



- **Diesel Microgrid Community**
- Hydro and Diesel Microgrid Community

First Nations in B.C. are strong advocates for clean energy and have been working with the province to advance reforms to allow community-led renewable energy projects to succeed.

A strong foundation of collaboration between First Nations and the B.C. government paired with an ambitious target for diesel reduction has helped to shape a strategy for supporting community-led renewable energy projects in the province. The strategy's focus on funding and capacity building directly supports Indigenous leadership in tackling diesel reduction.

****	Collaboration with rights- holders	Ongoing collaboration with First Nations on diesel reduction and energy policy development for remote communities.	**
Mil I	Plans and strategies	Comprehensive strategy to achieve the province's 80% remote community diesel reduction target.	**
•••	Funding and financing	Substantial and consistent funding for community energy projects and clean energy champions.	**
	Programs for efficient buildings	Robust, programs for energy efficiency, retrofits, and capacity building tailored to remote communities.	**
()	Independent power producer (IPP) market	IPP solar projects receive fixed rate; market opportunity for other projects is less defined.	**



Restoring the flow: British Columbia

British Columbia is home to 40 diesel-dependent remote communities, most of which are First Nations.¹³¹ BC Hydro, the utility which operates the province's integrated electricity grid, provides service to 28 of these communities across 14 isolated microgrids which are referred to as the nonintegrated areas (NIAs).¹³² The remaining 12 communities are First Nations that operate their own energy systems with support from Indigenous Services Canada.

Remote First Nations in B.C. have been strong advocates for their right to clean energy and diesel reduction. This advocacy resulted in the province setting an ambitious target to reduce diesel use in remote communities and establishing a collaborative platform with First Nations to develop and implement a strategy specific to remote community energy.

These actions created a policy and funding landscape that is increasingly supportive of community projects; BC Hydro and the provincial government have a strong mandate to achieve the diesel reduction target and to support community-led renewable energy. Most remote First Nations in B.C. have dieselreducing projects in operation or development, supported by a combination of federal and provincial funding. Even with this strong progress, meeting the diesel reduction target is a significant technological and economic challenge and will require sustained priority, attention, and collaboration.

¹³¹ New Relationship Trust, "CEDR Funding Guide Revised May 2023," 2023. https://newrelationshiptrust.ca/wpcontent/uploads/2023/05/CEDR-Funding-Guide-Revised-May-2023.pdf

¹³² BC Hydro, "Non-Integrated Areas Planning Regulatory Framework," December 15, 2023, 7. https://docs.bcuc.com/documents/proceedings/2024/doc_75671_b-1-bch-non-integrated-areas-planning-framework.pdf Photo: Barkley Project Group, Kitasoo Xai'Xais Hydropower, Klemtu, BC.



Collaboration with rights-holders

The B.C. government and remote First Nations have a strong foundation for collaboration on community energy policy.

Since 2021, the province has hosted a working group with representatives of remote First Nations to guide the development of the Remote Community Energy Strategy (RCES) and support its implementation.¹³³ The RCES working group is well resourced and supported through the B.C. government, and members are compensated with a stipend for their time and expertise. The group advises the government on policy priorities, ongoing issues with regulatory and utility policy, and persistent barriers to project completion.134

BC Hydro also hosted both bilateral and group engagements with First Nations on the development of their NIA strategy, which will set out how the utility will support community clean energy projects and diesel reduction. As a key component of the NIA strategy, BC Hydro is working to develop a plan for ongoing partnerships with community independent power producers to ensure the smooth integration and operation of clean energy projects with diesel generation, battery storage, and microgrid control systems.

In 2019, the provincial government passed the Declaration on the Rights of Indigenous Peoples Act, which states that the province must align all its laws and policies with the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). However, key energy sector legislation has yet to be reformed. 135 This reform has the potential to institutionalize the existing partnerships and ensure that First Nations are included in energy policy development.



Ongoing collaboration with First Nations on diesel reduction and energy policy development for remote communities.

