

Polar Knowledge Canada



Collaborating for the Future Canada's Polar Agency

PNWER Arctic Caucus
July 18, 2016



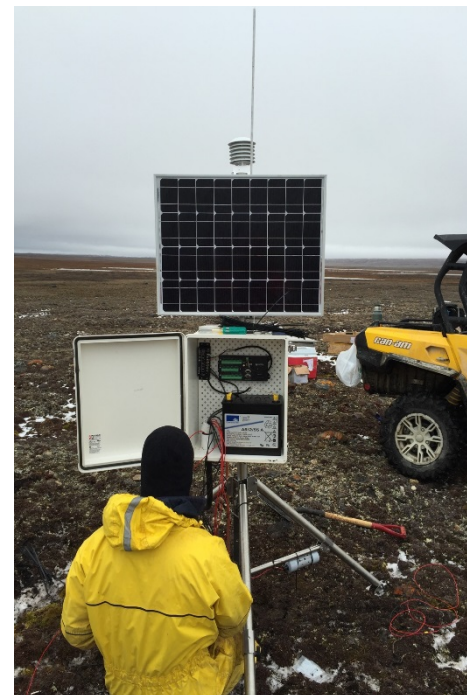
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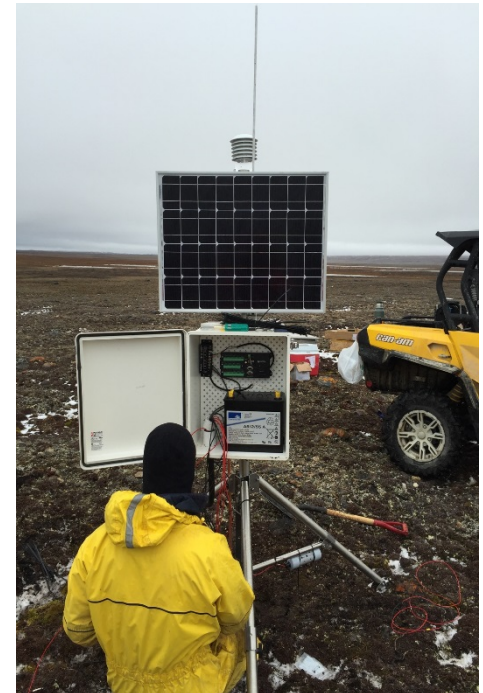
Introduction

- Polar Knowledge Canada
- Alternative and Renewable Priority
- Challenges
- Capacity Building
- Questions



What is Polar Knowledge Canada?

- A **innovative** Government of Canada agency, that will be **based in the north**, reporting to the Minister of Indigenous and Northern Affairs
- Established on June 1st, 2015, by **merging** the Canadian Polar Commission and the Canadian High Arctic Research Station's pan-northern science and technology program
- POLAR's horizontal function is based on the *Canadian High Arctic Research Station Act (2014)* to:
 - “Advance knowledge of the Canadian Arctic in order to improve economic opportunities, environmental stewardship and the quality of life of its residents and all other Canadians
 - Promote the development and dissemination of knowledge of the other circumpolar regions, including the Antarctic
 - Strengthen Canada's leadership on Arctic issues
 - Establish a hub for scientific research in the Canadian Arctic”

