



NATURAL RESOURCES CANADA - INVENTIVE BY NATURE

CANDO Atlantic Links to Learning

“Gathering for Success to Collaborate and Grow”

Indigenous Engagement in the Forest Sector in Atlantic Canada

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Natural Resources Canada, Canadian Forest Service

November 15, 2018



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Outline

- Importance of Forestry in Canada
- Forest Management in Canada
- About Natural Resources Canada
- Indigenous Forestry Initiative (IFI)
- Northern Biomass Initiative
- Clean Energy for Rural and Remote Communities (CERRC)

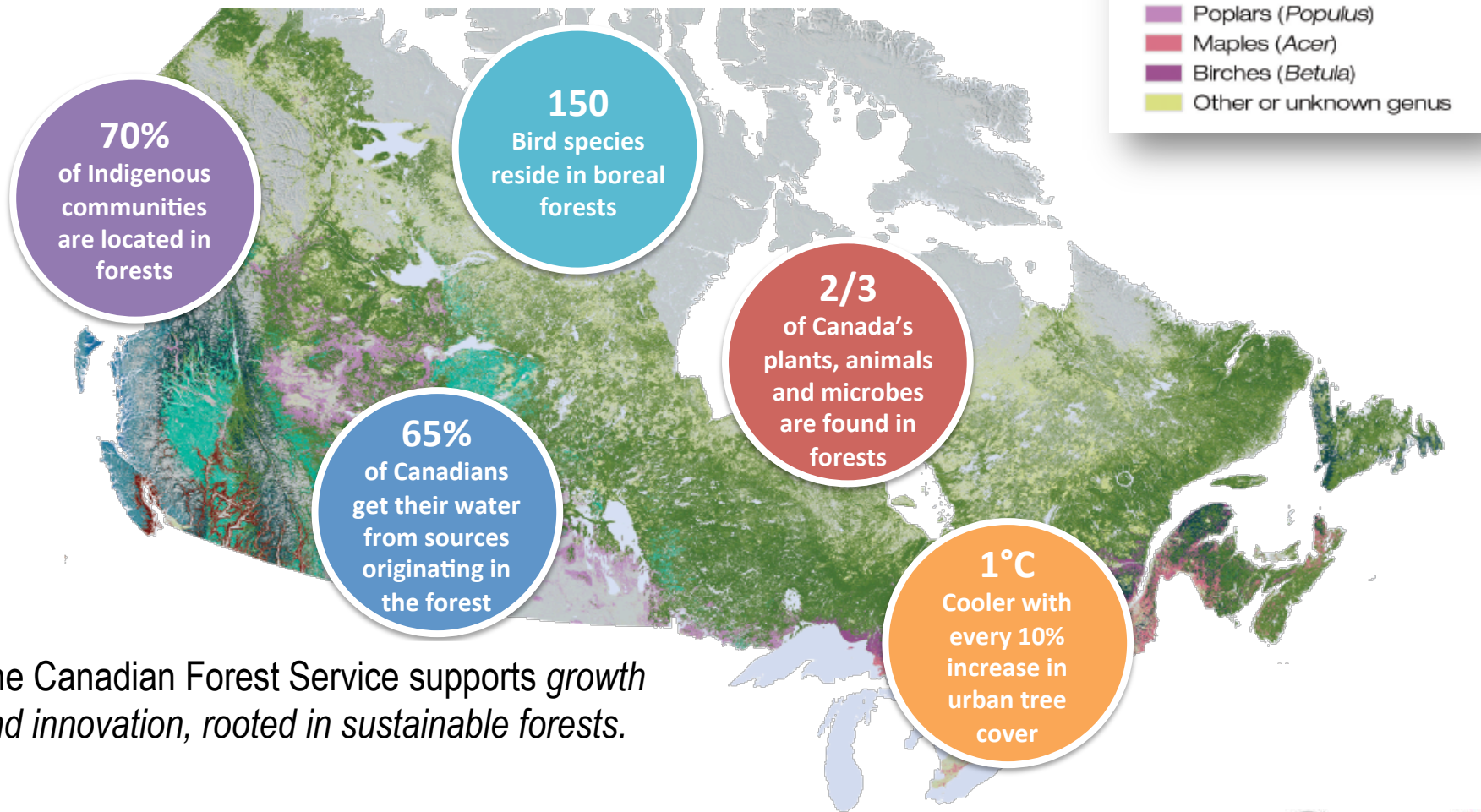


Forestry in Canada



Canada's Forests

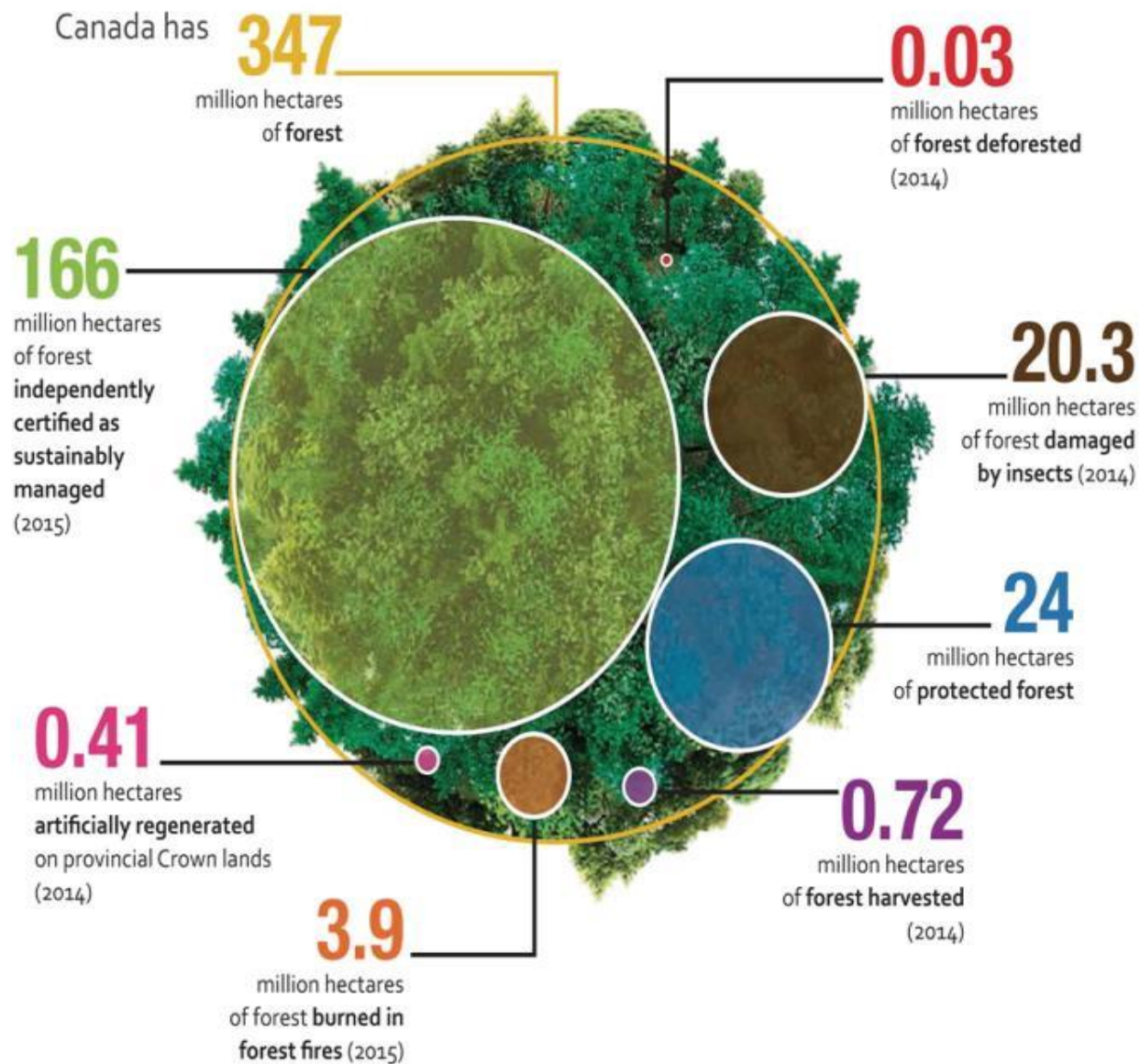
Forests are central to the Canadian identity, providing economic, environmental and spiritual wealth for communities across the country.