¹³³ Government of British Columbia, "CleanBC Remote Community Energy Strategy (RCES)." https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/community-energy-solutions/remotecommunity-energy-strategy-rces

¹³⁴ Government of British Columbia, "Remote Community Energy Strategy Working Group." https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/community-energy-solutions/remotecommunity-energy-strategy-rces/remote-community-energy-strategy-working-group

¹³⁵ Government of British Columbia, *Declaration on the Rights of Indigenous Peoples Act*, SBC 2019, c. 44. https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/19044

Plans and strategies

The B.C. government has set a target of 80% remote community diesel reduction by 2030 as a component of their 2018 CleanBC plan to address climate change. 136 In collaboration with the RCES working group, the province developed the Remote Community Energy Strategy (RCES) to achieve the climate plan's target for reducing diesel use in remote communities. RCES has three primary pillars: capacity building, demand-side management, and clean energy generation.

The strategy is executed through a suite of programs funded by both the provincial and federal government and B.C. Ministry of Energy and Climate Solutions, in partnership with Indigenous-led funders such as Coast Funds, the Fraser Basin Council, and New Relationship Trust. Policy implementation has been guided by the RCES working group, and through targeted engagement with all remote communities.137

BC Hydro is developing its corporate strategy for its remote microgrids, (the NIA Strategy), which is expected to be published in 2026 and has three pillars: reliability, clean power, and affordability. 138 The NIA strategy will contain high-level plans for the future operation of the microgrids in the NIAs, including significantly enhancing technical and organizational capacity to support high-penetration renewable energy projects with updated microgrid controls and battery energy storage. BC Hydro is also working to develop a collaborative long-term resource planning process with NIA communities to ensure the utility's plans are aligned with community expectations for growth and preferences for energy.



Comprehensive strategy to achieve the province's 80% remote community diesel reduction target.

¹³⁶ Government of British Columbia, *CleanBC: Our Nature. Our Power. Our Future* (2019), 33. https://www2.gov.bc.ca/assets/gov/environment/climate-change/action/cleanbc/cleanbc_2018-bc-climate-strategy.pdf

¹³⁷ Remote Community Energy Strategy Working Group, RCES Working Group: Recommended actions and strategies for achieving the CleanBC diesel reduction goal for BC's remote communities (2022).

https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/electricity-alternative-energy/communityenergy-solutions/rces_working_group_final_report_2022_06_01.pdf

¹³⁸ BC Hydro, letter to the BCUC on the NIAs Planning Regulatory Framework, December 15, 2023. https://docs.bcuc.com/documents/proceedings/2024/doc 75671 b-1-bch-non-integrated-areas-planning-framework.pdf



Community project funding and financing

The Remote Community Energy Strategy funds capacity building and clean energy projects in remote communities. The main vehicle for delivering this funding is through the Community Energy Diesel Reduction (CEDR) Program, which is a \$59 million fund for remote communities to support community energy planning, energy efficiency and demand-side management (DSM) initiatives, 139 and dieseldisplacing clean energy projects. 140,141 The CEDR program is funded by the province and the federal government and administered by the New Relationship Trust, an arms-length Indigenous funder established through a negotiated agreement between the Government of B.C. and First Nations in B.C.142

The program is flexible and offers a range of support and mentorship to ensure community projects are successful, including project planning advice, liaising with potential partner organizations, and providing technical advisory services. The program is designed to provide funding and support to each community wholistically, starting \$95,000 for community energy planning, up to \$500,000 for energy efficiency and DSM initiatives, and up to \$4 million for renewable energy generation projects. 143,144

The CEDR program is augmented by the Indigenous Climate Action Network, administered by the Coastal First Nations – Great Bear Initiative, a program which supports the salaries for and provides mentorship to full-time climate action coordinators, who work for their respective First Nations to champion community energy planning, energy efficiency and DSM initiatives, and renewable energy projects based on the needs and priorities of their nation.¹⁴⁵



Substantial and consistent funding for community energy projects and clean energy champions.

¹³⁹ More detail on this funding in the next section.

