



Natural Resources
Canada

Ressources naturelles
Canada

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SMART GRID

**PROGRAM
OVERVIEW**

<https://www.nrcan.gc.ca/SmartGridProgram>

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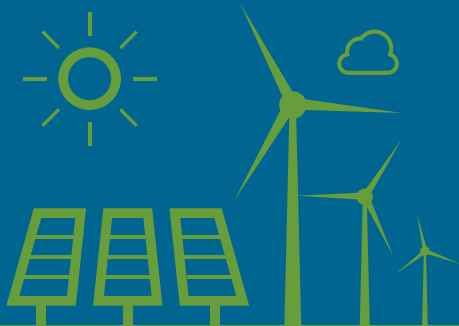
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OVERVIEW

The program funds \$100M over five years on demonstration and deployment projects.



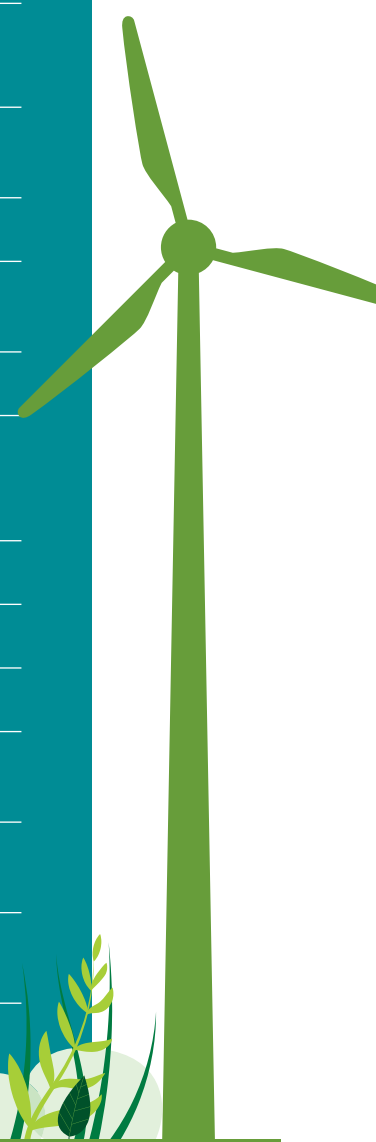
The Smart Grid Program (“the Program”) is one of Natural Resources Canada’s (NRCan’s) targeted national programs addressing key infrastructure required to advance the goals of the Pan Canadian Framework on Clean Growth and Climate Change.



The objective of the Program is to accelerate the development of smart grids to reduce GHG emissions and generate economic and social benefits (e.g. create new jobs). The program funds \$100M over five years for demonstration and deployment projects.

The projects listed in this document are funded by the Program. Once implemented, the projects will reduce greenhouse house gas emissions, and have an impact in reducing the long-term economical impact to the customer.

RECIPIENT (PROVINCE/TERRITORY)	PROJECT TITLE
1 Yukon Energy (YK)	Residential Demand Response Program (RDRP)
2 EPCOR (AB)	EPCOR Smart Grid System (ESGS)
3 EQUUS REA (AB)	Canada's 1st Member-Owned Rural Smart Grid Project
4 ENMAX Power (AB)	Integrating Distributed Generation into Secondary Networks in Large Urban Centres
5 FortisAlberta (AB)	Fortis Alberta Waterton Energy Storage Project
6 City of Lethbridge (AB)	Conservation Voltage Reduction (CVR) Deployment in Lethbridge Electric Utility (LEU) Distribution Network
7 SaskPower (SK)	SaskPower Distribution Modernization Program
8 SSM PUC (ON)	Sault Smart Grid
9 Entegrus Powerlines Inc. (ON)	Conservation Voltage Reduction
10 Bracebridge Generation (ON)	Smart, Proactive, Enabled, Energy Distribution; Intelligently, Efficiently, Responsive (SPEEDIER) Project
11 London Hydro (ON)	West 5 Smart Grid Project
12 Alectra Utilities (ON)	Power.House Hybrid: Minimizing GHGs and Maximizing Grid Benefits
13 Alectra Utilities (ON)	GridExchange
14 Independent Electricity System Operator (IESO) (ON)	York Region Non-Wires Alternatives Demonstration Project
15 Lakefront Utilities (ON)	Digital Utility Platform
16 Hydro-Québec (QC)	Smart Grid Deployment Off-grid Networks
17 Hydro-Québec (QC)	Lac-Mégantic Microgrid
18 Saint John Energy (NB)	Integrated Dispatchable Resource Network for Local Electric Distribution Utility
19 NB Power (NB)	Collaborative Grid Innovation for Atlantic Smart Energy Communities
20 NS Power (NS)	Collaborative Grid Innovation for Atlantic Smart Energy Communities
21 PEI Energy Corporation (PEI)	Slemon Park Microgrid Project