The Canadian Forest Service supports *growth and innovation, rooted in sustainable forests.*

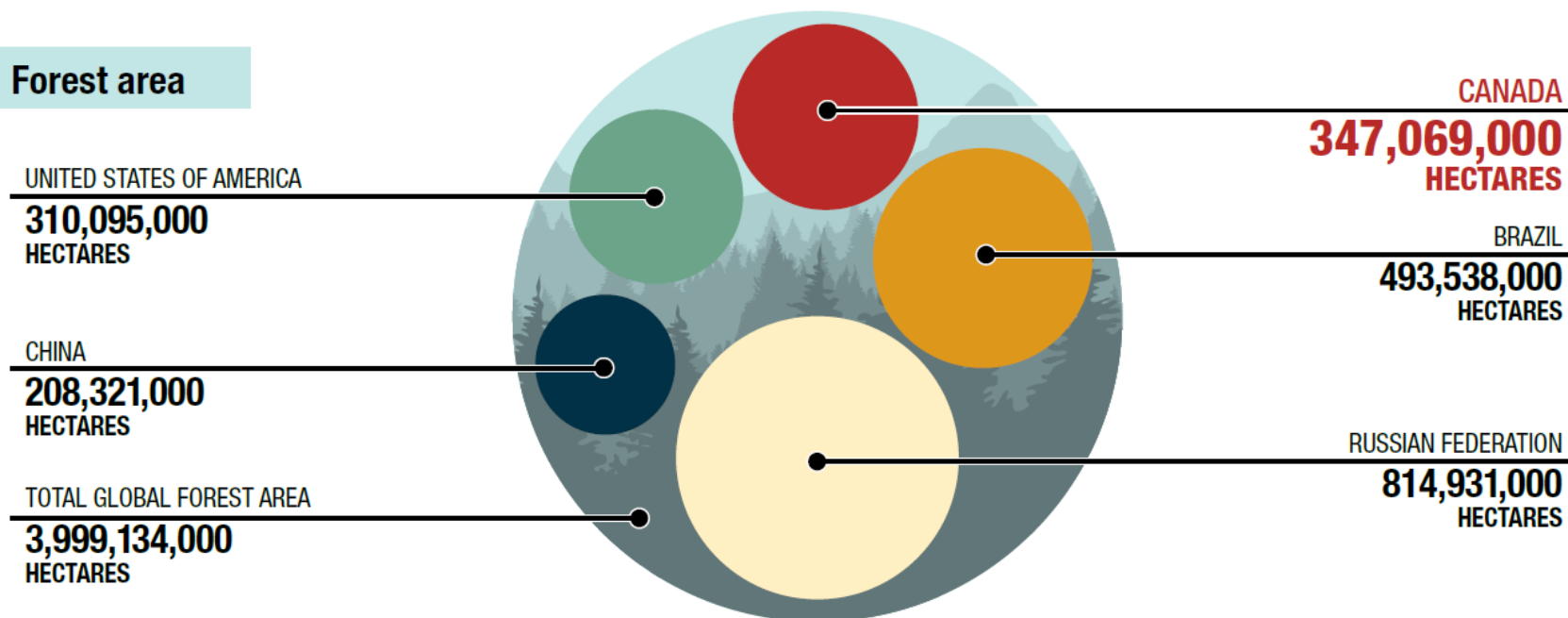


Canada's forest resource advantage



CANADA'S FORESTS BY THE NUMBERS

Forest area



Certification



Certification provides third-party assurance that a forest is managed under recognized standards of **SUSTAINABLE FOREST MANAGEMENT.**