¹⁴⁰ Lee Wilson, "B.C. announces \$30M to help First Nations transition away from diesel power," APTN News, May 04, 2023. https://www.aptnnews.ca/national-news/b-c-announces-30m-to-help-first-nations-transition-away-from-diesel-power/

¹⁴¹ New Relationship Trust, Community Energy Diesel Reduction Program, 2025. https://newrelationshiptrust.ca/wpcontent/uploads/2025/06/NRT-Clean-Energy-Report-Update-Proof-04-May.28.2025.pdf

¹⁴² New Relationship Trust, "Our Story," https://newrelationshiptrust.ca/about/about-us/our-story/

¹⁴³ The \$4 million figure is a total cap per community for all three streams.

¹⁴⁴ Community Energy Diesel Reduction, 12.

¹⁴⁵ Coastal First Nations, "Indigenous Climate Action Network," https://coastalfirstnations.ca/initiatives/indigenousclimate-action-network/



Programs for efficient buildings

B.C. has strong programs for energy efficiency upgrades to community housing stock. These programs have seen high uptake among remote communities, with many taking advantage to install heat pumps and make other building upgrades. In 2024, various funds and offers were amalgamated under the CEDR program, centralizing the access point for communities.

The CEDR demand-side management stream is flexible and accepts applications for communitydesigned projects or offers a number of financial incentives for building upgrades such as envelope improvements, high efficiency windows and doors, and switching from oil furnaces to heat pumps. 146 The climate action coordinators supported by the Indigenous Climate Action Network have strongly influenced high program uptake, as projects related to building retrofits, especially housing, require a high degree of community coordination.

For building-based renewable energy projects, BC Hydro also offers the Self-generation program which enables net metering projects.¹⁴⁷ This allows customers to install their own small-scale renewable energy generator to reduce energy costs.



Robust, flexible programs for energy efficiency, retrofits, and capacity building tailored to remote communities.

¹⁴⁶ New Relationship Trust, Community Energy Diesel Reduction Program Demand Side Management Quick Guide (2024). https://newrelationshiptrust.ca/wp-content/uploads/2024/06/NRT-Community-Energy-Quick-Guide-May-30-2024-SCREEN compressed.pdf

¹⁴⁷ BC Hydro, "Self Generation." https://app.bchydro.com/accounts-billing/electrical-connections/self-generation.html



Independent power producer (IPP) market

B.C. does not have a fully defined IPP policy for remote community clean energy projects. This has caused frustrations among NIA First Nations developing projects, who have cited issues around data transparency and clarity related to the IPP market, the electricity purchase agreement (EPA) negotiations, and the expected price for clean energy and how these issues have hindered project development.148

In response to these concerns, BC Hydro created a fixed-price offer for diesel reducing solar IPP projects called the Community Renewable Energy Offer (CREO).¹⁴⁹ For other technologies, the price is still negotiated on a project-by-project basis to ensure long-term financial sustainability for the project. BC Hydro is also working to provide better definition around EPA negotiations in the NIAs and is developing communications materials for IPPs to clearly explain the negotiation process. The utility's priority is to work with IPPs to develop and integrate financially and technically viable projects.

BC Hydro is covering the costs of system upgrades to its microgrids to integrate community-led clean energy projects, and plans to own and operate battery energy storage systems for NIAs with solar projects. 150 This is in part thanks to a regulatory amendment enacted by the B.C. government, which allows BC Hydro to spend more of its budget on remote community decarbonization. ¹⁵¹ This removes the financial burden of necessary infrastructure upgrades from the proponent of a community project.

These steps to support community projects are welcome, but lengthy and difficult PPA negotiations for community projects still hinders development, especially for technologies not covered under the CREO offer.



IPP solar projects receive fixed rate; market opportunity for other projects is less clear.