1

RESIDENTIAL DEMAND RESPONSE PROGRAM

YUKON ENERGY

- 4 year project spanning from 2018-2022
- Project total value \$1,422,112
- Receiving total contributions worth \$709,732 from NRCan
- Yukon Energy (YEC) is focused on reducing Yukon's current and future dependence on new thermal (natural gas and diesel) generation to meet increasing peak demands on its electrical grid through demand response technology focused on residential electric heating and hot water end-use loads. The demonstration will involve approximately 400 customers fitted with demand response devices, controllable from (YEC's) system control centre. This would enable the utility to shift participating customers load off critical peak electricity demand periods. Objectives also include the reduction of fuel costs, which would help to minimize electrical rate increases and reduce GHG emissions from thermal-based peaking generation.



2

EPCOR SMART GRID SYSTEM

EPCOR

- 4 year project spanning from 2018-2023
- Project total value \$44,038,841
- Receiving total contributions worth \$10,677,000 from NRCan
- EPCOR Utilities will deploy a solar PV facility with integrated battery energy storage system and an intelligent Distributed Energy Management System (DERMS) software that together, will reduce peak load demand at the E. L. Smith Water Treatment Plant and enable effective use of the grid-connected system to address capacity shortfalls in power system wires infrastructure.



3

EQUUS REA: CANADA'S 1ST MEMBER-OWNED RURAL SMART GRID PROJECT

EQUUS REA

- 3 year project spanning from 2018-2021
- Project total value \$10,224,003
- Receiving total contributions worth \$2,555,951 from NRCan
- EQUUS REA addresses challenges associated with serving rural customers such as terrain, distance, accessibility and communications. By deploying a next generation ultra-rural radio frequency mesh network, the project increases renewable energy sources and EV charging stations and installs battery storage. EQUUS REA will improve its utility and consumer interface, increase customer engagement and awareness while improving response times and repairs to outages for farms, residential, commercial and industrial sites in rural areas.



4

INTEGRATING DISTRIBUTED GENERATION INTO SECONDARY NETWORKS IN LARGE URBAN CENTRES

ENMAX POWER

- 5 year project spanning from 2018-2023
- Project total value \$5,787,735
- Receiving total contributions worth \$2,042,867 from NRCan
- The objective of ENMAX's project is to develop and demonstrate a new solution to accommodate bi-directional power flows on urban electrical grids. This can ultimately help unlock the untapped potential for urban centers, such as the city of Calgary, to allow generation from renewable and distributed energy. This project will install solar photovoltaics (PV), but the results will apply to other types of generation and resources. The success of this project could lead to significant reductions of GHGs and result in many other benefits. Using a combination of advanced monitoring and controls as well as protective relay configuration changes that allow for export, the proposed project will demonstrate how solar PV, and ultimately other forms of distributed generation and energy resources, can be safely integrated into secondary and spot networks.



5

FORTISALBERTA WATERTON ENERGY STORAGE PROJECT

FORTISALBERTA

- 2 year project spanning from 2020-2022
- Project total value \$4,939,608
- Receiving total contributions worth \$495,000 from NRCan
- This project will showcase technical, economic and social benefits of utilizing a battery energy storage system (BESS), solar photovoltaic (PV) renewable generation and advanced distribution control systems to address reliability issues faced by rural customers. FortisAlberta devised a new solution that is a first of its kind demonstration in the province to enable Waterton to maintain power during an outage while the distribution line is being repaired. The project will establish an Alberta-based cost benchmark to address distribution system deficiencies using non-wire alternatives.