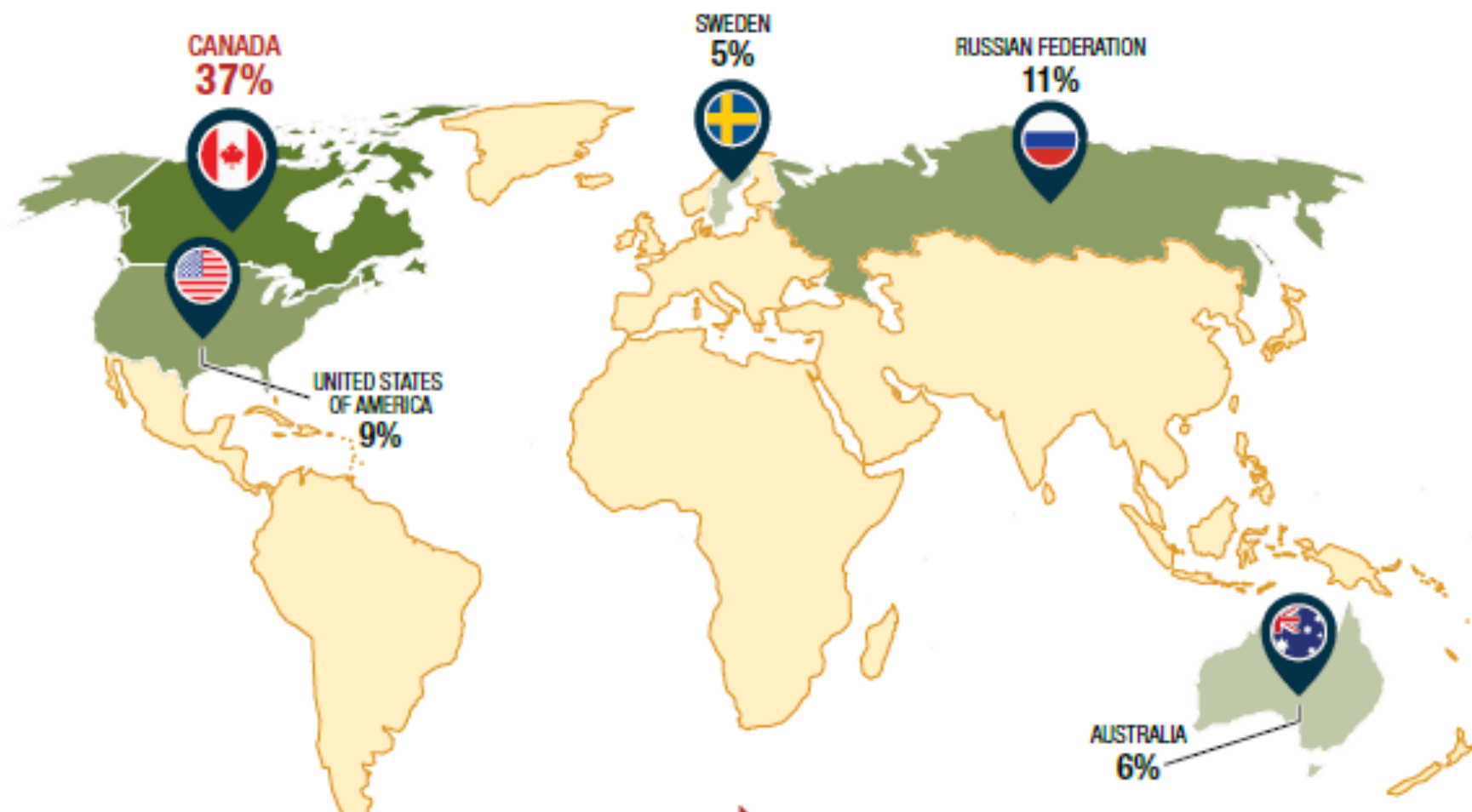


CERTIFIED FOREST AREA IN CANADA
168,000,000 HECTARES



CANADA'S FOREST AREA
347,069,000 HECTARES

37% OF THE WORLD'S CERTIFIED FORESTS ARE IN CANADA



Economic Benefits

CANADA



total employment
1,075 PEOPLE



forest industry contributed
1.1 BILLION
to Canada's GDP



Exports in 2016 totaled
\$34 BILLION

ATLANTIC CANADA



total employment
1,500 PEOPLE



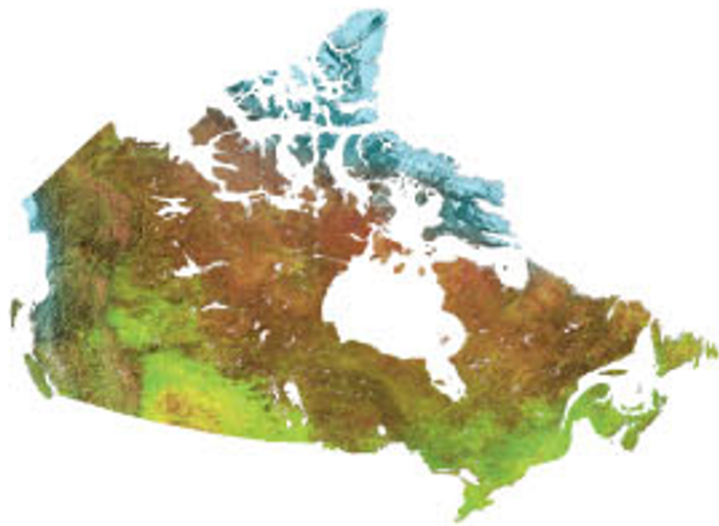
forest industry contributed
1.5 BILLION
to Atlantic Canada's GDP



Exports in 2016 totaled
\$2.4 BILLION

Natural Resources Canada

*Vision: Improving the quality of life of Canadians
by creating a sustainable resource advantage*



- Conduct innovative science across Canada
- Develop policies and programs
- Represent Canada at the international level on global commitments



Natural Resources Canada



1. Canadian Forest Service (forestry)
2. Lands and Minerals (earth sciences)
3. Energy Sector
4. Innovation and Energy Technology Sector (clean energy, CanmetENERGY)



NRCan in the forest sector: Canadian Forest Service (CFS)

500+ staff

Critical voice in
international forest fora

Delivers an evolving
suite of programs

Important convenor in
sector discussions

Sustainable Forests

CFS is an important provider of forest **science** on topics including sustainability, fire, pests, carbon, and climate change.

(CFS produces an average of 200 S&T publications & presents at ~120 events annually)

A Competitive Forest Industry

CFS supports innovation (e.g., new products, applications and technologies for efficiency) and protects/expands markets to increase competitiveness.



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Atlantic Forestry Centre

Spruce Budworm
Early Intervention

Insect Chemical
Ecology

Sustainable Forest
Management

Climate Change,
Cumulative Effects

- Staff = 110 +
- Insect Chemical Ecology Lab
