

Clean Energy for Rural and Remote Communities (CERRC) Program

Webinar
March 7, 2018



Natural Resources Canada
Ressources naturelles Canada

Canada

Outline

- 1) Provide an overview of the CERRC program, its different streams, and the application process
 - 2) Lessons learned from the CERRC's Project Concept Questionnaires
 - 3) Considerations when applying to the CERRC program
- For further details and information discussed in this webinar, please consult the CERRC Applicant's Guide, available at

nrcan.gc.ca/energy/science/programs-funding/19791

*Any questions you may have can be typed in the WebEx chat function or emailed to **nrcan.remoteenergy-energieadistance.rncan@canada.ca**.*

The Government of Canada is taking action to help reduce reliance on diesel fuel in rural and remote communities

Today's
presentation

The primary purpose is to reduce reliance on diesel fuel.

Key enablers of further diesel fuel reductions

Natural Resources Canada

- **Clean Energy for Rural and Remote Communities:** \$220 million over 6 years starting in 2018/19 (4 program elements)
- **Impact Canada Initiative:** \$75 million over 4 years. Impact Canada will use an outcome-based approach to accelerate efforts toward solving Canada's big challenges. Natural Resources Canada (NRCan) will launch an "Off-Diesel" challenge later this year (approximately \$20 to \$30 million)

Crown-Indigenous Relations and Northern Affairs

- **Northern REACHE:** \$53.5 million over 10 years starting in 2018/19 and \$5.4 million ongoing (renewal of the existing program). Established in 2003 as a national program

Infrastructure Canada*

- **Arctic Energy Fund:** \$400 million over 11 years starting in 2018/19 (for the territories only)
- **Green Infrastructure Stream:** \$9.2 billion for green infrastructure over 11 years starting in 2018/19
- **Rural and Northern Stream:** \$2 billion for rural and northern infrastructure over 11 years starting in 2018/19

Environment and Climate Change Canada*

- **Low Carbon Economy Fund:** \$2 billion over five years starting in 2017/18

Indigenous Services Canada

- **First Nation Infrastructure Fund (FNIF):** Could be leveraged to optimize the use of energy and reduce reliance on diesel fuel in First Nation communities

For more information on the Government of Canada's plans and to learn more about other programs, please visit:

<https://www.canada.ca/en/services/environment/weather/climatechange/pan-canadian-framework.html>

* indicates project funding that will be dispersed through bilateral agreements with the provinces and territories -



Program Objective

NRCan is seeking to promote a transition to a **more sustainable and clean energy future** by supporting projects that **reduce reliance on diesel and other fossil fuels** in Canada's **rural and remote communities** and **industrial sites**.



CERRC's Program Components

Request for Proposals

- **BioHeat** - \$55 million for feasibility studies and/or installation of proven biomass combustion heating systems, district heating and combined heat and power systems that displace diesel or certain other fossil fuels used for heating. Electricity may be produced, but the primary output of the project must be heat.
- **Demonstration** – \$60 million to demonstrate innovative renewable energy, energy efficiency, energy storage or smart-grid technologies to displace diesel fuel for power and/or heat.
- **Deployment** – \$90 million for deployment of commercially available renewable energy technologies for electricity. Heat may also be produced, but the primary output of the project must be electricity.

Call for Preliminary Proposals

- **Capacity Building** – \$10 million for the development of energy literacy and local technical expertise through skills training and network participation in rural and remote communities.

nrcan.gc.ca/energy/science/programs-funding/20477



Mandatory Criteria

The mandatory criteria varies across the program components; however there are some commonalities:

- ✓ Eligible recipients
- ✓ Location
- ✓ Displacement of diesel
- ✓ Community participation*

* preference for projects that include opportunities for community and/or Indigenous participation and ownership

Location

Remote communities and locations (all components)

- Not connected to the North American electrical grid nor to the natural gas pipeline network
- Long-term settlement (5 years or more) with at least 10 dwellings

Rural Communities (eligible under only the bioheat and capacity building streams)

- Connected to the North American electrical grid but not to the natural gas pipeline network
- Fewer than 1,000 people
- Population density of less than 400 people per square kilometre

Industrial Sites

- Industrial-scale commercial operations in remote locations, both large and small, such as mines and manufacturing facilities, are eligible under all three components of CERRC.
- This includes part-time residences for site workers at industrial sites that are not currently connected to the North American electrical grid, nor to the natural gas network.
- While remote industrial sites are eligible under all three streams, rural industrial sites are only eligible for the BioHeat program component.