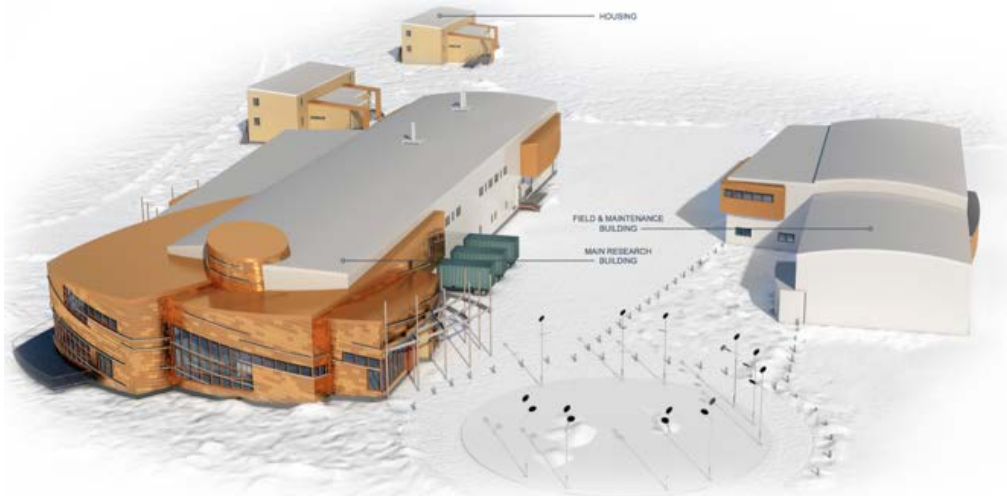


A Pan-Northern Organization

- Knowledge Management and Engagement function
- Pan-northern Science and Technology program
- The Canadian High Arctic Research Station (CHARS) under construction in Cambridge Bay, Nunavut

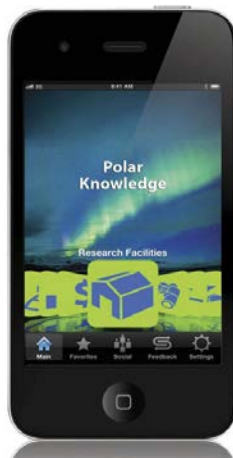


CHARS – The Facilities



Knowledge Mobilization

- Leverage domestic and international research to **assess gaps and strategically invest** to stimulate new knowledge in key areas
- POLAR is successfully strengthening and disseminating new knowledge through –
 - Awareness
 - Engagement
 - Outreach activities



Pan-Northern S&T Program

Priority Areas for 2014-2019:

- **Alternative and renewable energy for the North**
 - Reduce the dependency on high-cost imported energy, explore feasibility of local sources and enhance northern application of alternative technologies

- **Baseline information to prepare for northern sustainability**
 - Improve decision support for sustainable communities and responsible development in Canada's North

- **Predicting the impacts of changing ice, permafrost, and snow on shipping, infrastructure and communities**
 - Increase knowledge of terrestrial and marine cryosphere to support adaptation and improve climate models

- **Catalysing improved design, construction and maintenance of northern built infrastructure**
 - Application of innovative designs, materials and techniques to increase energy efficiency, quality, and reduce life-cycle costs



Drivers for A&R Priority

- Reduce Dependence on Diesel for Energy Generation
 - Economic and Environmental Benefits
 - Clean Technology
 - Explore feasibility of local sources
 - Community Level Projects
 - Enhance northern application of alternative technologies
 - Open Call for Proposals
- Create Economic Opportunities
- Build Capacity



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Challenges

- Remoteness
 - Timelines
 - Support Logistics
- Lifestyles and Culture
- Limited Human Resources/Skill Sets
 - Operability and Maintainability
 - Develop Projects
- Community Energy Champions
- Capacity Building
 - Stimulate Interest and Knowledge
 - Clean Tech Project
 - Investment



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Arctic Remote Energy Networks Academy (ARENA)

- Circumpolar Training Program
- Enhance literacy awareness
- A circumpolar knowledge exchange program
- Integrates web-based seminars with classroom learning and field experience
- Multi-Locations. NWT (Mar 17), Alaska (Jun 17), Iceland/Finland (Sep 17)
- Co-led by the U.S., Canada, Gwich'in Council International, Finland, Iceland



ARENA

- Grow Capacity
- Show Case Best Practice
- Develop Collaborative Relationships
 - Pan Arctic/Global
- Benefit our Remote Communities



PNWER & ARENA

- PNWER's mission:
 - Increase the economic well-being and quality of life for all citizens of the region
- ARENA's Goal:
 - Economic Development through Capacity Building
 - Improving Quality of Life through Clean Technology
- Arctic Caucus Objectives
 - Increase the visibility and priority of Arctic issues in all PNWER activities
 - Support each other in achieving mutual goals
 - Identify areas regarding opportunities for mutual economic development in the Arctic
 - Provide support to other jurisdictions to help them achieve their individual goals
- ARENA
 - Highlighting Best Practice to Address Arctic Issues
 - Pan Arctic Initiative
 - Working Together for Mutual Economic Development
 - Export the Knowledge Base

ARENA

- Sustainable Course
- Support on all levels of Government
- Industry Support
- Partners and Students
- Sponsors for Students



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Questions



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