- Spruce Budworm Processing Lab
- Acadia Research Forest
- National Tree Seed Centre
- Research Greenhouse
- Program Delivery



Atlantic Forestry Centre



- Strong networks from coast to coast
- Access to science and policy expertise across the country
- Understanding of issues and opportunities facing the sector
- Strong local partnerships with federal departments, provincial and Indigenous governments and communities, universities, and industry





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Indigenous Forestry: Economic Development, Energy Solutions and Engagement in Atlantic Canada



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Indigenous Forestry Initiative

- **\$1M per fiscal year; additional \$10M over three years starting in 17/18 (SLAP funding)**
- Next call for proposal closes January 8, 2019
- Seeks **projects** that promote greater participation by Indigenous communities in the natural resource sectors, especially the forest sector
- Investing in capacity-building activities, business development and capital expenditures focused on the following areas:
 - Clean technology and participation in the forest bioeconomy (eg. using woody biomass for heat and/or power to reduce reliance on diesel use)
 - Environmental stewardship (eg. climate change mitigation and adaptation, land reclamation, or environmental/ecological services)
 - Use and management of forest resources (eg. community training in forest management or other skills development)
 - <https://www.nrcan.gc.ca/forests/federal-programs/13125>



An example



Paving the Way for Success

Proponent:	The Confederacy of Mainland Mi'kmaq
Project Type:	Use and Management of Forest Resources and Environmental Stewardship
Stream:	Capacity building
IFI Theme:	Environmental Stewardship
Funding:	\$ 700,000

Project Summary and Objective:

The “Paving the Way for Success” project has three main components:

