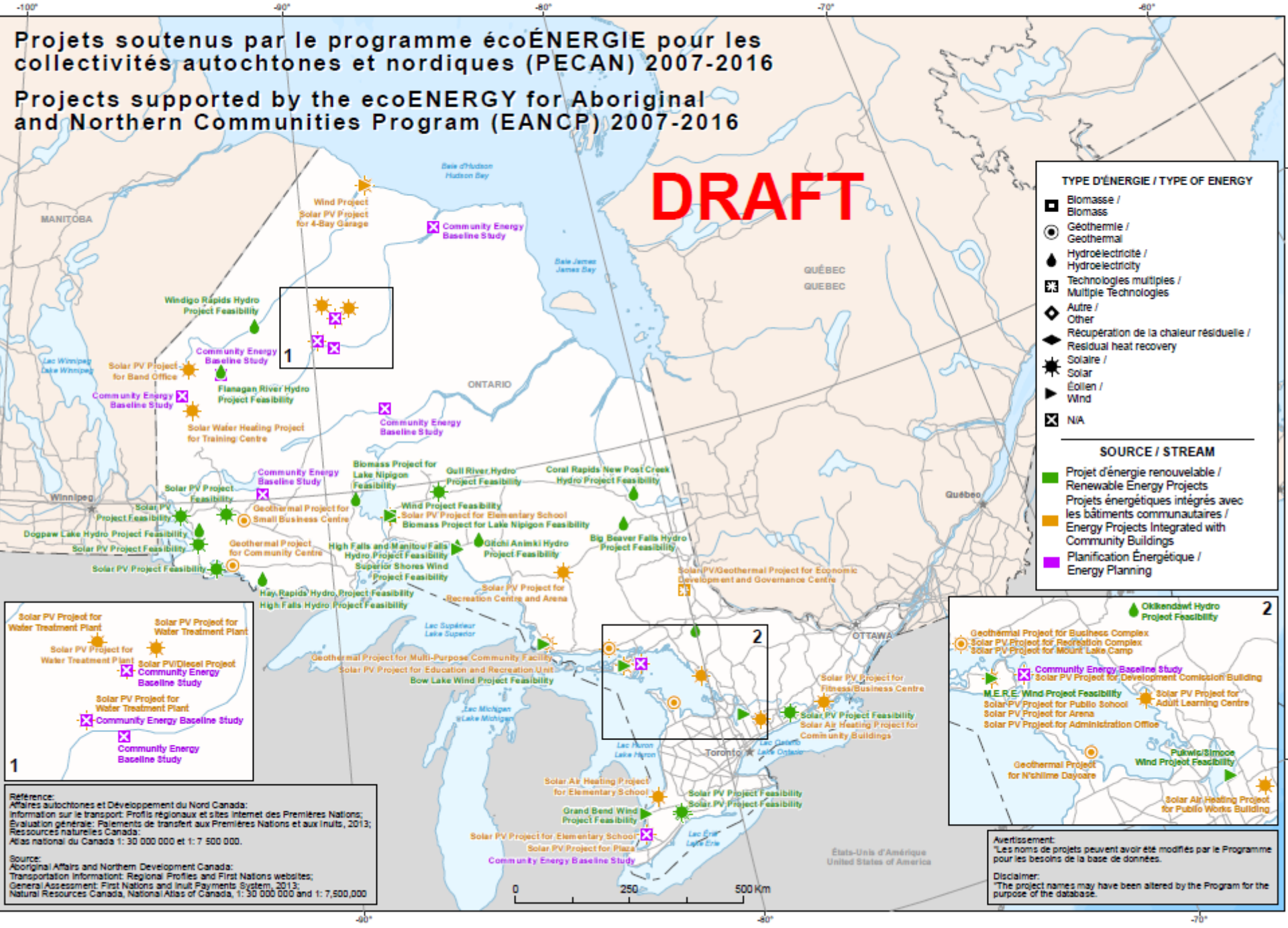
DRAFT

TYPE D'ÉNERGIE / TYPE OF ENERGY

- Biomasse / Biomass
- Géothermie / Geothermal
- ⦿ Hydroélectricité / Hydroelectricity
- ⦿ Technologies multiples / Multiple Technologies
- ◇ Autre / Other
- ◆ Récupération de la chaleur résiduelle / Residual heat recovery
- ☀ Solaire / Solar
- ▶ Éolien / Wind
- ⊠ N/A