¹⁴⁸ BC Hydro, NIA Engagement Summary, "BCUC Evidentiary Update and Compliance with Public Notice Directive," February 9, 2024; 68-69, 134, 175, 227. https://docs.bcuc.com/documents/proceedings/2024/doc_76002_b-2-bchevidentiaryupdate-publicnotice.pdf

¹⁴⁹ BC Hydro, "Non-integrated area community renewable energy projects." https://www.bchydro.com/work-withus/selling-clean-energy/nia-community-renewables.html

¹⁵⁰ BC Hydro, 2024 Climate Change Accountability Report, May 2025.

https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/corporate/environmentsustainability/environmental-reports/2024-climate-change-accountability-report.pdf

¹⁵¹ Government of British Columbia, Order in Council 301/2024, amendment to Greenhouse Gas Reduction (Clean Energy) Regulation, B.C. Reg. 102/2012, approved June 10, 2024.

https://www.bclaws.gov.bc.ca/civix/document/id/oic/oic cur/0301 2024

Community outcomes

The 80% diesel reduction target in the CleanBC plan, set in response to NIA First Nations advocacy, has led to an array of policies and funds to support the participation of remote communities in the energy transition, which are sustained and guided by ongoing engagement with First Nations.

Seven of the twelve remote communities not served by BC Hydro have taken advantage of these policies and funding opportunities to build significant diesel reducing projects. 152,153

NIA First Nations have also been hard at work bringing diesel reducing projects to fruition for their communities, with several in EPA negotiations with BC Hydro. The Ulkatcho First Nation's 4.4 MW Anahim Lake solar project is expected to complete construction in October 2025, and will be the largest off-grid solar farm in Canada, reducing the community's diesel consumption by over 60%. 154

A 2 MW solar farm on Haida Gwaii, led by the Haida-owned Tll Yahda Energy has completed construction and is in the final stages of commissioning with BC Hydro. 155 There are plans to expand the installation to a minimum of 4 MW, and for the project to be followed by another solar installation on the island's southern microgrid.156

BC Hydro intends to sign EPAs on eight more diesel-reducing First Nation-owned IPP projects in the NIAs, including the two major solar projects on Haida Gwaii, major hydro projects in Gitga'at and Nuxalk territory, and several other smaller projects. 157

¹⁵² Fraser Basin Council, "Renewable Energy for Remote Communities." https://www.fraserbasin.bc.ca/bc-widework/climate-change/renewable-energy-for-remote-communities/

¹⁵³ Coast Funds, "First Nations Announce Over \$25 Million in New Renewable Energy Investments to Decarbonize Their Coastal Communities," June 28, 2020. https://coastfunds.ca/news/first-nations-announce-over-25-million-in-newrenewable-energy-investments-to-decarbonize-their-coastal-communities/

¹⁵⁴ Staff Black Press Media "B.C. First Nation to house largest off-grid solar project in Canada," Victoria News, April 21, 2024. https://www.vicnews.com/news/bc-first-nation-to-house-largest-off-grid-solar-project-in-canada-7347869

¹⁵⁵ Andrew Hudson, "Tll Yahda Solar Farm. https://haidagwaiinews.com/solar-farm-shines-at-energy-forum/

¹⁵⁶ Natural Resources Canada, "Solar North Expansion." https://natural-resources.canada.ca/funding-partnerships/solarnorth-expansion

¹⁵⁷ Chris Sandive, letter to the BCUC on the NIAs Planning Regulatory Framework, December 15, 2023. https://docs.bcuc.com/documents/proceedings/2024/doc_75671_b-1-bch-non-integrated-areas-planning-framework.pdf

Priorities for action

In May 2025, B.C. announced a review of CleanBC to ensure that the plan is effectively supporting a provincial economy that will create a cleaner, more sustainable future. 158 Any changes to the climate plan regarding remote communities will need to build on the success of the RCES and address the lingering policy barriers and funding gaps that are hampering renewable energy projects.

It is critical that B.C. maintains the availability of the funding programs that are building community capacity to address energy issues, such as the Indigenous Climate Action Network, and continues to collaborate with First Nations and BC Hydro to identify and address the remaining roadblocks to community led projects.

B.C. has legislated the intent to bring all its laws into alignment with UNDRIP, but the status quo of energy sector legislation does not mandate that Indigenous rights are prioritized in energy planning decisions. The province and the utility have made significant progress in developing stronger collaboration with First Nations, but that progress must be enshrined in legislation.



¹⁵⁸ Government of British Columbia, "CleanBC review launched to strengthen climate action, results for people," news release, May 7, 2025. https://news.gov.bc.ca/releases/2025ECS0019-000423

Photo: David Benton, Hartley Bay, BC.