6

CONSERVATION VOLTAGE REDUCTION (CVR) DEPLOYMENT IN LETHBRIDGE ELECTRIC UTILITY (LEU) DISTRIBUTION NETWORK

CITY OF LETHBRIDGE

- 3 year project spanning from 2019 - 2022
- Project total value \$1,256,217
- Receiving total contributions worth \$314,054 from NRCan
- This project is will enhance the Lethbridge Electric Utility's distribution network by deploying CVR software technology using advanced metering infrastructure (AMI) to conserve energy and reduce demand on the energy grid. The CVR software technology will use feedback information generated by the AMI system to systematically control the voltage on the distribution system. The CVR technology will be applied to 6 substations within the network. This project will result in GHG emission reductions, energy conservation from grid optimization and reduced demand which will provide financial benefits for over 40,000 customers on the network.



CITY OF
Lethbridge

7

SASKPOWER DISTRIBUTION MODERNIZATION PROGRAM

SASKPOWER

- 5 year project spanning from 2018-2023
- Project total value \$38,009,362
- Receiving total contributions worth \$7,593,129 from NRCan
- SaskPower will modernize and upgrade SaskPower's electrical grid by investing in central monitoring and control from the newly established Provincial Distribution Control Centre. By upgrading an existing substation and feeder sensors, deploying telecommunication and integrating information from advanced metering infrastructure (AMI), the project will improve SaskPower's workforce efficiency and enable future integration of distributed energy resources and energy storage.



8

SAULT SMART GRID

SSM PUC DISTRIBUTION

- 5 year project spanning from 2018-2023
- Project total value \$42,806,000
- Receiving total contributions worth \$10,626,500 from NRCan
- PUC will deploy a community-scale smart grid in Sault Ste. Marie, covering 100% of the PUC service area. The project improves PUC's system efficiency, resiliency and reliability by integrating a number of complimentary smart grid technologies, including distributed automation, voltage/VAR management, and the enhancement of existing advanced metering infrastructure (AMI). In addition, the project provides an enabling platform for renewable energy and expands customer opportunities to take advantage of enhanced energy services and solutions.



NRCAN SMART GRID PROGRAM

LEGEND

Project by Program Stream:

- ▲ Demonstration Projects
- Deployment Projects
- Hybrid Projects

1. Whitehorse, Yukon Energy

2. Edmonton, EPCOR

3. Red Deer, EQUUS REA

4. Calgary, ENMAX Power

5. Waterton, FortisAlberta

6. Lethbridge, City of Lethbridge

7. Regina, SaskPower

8. Sault Ste. Marie, PUC Distribution

10. Parry Sound, Bracebridge Generation

11. London, London Hydro

9. Thamesville, Entergy Powerlines Inc.

16. Nunavik, Hydro-Québec

21. Slemon Park, PEI Energy Corporation

19. Shediac, NB Power

20. Amherst, NS Power

18. Saint John, Saint John Energy

17. Lac Megantic, Hydro-Québec

15. Cobourg, Lakefront Utilities

14. Toronto, Independent Electricity System Operator

12. 13. Markham, Alectra Utilities

9

CONSERVATION VOLTAGE REDUCTION

ENTEGRUS POWERLINES INC.

- 3 year project spanning from 2018-2021
- Project total value \$301,371
- Receiving total contributions worth \$75,343 from NRCan
- This project will enable a local energy system in Thamesville to reduce GHG emissions by decreasing energy demand and consumption. To do this, an integrated voltage management system using edge-of-network grid optimization (ENGO) devices was deployed on distribution transformers. These were used in combination with an upstream voltage regulator to achieve conservation voltage reduction (CVR).
- This project will result in Entegrus's ability to better manage distribution system voltages and improve efficiency without compromising power quality. The project will enhance the utilization and extend the operating life of existing utility assets, providing improved grid visibility to respond to and investigate power-quality issues more efficiently.