SOURCE / STREAM

- Projet d'énergie renouvelable / Renewable Energy Projects
- Projets énergétiques intégrés avec les bâtiments communautaires / Energy Projects Integrated with Community Buildings
- Planification Énergétique / Energy Planning



1

- Solar PV Project for Water Treatment Plant
- Solar PV Project for Water Treatment Plant
- Solar PV/Diesel Project
- Community Energy Baseline Study
- Solar PV Project for Water Treatment Plant
- Community Energy Baseline Study
- Community Energy Baseline Study

2

- Geothermal Project for Business Complex
- Solar PV Project for Redfish Complex
- Solar PV Project for Mount Lake Camp
- Community Energy Baseline Study
- Solar PV Project for Development Completion Building
- M.E.R.E. Wind Project Feasibility
- Solar PV Project for Publico School
- Solar PV Project for Adult Learning Centre
- Solar PV Project for Arena
- Solar PV Project for Administration Office
- Geothermal Project for N'shime Dayoore
- Pukwits/Simcoe Wind Project Feasibility
- Solar Air Heating Project for Publico Works Building

Reference:
 Affaires autochtones et Développement du Nord Canada:
 Information sur le transport. Profils régionaux et sites Internet des Premières Nations;
 En situation générale: Paiements de transfert aux Premières Nations et aux Inuits, 2013;
 Ressources naturelles Canada:
 Atlas national du Canada 1: 30 000 000 et 1: 7 500 000.

Source:
 Aboriginal Affairs and Northern Development Canada:
 Transportation Information: Regional Profiles and First Nations websites;
 General Assessment: First Nations and Inuit Payments System, 2013;
 Natural Resources Canada, National Atlas of Canada, 1: 30 000 000 and 1: 7,500,000

Avertissement:
 "Les noms de projets peuvent avoir été modifiés par le Programme pour les besoins de la base de données."
Disclaimer:
 "The project names may have been altered by the Program for the purpose of the database."



MERE Wind Project - M'Chigeeng First Nation (completed mid-2012)



MERE June 2012 Newsletter



Picture courtesy of MERE web site



Pic Mobert First Nation – White River (Gitchi Animki) Water Power Development (construction has begun)





Deer Lake First Nation – School Rooftop Solar PV Project (completed March 2014)





AANDC Energy Related Programming – How we fit in

Climate Change Division

ecoENERGY for Aboriginal and Northern Communities Program

The only program
focused solely on
development and
implementation
of renewable
energy projects
(North and South)

Land and Economic Development

Programming
through the *Federal
Framework for
Aboriginal
Economic
Development*
(South)

Strategic
Partnerships
Initiative
(North and South)

Community Infrastructure Branch

*Capital Facilities
and Maintenance
Program*
and the
*First Nation
Infrastructure
Fund*

(South)

Canadian High Arctic Research Station

Upcoming
programming
focussing on
northern science
& technology
research &
development, and
demonstration

(North)

AANDC's **ecoENERGY** program is one of the Clean Energy programs which are part of the Government of Canada's ecoACTION programs that make up Canada's Clean Air Agenda to address action on climate change.



ecoENERGY for Aboriginal and Northern Communities Program (2011-2016)

Contact: Barb Gray

Barbara.Gray@aadnc-aandc.gc.ca

819-997-0559

Program Website:

<http://www.aadnc-aandc.gc.ca/climate>