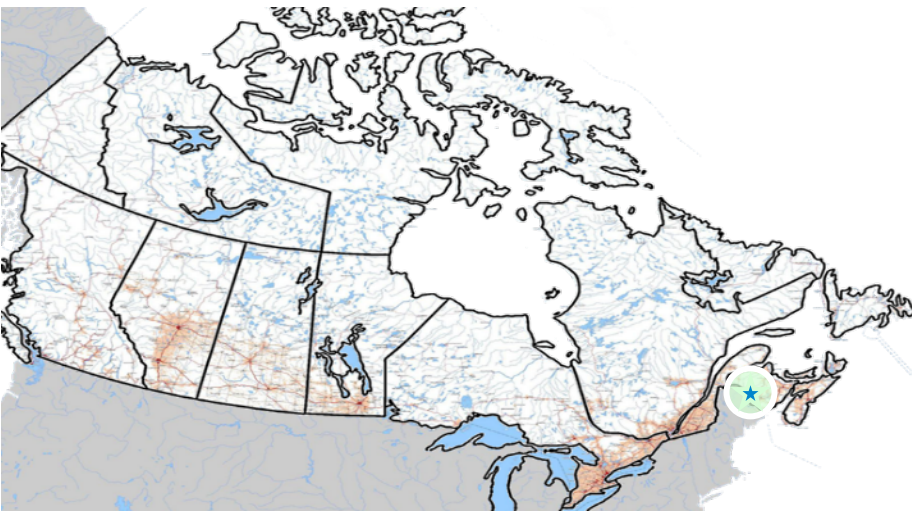
- 1) Commercial Forestry : focus on completing the necessary analysis on the Mi'kmaq Forestry Initiative landholdings
- 2) Non-Timber Forest Products : Networking event and certification and branding
- 3) Training : lumber grading accreditation, mentorship program on how to effectively manage a Christmas tree farm and Good Agricultural Collections Practice Training for non-timber forest products.

Merits of Proposal:

- Top 5 of capacity projects
- Have received IFI funding in past two years
- Tangible economic forecasts
- Strong forest champion
- Several communities involved, including Cape Breton communities
- Partners identified - diversified (Port Hawksbury paper mill, INAC, others)
- Broad perspective (from awareness to land acquisition)



An example



Tobique First Nation's John W. Jamer Sawmill Training and Transition Initiative

Proponent: Tobique First Nation
Project Type: Use and Management of Forest Resources
Stream: Capacity Building
IFI Theme: Use / Management of Forest Resources (Sawmill)

Funding: \$ 200,000

Project Summary and Objective:

- This project seeks to effectively deliver wood products at market or close to market rates.
- As well this project seeks NRCan support to assist in the development of skills (e.g. wood stamping training) and create Health and Safety, Best Practices, Standard Operating Procedures and strategic business development in all aspects of their operational plan going forward.

Merits of Proposal:

- Business plan strategy completed under IFI
- Niche businesses to build log homes
- Community looking beyond current approach to housing
- Community looks to minimize economic leakage
- Community wanting to build jobs locally with new technology



Strategic Partnerships Initiative (SPI)

- To advance Indigenous leadership in the bioeconomy, the IFI leads Canada's SPI for Indigenous Economic Development from Northern and Remote Forest Biomass.

2017-2022, \$8.2 million investments focused on:

1. Adoption of bioenergy solutions
2. Development of biomass supply streams

Note: Alternative BioChar markets are not sufficiently established to be eligible for SPI deployment support at this time.



Photo Credit: Teslin Tlingit Council, YK



Northern and Remote Forest Biomass Initiative Strategic Partnership Initiative (ISC) and CFS

- Focuses on emerging economic development opportunities associated with biomass energy
- Using wood-based fuels for heating has proven to be a cost-competitive, economically sustainable and reliable alternative to conventional fossil fuels in many Northern communities.