10

SMART, PROACTIVE, ENABLED, ENERGY DISTRIBUTION; INTELLIGENTLY, EFFICIENTLY, RESPONSIVE (SPEEDIER) PROJECT

BRACEBRIDGE GENERATION

- 4 year project spanning from 2018-2022
- Project total value \$8,348,996
- Receiving total contributions worth \$3,757,049 from NRCan
- Bracebridge Generation will modernize the Town of Parry Sound's electricity grid to facilitate the shift towards a net-zero (carbon-neutral) smart community by using Distributed Energy Resource Management Systems (DERMS) for increasing visibility and control of loads and variable renewable generation. The project will deploy solar, energy storage systems and automation technologies to reduce loading on the transmission station and reduce dependencies on far away energy resources, facilitate increase electric vehicle (EV) adoption, and develop smart residential demand management systems via controllable hot water tanks (HWTs), EV chargers and battery storage.



11

WEST 5 SMART GRID PROJECT

LONDON HYDRO

- 4 year project spanning from 2018-2022
- Project total value \$10,988,817
- Receiving total contributions worth \$5,084,000 from NRCan
- This project will enable the development of the West 5 Net-Zero Energy (NZE) community and microgrid in London, Ontario, creating a showcase for sustainable communities which incur minimal negative impacts on the environment, and providing an example of Canadian leadership in the field of integrated smart energy system technologies. This project will involve the following innovations: (1) microgeneration; (2) renewable sources of energy; (3) tighter building envelopes; (4) smarter heating and cooling systems; (5) direct current (DC) generation, distribution, and energy storage; (6) system monitoring; (7) vehicle-to-grid storage; and, (8) improved electric vehicle (EV) charging infrastructure. The overarching objective of the project is to successfully construct Canada's first large-scale, fully integrated, net-zero energy community, to demonstrate net-zero energy's feasibility, deploy it at the community level, and to inspire and inform widespread change across Canada's construction industry towards net-zero energy.



**London
Hydro**

12

POWER.HOUSE HYBRID: MINIMIZING GHGS AND MAXIMIZING GRID BENEFITS

ALECTRA UTILITIES

- 5 year project spanning from 2018-2023
- Project total value \$3,384,655
- Receiving total contributions worth \$1,669,000 from NRCan
- Alectra will demonstrate how a full complement of controllable electrical and thermal energy technologies installed in 10 Markham homes, with integrated controls and real-time grid GHG signals can achieve significant reductions in total household GHGs, while still providing energy for space and water heating, transportation, and appliances.



13

GRIDEXCHANGE

ALECTRA UTILITIES

- 4 year project spanning from 2018-2022
- Project total value \$5,624,573
- Receiving total contributions worth \$2,620,000 from NRCan
- Alectra will demonstrate the ability of blockchain software technology to provide real-time transparency, tracking, and management of distributed energy resources (DER) participation in providing energy services. Through a blockchain software platform, Alectra will issue requests for the Power.House systems to provide hypothetical market services. All aspects of market participation will be transacted through and recorded using this blockchain platform. Customers will receive compensation through a rewards system that will be created to support participation. The rewards may be exchanged for goods and services at participating merchants or for use in the platform's marketplace.



14

INTEROPERABILITY AND NON-WIRES ALTERNATIVE DEMONSTRATION

INDEPENDENT ELECTRICITY SYSTEMS OPERATOR (IESO)

- 4 year project spanning from 2018-2022
- Project total value \$11,000,000
- Receiving total contributions worth \$5,000,000 from NRCan
- The IESO will investigate newly proposed, advanced, whole-system operation and market models for a smart grid, high distributed energy resources (DER) future, with a focus on the division of grid functions among entities (new and/or existing) and interoperability at the transmission-distribution interface. The project will focus on the development of an interoperability framework, assessing division of grid functions, transmission-distribution coordination requirements, technical feasibility, and cost-benefit. Design of a non-wires alternative (NWA) market for third party service providers that is interoperable with participation in the IESO's wholesale markets on a demonstration basis. Development of communication and dispatch protocols for IESO, local distribution companies, DERs and aggregators, and deployment of information and communication technology infrastructure needed for demonstration purposes. Demonstration of new distribution-level functions and coordination with wholesale-level functions.



