

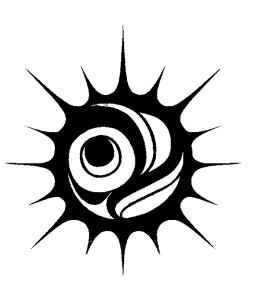






# Remote Community Energy Strategy

## **2023 UPDATE REPORT**



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# Acknowledgements

With gratitude and respect, the Ministry of Energy, Mines, and Low Carbon Innovation (the ministry) acknowledges the Lək wəŋən Peoples on whose lands the Community Clean Energy Branch office is located. The ministry is committed to the regenerative work of meaningful reconciliation.

The ministry is grateful to the members of the Remote Community Energy Strategy Working Group, who provide guidance to the Province: David Benton (Gitga'at), Edmund Haines (Xeni Gwet'in), Jamie Pond (Kwikwasut'inuxw Haxwa'mis), Leona Humchitt (Haíłzaqv), Patrika McEvoy (Haida), Sean Brennan (Haida), Steve James (Ulkatcho), Terry Webber (Nuxalk), and Trent Moraes (Haida). We honour the knowledge and determination they have demonstrated as clean energy leaders.

The ministry continues to partner with New Relationship Trust, Fraser Basin Council, and Coastal First Nations Great Bear Initiative on program administration. We thank them for their long-term commitment and daily contributions to diesel reduction.



### **Artist Danika Saunders**

Danika was raised Nuxalk from Bella Coola and has a bloodline to the Gwa'sala-Nakwaxda'xw Nation. She graduated from the Freda Diesing School of Northwest Coast Art in 2016. Danika is an award-winning artist dedicated to creating digitally and in paints, and to hand poke tattooing and jewelry-making. We appreciate the addition of their delightful artwork.

#### Cover photos:

Top: Uchucklesaht Tribe Bottom: Sean LeRoy and Elijah Mecham at Squmalh Creek. Elijah's sweater is by Christina Hoppe.



# Introduction

Approximately 44 remote communities in British Columbia are not connected to the provincial electricity grid. The majority of these are First Nation communities that depend on diesel fuel for back-up or baseload electricity generation. Some remote communities own and operate their electricity microgrids, while others are served by BC Hydro.

In 2017, the Province announced the CleanBC Remote Community Energy Strategy (RCES) with the goal of reducing diesel consumption for electricity generation and heating in remote communities by 80% by 2030.

The Community Clean Energy Branch, part of the Built Environment Unit in the Ministry's Energy Decarbonization Division, is responsible for leading the implementation of RCES. The branch develops policies and programs in collaboration with First Nations and a wide variety of stakeholders, including multiple levels of government, utilities, researchers, and non-governmental organizations.

*This report showcases diesel reduction activities from 2023 and highlights upcoming work in remote communities.* 

Squmalh Creek, Nuxhalk Nation



# Letter from the Ministry

Over the past year, the ministry has collaborated closely with remote communities to meet the CleanBC diesel reduction target by implementing energy efficiency, renewable generation, and capacity building initiatives.

We have witnessed a flurry of hard work at every stage of development, from creating community energy plans, to launching feasibility studies, to completing home retrofits.

The RCES Working Group continued to guide the ministry with their expert knowledge and insight, advocating for decarbonizing their communities and exceeding climate commitments.

### 2023 Community Clean Energy Branch highlights included:

- In 2023, the Community Energy Diesel Reduction program helped support 13 clean energy projects. The ministry provided an additional \$30 million to the program's original \$29 million investment, the Province's core funding program for remote, off-grid communities. We are pleased that the added investment will extend the program to 2028.
- In June 2023, the ministry announced a contribution of \$140 million to New Relationship Trust to expand the B.C. Indigenous Clean Energy Initiative and further support small-scale, Indigenous-led clean energy projects in both off and on grid communities.
- Through 2023, the ministry engaged on a proposed amendment to the Greenhouse Gas Reduction (Clean Energy) Regulation. The proposed amendment is intended to increase regulatory certainty for renewable energy generation in Non-Integrated Areas served by BC Hydro.

For 2024, the ministry will continue to partner with other funders and cultivate relationships with renewable energy experts in government, academia, and communities. The ministry will continue to explore ways to support First Nations in their ongoing work toward healthy, vibrant, and decarbonized remote communities.