Remote Community Energy Database: atlas.gc.ca/rced-bdece/en/index.html

Eligible Recipients

- For-profit and not-for-profit legal entities validly incorporated or registered in Canada
- Provincial, territorial, regional and municipal governments and their departments and agencies where applicable
- Indigenous communities or governments; tribal councils or entities that fulfill a similar function (e.g. general council or tribal organizations) and Indigenous for-profit and not-for-profit organizations



Community Participation and Ownership

- Projects that incorporate aspects of community participation **beyond consultation**, e.g. community ownership or management, will be given priority.
- The level of community involvement will be reflected in how proposals are scored.
- The level of Indigenous involvement will be evaluated more favourably.



Displacement of diesel fuel use

- All projects must be clear on how a reduction in diesel fuel use will occur.
 - Estimating the quantities of displaced diesel, if possible, may be beneficial.
- Bioheat projects may displace other fossil fuels in addition to diesel.
- Projects that can demonstrate a greater reduction in the use of diesel fuel, corresponding reductions in greenhouse gas emissions, technical impacts, job creation and socio-economic development will be given priority.



BioHeat component – Specific Criteria

- Heat must be the primary output from any project, and it must be derived from wood biomass fuel.
- May displace other fossil fuels in addition to diesel
- Includes rural communities and industrial sites
- Includes diverse activities, including supply chain development



Demonstration Component – Specific Criteria

- Must be located in a remote location (including industrial sites)
- Must feature an innovative demonstration of renewable technology to result in reducing the use of diesel fuel for heat and/or power
- Novel applications of a commercially available technology are also eligible
- Preference may be given for projects with high-levels of readiness, including completion of regulatory/permit approvals, community engagement, environmental assessment, etc.



Deployment Component – Specific Criteria

- Must be **commercially available** renewable energy technologies including:
 - Solar PV
 - Wind
 - Geothermal
 - Hydroelectric projects (less than 50 MW)
 - Bioenergy
 - Energy storage and micro grid control systems
- Electricity production must be the **primary** output of the project.
- **Minimum 250 kW** generation capacity (may be achieved by combining technologies under one project application).