15

DIGITAL UTILITY PLATFORM

LAKEFRONT UTILITIES

- 4 year project spanning from 2018-2022
- Project total value \$656,612
- Receiving total contributions worth \$164,153 from NRCan
- The project deploys Utilismart's Digital Utility Platform allowing increases in distributed energy resources and electric vehicle (EV) charging station penetration, replaces overloaded transformers and feeders through load flow, feeder and short-circuit analysis, develop a more reliable and resilient grid through 24/7 monitoring and support customers in their conservation efforts by providing historical data, conservation tips and detailed billing.



**Lakefront
Utilities
Inc.**

16

SMART GRID DEPLOYMENT OFF-GRID NETWORKS

HYDRO-QUÉBEC

- 4 year project spanning from 2018-2022
- Project total value \$46,235,398
- Receiving total contributions worth \$11,000,000 from NRCan
- Hydro-Québec will deploy a microgrid control system and battery energy storage system throughout 11 remote Indigenous communities. By using a higher order of automation, Hydro-Québec will improve the performance of its thermal generating assets and allow for the future integration of renewable energy. The project will be supported by research work that has been underway for more than 10 years at the Institut de recherche d'Hydro-Québec (IREQ).



17

LAC-MÉGANTIC MICROGRID

HYDRO-QUÉBEC

- 4 year project spanning from 2018-2022
- Project total value \$12,803,584
- Receiving total contributions worth \$5,184,000 from NRCan
- Hydro-Québec has demonstrated and deployed distributed energy resource (DER) technologies in an innovative micro-grid that has been commissioned and will increase the adoption of decentralized renewable energy generation. The project has been commissioned and controls DER technologies such as batteries, solar PV, vehicle charging stations, and home automation equipment in an intelligent micro-grid to help support the grid and reduce environmental impacts.



18

INTEGRATED DISPATCHABLE RESOURCE NETWORK FOR LOCAL ELECTRIC DISTRIBUTION UTILITY

SAINT JOHN ENERGY

- 4 year project spanning from 2018-2022
- Project total value \$15,806,309
- Receiving total contributions worth \$6,320,995 from NRCan
- Saint John Energy (SJE) will integrate a variety of distributed energy resources (DERs) into the local electricity grid and develop machine-learned algorithms to optimize the dispatch of the DERs. The DERs consist of smart water heaters, thermal energy storage devices, battery technologies, dispatchable generation and other smart control elements. The infrastructure will allow SJE to manage its peak demands and reduce its carbon footprint.



19

COLLABORATIVE GRID INNOVATION FOR ATLANTIC SMART ENERGY COMMUNITIES

NEW BRUNSWICK POWER

- 5 year project spanning from 2018-2023
- Project total value \$26,563,461
- Receiving total contributions worth \$5,695,000 from NRCan
- This project is part of a collaborative demonstration with NS Power, supporting the development of an energy system platform (ESP) to continue NB Power's grid modernization. This project will enable them to manage the variability of renewable energy, control distributed energy resources (DER), minimize the requirement for peaking power plants and increasing grid resiliency through increased investment in on-site generation and energy storage. In addition, it will introduce energy efficiency tools and customer engagement programs based on new rate structures in Shediac, New Brunswick. DER and storage installations will take place at residential and commercial sites (Government of Canada Pension and the Shediac Multi-purpose Centre), 500-home research study exploring load control, distributed generation and storage, and cyber-security approaches to secure these DERs.