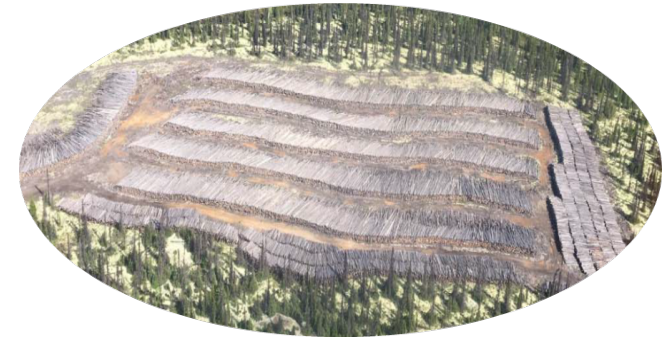
Moving Forward: Northern and Remote Forest Biomass Initiative with Indigenous Communities

- NRCan-led under the IFI. New funding from INAC Strategic Partnership Initiative: \$8.25 M/5 years started in 2017/18
- Support Indigenous communities to use and manage biomass for heat and power
- Employs a sequenced approach that moves from initial identification of a community's wood profile to capital acquisition and maintenance
- Tailored to community's needs
- Focuses on business opportunities



Examples - Biomass/Bioenergy Opportunities in Labrador

- Under the first Northern Biomass initiative, Labrador was identified as a priority region.
- Decision largely based on: 1) Unutilized wood harvested as a result of Muskrat Falls Hydro Development; 2) an underutilized forest allocation and 3) energy demands from remote coastal communities currently on diesel generators.
- As such, region viewed as having high potential for use of biomass for Indigenous Economic Development and Business Development.
- Capacity of Indigenous groups has been greatest challenge
- Supported Projects include:
 - Labrador Forestry Biomass Workshop – (Labrador Aboriginal Training Partnership)
 - High Efficiency Wood Stove pilot – (Nunatsiavut Government - Energy Security Plan)
 - Firewood Harvesting, Storage and Distribution - (Nunatsiavut Group of Companies)
 - Small Scale Sawmill and Forest Based Economic Development – (Innu Nation)
 - Biomass-to-Energy Conversion to Promote Economic Development and Social Well-Being in Nunatsiavut – (Lumos Consulting)
 - Aboriginal Bioenergy Opportunities in Labrador – (TorchLight Bioresources)



Photos by Max Kinden, NGC



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Clean Energy for Canada's Rural and Remote Communities (Launched May 2018)



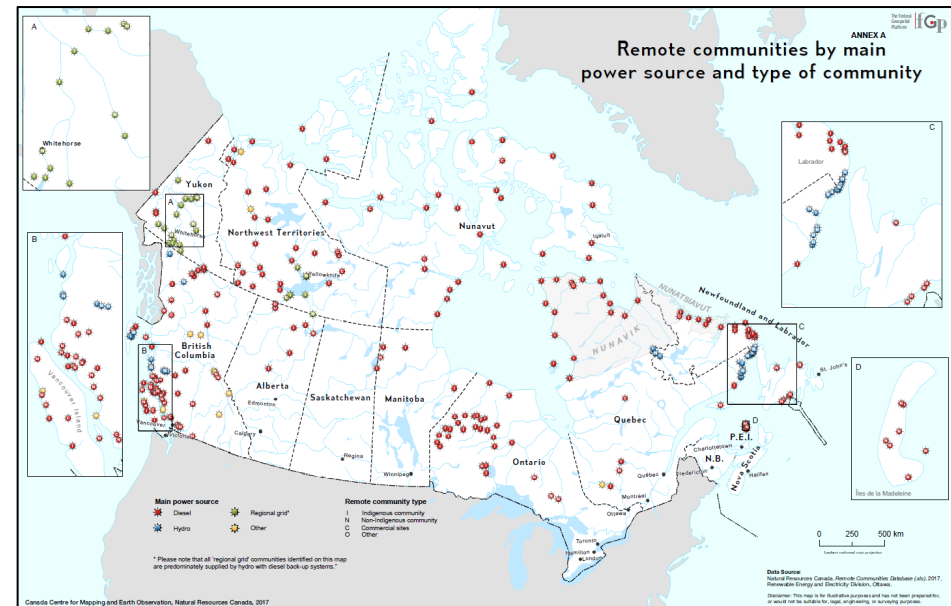
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The Challenge: Diesel Reliance in Rural and Remote Communities

- ~200 remote communities in Canada rely heavily on diesel fuel to produce electricity and heat
- Majority are Indigenous or have significant Indigenous populations
- Communities have traditionally relied on diesel because it is a stable and reliable source of power, the cost of which is usually subsidized
- Advances in renewable and energy efficiency technologies make it economically and technically possible to transition away from diesel-only systems
- <https://www.nrcan.gc.ca/reducingdiesel>



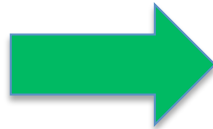


Why focus on reducing diesel reliance?