Sincerely,

D. Sean letting

Sean LeRoy, Acting Executive Director Built Environment Unit



# **RCES Working Group**

Composed of nine members from seven First Nations, the RCES Working Group provides advice to the ministry on implementation of the CleanBC RCES. The Working Group is instrumental to achieving the Province's diesel reduction goal and the goals of their respective Nations.

The Working Group meets regularly with ministry representatives to share updates on community energy

projects and provide input into the ministry's actions. Meetings also offer the space to discuss concerns and aspirations around community wellbeing and energy sovereignty.

In 2023, the RCES Working Group grew from seven members to nine. The ministry welcomed Patrika McEvoy and Stephen James to the Working Group.

# Members

### David Benton — Gitga'at **First Nation**

David has been the lead Energy Champion for Hartley Bay since 2008, assisting the Gitga'at First Nation in the fulfillment of their clean energy aspirations - namely to be the



Greenest First Nations Village in Canada. He was adopted by the Gitga'at's Raven Clan and given the honorary name of Meskim Biels (Red Star). Under his guidance Hartley Bay became the first micro smart grid in Canada. The community recently installed heat pumps in every commercial building and all homes.

#### Trent Moraes — Haida Nation

Nangkilslas, Trent Moraes, is a Haida from Skidegate, Haida Gwaii. He is the elected Deputy Chief Councillor for Skidegate. Trent also serves as a member of First Nations Home Energy Save Advisory and Indigenous Climate Adaptation Working Group. He is



Chair of Indigenous Coastal Climate Coalition. Trent has helped the Skidegate Band Council study the needs of his community and educated the public on emerging technologies and energy efficiency strategies available.

### Sean Brennan — Haida Nation

Sean is the Implementation Manager for Haida Nation's Tll Yahda Energy. From the Ts'aahl Laanaas Eagle Clan, Sean has contributed to writing the Haida Gwaii Land Use Plan, developing Cultural Feature Identification programs for industry, and working directly with government and industry. Sean has been working towards Haida sovereignty his whole career. A proud father of three, Sean loves fishing and food gathering in and around Haida Gwaii.

### Leona Humchitt — Haíłzagy (Heiltsuk) Nation

Leona Humchitt is a member of Haíłzagy Nation of Bella Bella where she is the local Climate Action Coordinator and Energy Champion for the Indigenous Off Diesel Initiative. Leona is the inspiration and leader for the Haíłzagy Renewable Diesel Pilot Project. Leona is a grandmother and knows we have an obligation to ensure that through climate action, we protect and preserve our collective future for our children yet to come.





### Jamie Pond — Kwikwasut'inuxw Haxwa'mis

Jamie is of mixed heritage that includes Indigenous origins and 12 years of living on reserve. Perspectives from both Indigenous



and non-Indigenous cultures enhance her work in project management and program development. Jamie works for Kwikwasut'inuxw Haxwa'mis First Nation Economic Development, managing government programs and projects, and building local capacity. She has many years of experience working in contaminated soils projects, infrastructure, housing, climate adaptation, and clean energy projects.

### Edmund Haines — Xeni Gwet'in First Nation Government

Edmund Haines is from Xeni Gwet'in First Nations Government in the Nemiah Valley of B.C., three hours west of Williams Lake. He has worked in the Xeni Gwet'in housing department



for a number of years. This work builds on his knowledge from earlier work in home construction. Xeni Gwet'in got cell reception in 2000 and now has a solar farm. The Nation is off-grid from BC Hydro. Edmund is father to a 13-year-old daughter.

### Terry Webber — Nuxalk Nation

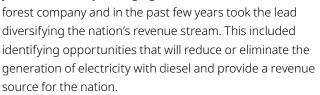
Xuta — Terry would like to acknowledge the Creator for blessing us with another beautiful day — as we say in our language 'Yamtinilh Suts.' He and his family come from the Village of Snxlhh. He is



married with seven children (five daughters and two sons) and has a background in electrical and business. Terry is the Clean Energy Director for Nuxalk Nation with a clear mandate to achieve 100% diesel displacement. He is also an Elected Councillor and Deputy Chief for Nuxalk who oversees the Education portfolio work on behalf of the Nation. Further, he is a Trustee for School District #49 Central Coast. His background consists of business administration, carpentry, and electrical.