Énergie NB Power

20

COLLABORATIVE GRID INNOVATION FOR ATLANTIC SMART ENERGY COMMUNITIES

NOVA SCOTIA POWER

- 3 year project spanning from 2019-2022
- Project total value \$18,290,606
- Receiving total contributions worth \$5,111,000 from NRCan
- This project is part of a collaborative demonstration with NB Power, supporting the development of an Energy System Platform (ESP) to continue NS Power's grid modernization. This project will enable the grid to manage the variability of renewable energy, control distributed energy resources (DER), use cyber-security approaches for DERs, minimize the requirement for peaking power plants and improve grid resiliency through increased investment in on-site generation and energy storage. In addition, the project will introduce customer engagement programs, including a new solar program in Amherst, Nova Scotia. NS Power is interested in facilitating renewable integration to further advance their "coal to renewables" strategy. NS Power will also investigate optimization of energy management through DERs, control systems and customer programs. DER and storage installations will take place at various residential and commercial and industrial sites.



PEI ENERGY CORPORATION

- 3 year project spanning from 2019-2022
- Project total value \$24,370,890
- Receiving total contributions worth \$4,373,250 from NRCan
- The project combines the installation of a 10MW PV solar array and a large grid connected battery array for flexible storage with remote control to provide clean energy and peak load management in a combined residential, industrial and commercial self-contained park. The resulting microgrid will be configured so that it can be connected to the grid or, when the grid is not available, disconnected to function as a fully operational, independent system.



PROGRAM OVERVIEW

Definitions:

DERMS — Distributed energy resource management system
Demonstration projects involve a combination of technologies or operational procedures typically implemented for the purposes of proving pre-commercial innovative technologies. Technologies considered as demonstration are expected to be in the Technology Readiness Level range of 5-8.

Deployment projects consist of proven technologies with the intent of modernizing grid operations by providing new functionality and addressing market gaps.
Hybrid projects involve demonstration and deployment phases. This occurs as either: 1) phased approach, where a project moves from a demonstration to a deployment; or, 2) project simultaneously launching demonstration and deployment components that may or may not be related.

RECIPIENT (PROVINCE/TERRITORY)	PROJECT TITLE	ENERGY MARKET AND RATE INNOVATION	SOLAR	WIND	ADVANCED INVERTER FUNCTIONS	STORAGE	LOAD MANAGEMENT	EV INTEGRATION	ARTIFICIAL INTELLIGENCE	PROJECT TYPE	SYSTEM CATEGORY
Yukon Energy (YK)	Residential Demand Response Program (RDRP)						●			Demonstration	DERMS
EPCOR (AB)	EPCOR Smart Grid System (ESGS)		●		●	●	●			Deployment	DERMS, Microgrid, Distributed energy storage
EQUUS REA (AB)	Canada's 1st Member-Owned Rural Smart Grid Project		●			●		●	●	Deployment	DERMS
ENMAX Power (AB)	Integrating Distributed Generation into Secondary Networks in Large Urban Centres		●		●					Demonstration	Grid monitoring and automation
FortisAlberta Inc. (AB)	FortisAlberta Waterton Energy Storage Project		●			●				Deployment	Microgrid-connected
City of Lethbridge (AB)	Conservation Voltage Reduction (CVR) Deployment in Lethbridge Electric Utility (LEU) Distribution Network						●			Deployment	Grid monitoring and Automation
SaskPower (SK)	SaskPower Distribution Modernization Program						●			Deployment	Grid monitoring and automation
SSM PUC (ON)	Sault Smart Grid	●					●			Deployment	Grid monitoring and automation
Entegrus Powerlines Inc. (ON)	Conservation Voltage Reduction						●			Deployment	Grid monitoring and Automation