Considerations for Applying to CERRC



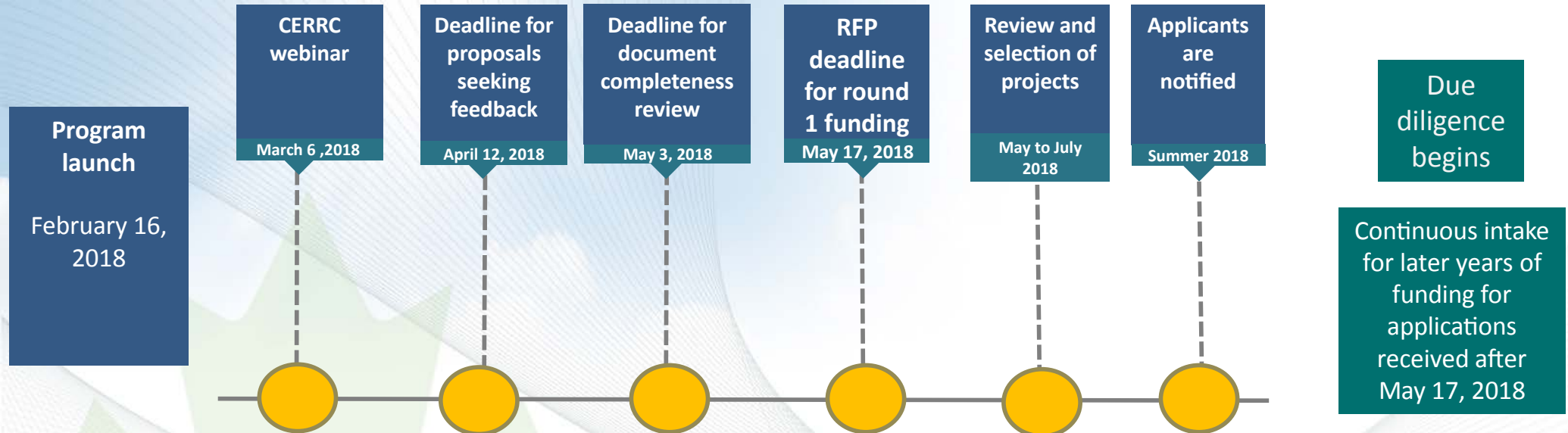
Funding

- Funding for the program is available for projects beginning April 1, 2018, and ending by March 31, 2024.
- Collaboration is strongly encouraged for all program components, and will be one criteria considered during project evaluations. All program components allow for 100% stacking. In the case of industrial sites, the program allows for up to 75% stacking for demonstration and deployment projects.

Program Component	Expected Range of Funding per project (\$)	Projects	Total Program Funding (% of total project costs)
BioHeat	Up to 5 million	~20 to 40	Up to 100%
Demonstration	2 million to 5 million	~15	Up to 100%
Deployment	4 million to 8 million	10 to 20 projects	Up to 40%
Capacity Building	100,000 to 400,000	TBD	Up to 100%



Clean Energy for Rural and Remote Communities Timeline



Project Concept Questionnaires (PCQ): What We Learned



Lessons Learned and Overall Impressions

What we received:	Reasons for ineligibility
Projects in grid-connected / not-remote communities	Deployment and demonstration MUST be in a remote community. BioHeat includes both rural and remote communities.
Capacity (kW) of the deployment project was below 250 kW or not specified	Need to specify the capacity or consider bundling projects to reach 250 kW for the deployment component
Research and Development	Must be at the demonstration stage, i.e. not yet commercialized nor still in early research
Technology provider only, no community specified	Proponents must have a specific community partner that supports the proposal at the time of application to be eligible.
Replacement fuel and energy efficiency	Projects that include fuel conversion (i.e. to natural gas) and those focused solely on energy efficiency are not eligible.
Capacity building project (Energy plan, resource assessment, training program)	Apply for capacity building call for preliminary proposals.
Incomplete project description	Not enough details provided to be assessed.



Note: applicants who submitted a Project Concept Questionnaire MUST also submit a project proposal.



Application Process

- Step 1: **Read the *Applicant's Guide* carefully.**
- Step 2: Complete and submit a project proposal including any other required documents by **April 12** to be eligible for a feedback call.
- Step 3: All proposals to be considered for funding in the first fiscal year (2018-19) are due to NRCan by May 17, 2018, (23:59 EDT).
Email: nrcan.remoteenergy-energieadistance.nrcan@canada.ca
 - Note that applicants who submitted a Project Concept Questionnaire **MUST also submit a project proposal.**

Application Process

Applicants may also submit their documentation by courier or registered mail to:

**Clean Energy for Rural and Remote Communities
Office of Energy Research and Development
Natural Resources Canada
580 Booth Street, 14th floor
Ottawa, ON K1A 0E4**

Reference number: PW-18-00819798



CERRC Application Process

Register to download the application forms and guide at
<https://www.nrcan.gc.ca/energy/science/programs-funding/19791>.

Please check the website periodically throughout the Call For Proposals period for important updates and to view additional answers to application-related questions.

Feel free to send questions as they arise to
nrcan.remoteenergy-energieadistance.nrcan@canada.ca.



Key Elements to a Successful Proposal

- Be clear and concise.
- Have a well-defined project scope and realistic time lines.
- Ensure community/organizational leaders support the project application and show how the community will be involved in project.
- Including technical and financial supporting information will help your project's chances of being approved for funding.
- Describe clearly the path you will take to achieve project goals or objectives, e.g. market development activities.



Q & A