### Stephen James — Ulkatcho First Nation

Stephen is the CEO for the Ulkatcho Group of Companies, Yun Ku Whu'ten Forestry Ltd. Ulkatcho is located in Anahim Lake. Stephen has several years successfully managing Ulkatcho's



### Patrika McEvoy — Haida Nation

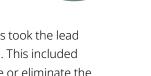
Kwaa Tsaaps Patrika McEvoy graduated from McGill University with her Public Administration and Governance Undergraduate degree. She is working for Coastal First Nations' Weedan HITI'agee xildang hlGangulaas Earthquake Work as the Earthquake Early



Warning Community Technical Coordinator, as well as managing files with BC Hydro for Old Massett Village Council. For five years she served as a Board Director for TII Yahda Energy to pursue renewable energy initiatives for Haida Gwaii. Gin 'waadluuwan gud 'ahl kwaagiidang everything depends on everything else.







# Working Group Activities

In 2023, the Working Group met five times, including three in-person meetings in Vancouver and two virtual meetings. Topics included:

- Non-Integrated Areas (NIAs) and their relationships to BC Hydro
- Project funding
- Regulatory changes
- Building relationships with ministry leadership
- Updating the RCES Working Group Terms of Reference

Throughout the year, the Working Group continued to monitor the RCES workplan, which sets out the ministry's tasks based on the Working Group's 2022 recommendation report.

For the Working Group's recommendations report please visit <u>https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/electricity-alternative-energy/community-energy-solutions/rces\_working\_group\_final\_report\_2022\_06\_01.pdf</u>

Working Group members were highly visible at clean energy conferences and summits. By moderating and participating in panels and speaking from the floor, Working Group members raised the profile of remote communities.

In November, the Working Group met with Minister Josie Osborne to discuss the importance of reconciliation and climate action. Topics included meeting renewable energy targets and engagement with BC Hydro.

## **Statement Of Appreciation**

The ministry is grateful to RCES Working Group members for their steadfast commitment to mitigate the impacts of climate change. The branch recognizes the leadership roles members play in their own nations and various climate action initiatives. We thank members for generously sharing their expertise with the ministry.

Working Group members have been essential to the ongoing work of aligning dieselreduction efforts with provincial reconciliation commitments. They have continuously advocated for the integration of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and the Declaration on the Rights of Indigenous Peoples Act (DRIPA) into ministry activities. The Working Group demonstrates the importance of prioritizing the lived experience of remote communities in program and policy development, as well as the rewards of collaborating with First Nations.

The ministry appreciates the insights and tenacity of the RCES Working Group and looks forward to the continued pursuit of meaningful co-development.



#### LOOKING FORWARD

The Working Group intends to meet more consistently with provincial leadership and advocate for legislative change. The ministry is committed to keeping the minister informed about RCES progress and barriers.

# Site Visits

## **Nuxalk Nation**

In May 2023, the ministry gratefully accepted Nuxalk Nation's invitation to attend a Clean Energy Open House in Bella Coola. Staff also toured the Clayton Falls hydro facility, the future site of the Nooklikonnik Power Project, and rooftop solar arrays at the Acwsalcta School.

## **Ulkatcho First Nation**

In June 2023, the ministry was invited to attend the groundbreaking ceremony for an electric vehicle charging and gas station in Anahim Lake. Staff also visited the future site of Ulkatcho First Nation's 3.48 megawatt solar project.

## Dzawada'enuxw First Nation

In August 2023, the ministry traveled to Kingcome Inlet to observe the impressive construction of the Padakus Creek hydro project. The site is very steep, which has made for challenging work on slope and rock stability. The creek has temporarily been diverted and retaining walls have been built into the bedrock. The 350 kilowatt project is expected to displace 97% of annual diesel use for electricity generation in Kingcome Inlet.