RECIPIENT (PROVINCE/TERRITORY)	PROJECT TITLE	ENERGY MARKET AND RATE INNOVATION	SOLAR	WIND	ADVANCED INVERTER FUNCTIONS	STORAGE	LOAD MANAGEMENT	EV INTEGRATION	ARTIFICIAL INTELLIGENCE	PROJECT TYPE	SYSTEM CATEGORY
Bracebridge Generation (ON)	Smart, Proactive, Enabled, Energy Distribution; Intelligent, Efficiently, Responsive (SPEEDIER) Project		●			●	●	●		Hybrid	DERMS
London Hydro (ON)	West 5 Smart Grid Project		●			●	●	●		Hybrid	DERMS
Alectra Utilities (ON)	Power.House Hybrid: Minimizing GHGs and Maximizing Grid Benefits		●			●	●	●	●	Demonstration	DERMS
Alectra Utilities (ON)	GridExchange	●					●		●	Demonstration	DERMS
Independent Electricity System Operator (IESO) (ON)	York Region Non-Wires Alternatives Demonstration Project	●	●			●	●			Demonstration	New markets & rate options (NRO)
Lakefront Utilities (ON)	Digital Utility Platform						●	●		Deployment	Grid monitoring and automation
Hydro-Québec (QC)	Smart Grid Deployment of Off-Grid Networks					●	●			Deployment	Microgrid off-grid, grid monitoring, automation and storage off-grid
Hydro-Québec (QC)	Lac-Megantic Microgrid		●			●	●	●	●	Hybrid	Microgrid-connected
Saint John Energy (NB)	Integrated Dispatchable Resource Network for Local Electric Distribution Utility		●			●	●	●	●	Hybrid	DERMS
New Brunswick Power (NB)	Collaborative Grid Innovation for Atlantic Smart Energy Communities	●	●			●	●			Hybrid	DERMS
Nova Scotia Power (NS)	Collaborative Grid Innovation for Atlantic Smart Energy Communities	●	●			●	●			Hybrid	DERMS
PEI Energy Corporation (PEI)	Slemon Park Microgrid Project		●			●	●		●	Deployment	Microgrid, DERMS

RELATED NRCAN PROGRAMS

SMART RENEWABLES AND ELECTRIFICATION PATHWAYS PROGRAM

SREPs provides up to \$964 million over four years for smart renewable energy and grid modernization projects. This program will significantly reduce greenhouse gas emissions by encouraging the replacement of fossil-fuel generated electricity with renewables that can provide essential grid services while supporting Canada's equitable transition to an electrified economy.

ELECTRIC VEHICLE INFRASTRUCTURE AND DEMONSTRATIONS

Supports innovative EV charging and hydrogen (H2) refuelling infrastructure demonstration projects that will address barriers to the installation, operation and management of charging and refuelling technologies.

ELECTRIC VEHICLE AND ALTERNATIVE FUEL INFRASTRUCTURE DEPLOYMENT INITIATIVE

Supports the deployment of electric vehicle fast-chargers, natural gas and hydrogen refuelling stations.



ENERGY EFFICIENT BUILDINGS RESEARCH DEVELOPMENT AND DEMONSTRATION

Supports RD&D projects to lower the cost of highly energy efficient building construction and to inform the development and adoption of new building codes for both the alteration of existing buildings and the construction of new net-zero energy ready buildings across Canada.

CLEAN ENERGY FOR RURAL AND REMOTE COMMUNITIES

Supports rural and remote communities' transition away from diesel to more sustainable clean energy through 2 program streams:

- Bio Heat, demonstration & development projects
- Capacity building projects

CYBER SECURITY AND CRITICAL ENERGY INFRASTRUCTURE PROGRAM

CCEIP received \$2.42 million over 5 years to enhance the cyber security and resilience of domestic and cross-border energy infrastructure, in support of Canada's National Cyber Security Strategy.

BREAKTHROUGH ENERGY SOLUTIONS CANADA

Accelerating clean energy solutions in electricity, transportation, buildings and manufacturing with potential to substantially reduce greenhouse gas emissions globally. Partnership with the Breakthrough Energy Coalition (up to \$10M) and the Business Development Bank of Canada (up to \$10M).

IMPACT CANADA

A Prize Challenge Program that speeds up cleantech solutions to some of Canada's biggest challenges. Some of our electricity-related cleantech challenges are:

- Power Forward – Pairing Canada and UK Innovators to design the power grid of 2030
- Indigenous Off-Diesel Initiative – Enabling 15 remote Indigenous communities lead the transition away from reliance on diesel
- Charging the Future – Accelerating the best made-in-Canada battery innovation towards the market

Visit NRCan's current investments page for information on projects funded under these programs: <http://nrcan.gc.ca/current-investments>

For more information on major federal clean technology programs and services, visit the Clean Growth Hub website: Canada.ca/clean-growth