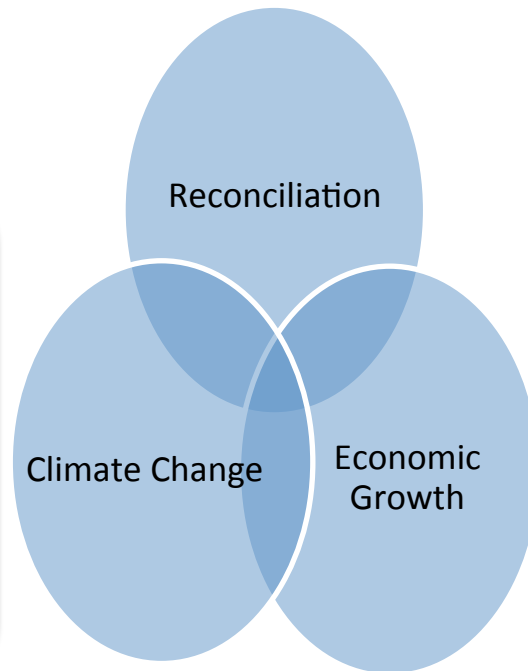
Diesel Fuel

- Sourced outside the community
- GHG emissions
- Spills and local pollution
- Costly to supply and maintain



Renewable Energy

- Harness local resources
- Improved environmental outcomes
- Create local economic opportunities
- Build local capacity
- Energy independence



Clean Energy for Rural and Remote Communities (CERRC)

Funding: \$220M over six years (starting in 2018/19)

Objective: reduce reliance on diesel in remote communities and industrial sites by supporting the transition to more sustainable energy solutions

Who can apply?

Funding is open to a variety of applicants including legal entities incorporated or registered in Canada, governmental organizations (excluding the federal government), and Indigenous communities or governments.

Round 1 funding decisions have been made. A new Request for Proposals was launched **October 2018, closes January 15, 2019** (December 4th if proponent wishes to have a ½ hour feedback call)

3 Program Streams

- **BioHeat to Reduce Fossil Fuel Use (BioHeat)**

Installation, retrofit, or investigation into the feasibility of biomass heating or combined heat and power systems for community and/or industrial applications in rural and remote locations.

- **Innovative Demonstrations to Reduce Diesel Use (Demonstration)**

Demonstrate innovative renewable energy, energy efficiency, energy storage, and smart-grid technologies in remote communities and industrial sites.

- **Deployment of Renewable Energy Technologies (Deployment)**

Deployment of commercially available renewable energy technologies for electricity (heat may also be produced, but the primary purpose of the Project must be electricity production), including hydro, wind, solar, geothermal, and bioenergy in remote communities and industrial sites.



Next Steps: Assessment of Enhanced Engagement Opportunities

- Indigenous forestry opportunities scan in Atlantic Canada
- Planning for outreach and integration of Indigenous expertise and knowledge sharing in CFS science programs (“western science” and traditional knowledge)
- Capacity development opportunities through training, mentoring, and exchange
- Partnership development and relationship brokering
- AFC staff education sessions regarding regional Indigenous history, cultural and rights awareness





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Discussion and Questions



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An early shared-governance recommendation:

"I don't want to review IFI proposals and make funding decisions – I already have a job. I want an Indigenous committee to determine the criteria by which proposals are assessed and funding decisions are made, and to periodically monitor compliance and performance, and adjust the criteria as necessary."



Paraphrase of comments made by:

Angie Gillis, Senior Director
The Mi'kmaw Conservation Group
The Confederacy of Mainland Mi'kmaq

... and this is just the first idea,
 from our early engagement!

*Could there also be a role for such
 an Indigenous committee to support
 CFS' Science-Policy review ?*