Clayton Falls generation station



Site of Ulkatcho solar project



Dzawada'enuxw: Padakus Creek project site





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# Partners

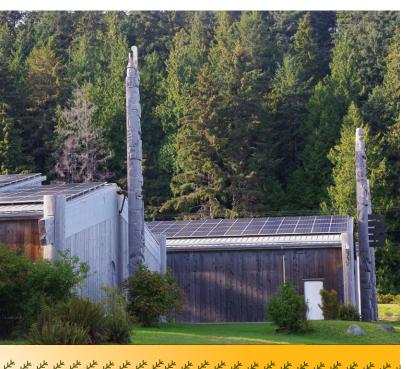
## BC Hydro

In 2023, BC Hydro continued to contribute directly to the Indigenous Climate Action Network and the energy efficiency component of the Community Energy Diesel Reduction program.

In the fall, BC Hydro engaged Non-Integrated Areas (NIIA) on a framework for long-term resource planning as well as an NIA strategy. BC Hydro also announced engagement on the Community Renewable Energy Offer (CREO). CREO includes a fixed-price offer for solar projects in NIA communities, bi-lateral negotiations for non-solar projects, and a process for working with BC Hydro to advance projects to construction and operation.

For more information on CREO, please visit https://www.bchydro.com/work-with-us/selling-cleanenergy/nia-community-renewables.html

Haida Heritage Centre, Skidegate, Haida Gwaii



# New Relationship Trust

New Relationship Trust is an Indigenous organization creating transformative change through Indigenous-led funding approaches. In 2023, New Relationship Trust continued to partner with the Province as a delivery agent for First Nations' clean energy projects and government engagement funding. They administer the following funding programs:

- Community Energy Diesel Reduction (CEDR) for remote, off-grid communities
- B.C. Indigenous Clean Energy Initiative (BCICEI) for remote and on-grid communities
- **Declaration Act Engagement Fund** (DAEF), the Province's non-repayable capacity fund for First Nations engaging with the Province on the implementation of DRIPA and alignment of Provincial laws with UNDRIP

For information on the Declaration Act Engagement Fund, please visit

https://newrelationshiptrust.ca/apply-for-funding/ declaration-act-engagement-grant/declaration-actengagement-fund-daef/

## Government of Canada

The Government of Canada invests in decarbonizing remote Indigenous communities across Canada through programs run by Natural Resources Canada (NRCan), Indigenous Services Canada (ISC) and Environment and Climate Change Canada (ECCC). NRCan has contributed directly to the Indigenous Climate Action Network, and PacifiCan has contributed to the B.C. Indigenous Clean Energy Initiative.

## Fraser Basin Council

Fraser Basin Council is a non-profit organization that brings people together to advance sustainability in B.C. The Council prioritizes climate action; healthy watersheds and resources, and sustainable resilient communities. In 2023, the Council continued to provide administrative support for the RCES Working Group, having worked with the group since its inception.

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## Coastal First Nations Great Bear Initiative

Coastal First Nations Great Bear Initiative is an alliance of nine First Nations whose territories are on the North and Central Coast and Haida Gwaii. In 2023, Coastal First Nations continued to support New Relationship Trust in the administration of the CEDR program. They also continued to administer the Indigenous Climate Action Network (I-CAN), which offers resources to remote communities advancing climate resilience and decarbonization projects.

I-CAN is funded by the ministry, BC Hydro, and Natural Resources Canada. The network supports remote First Nations' capacity building by funding full-time staff positions and offering individual and peer support. Climate Action Coordinators plan and implement energy efficiency, renewable energy generation, and climate-change adaptation projects in their communities.

In 2023, seven new remote First Nations enrolled in the program. In addition to ongoing mentorship and creating training resources, the network organized a spring retreat in Haida Gwaii and a summer retreat at the University of British Columbia. In the fall, the Climate Action Coordinators attended the Adaptation Futures conference in Montreal. In November, they attended the Clean Energy BC First Nations Energy Summit and visited the Queen of Peace Monastery's micro hydro project 30 kilometres north of Squamish. Ongoing skills training includes computer literacy, community organizing, project implementation, and community-led maintenance.

The network also published a Toolkit for Heat Pump Installations. To see the toolkit, please visit <u>https://coastalfirstnations.ca/new-toolkit-for-installing-heat-pumps-in-remote-indigenous-communities/</u>

#### 2023 Remote First Nations with Climate Action Coordinators

Kitasoo Xai'xias	Uchucklesaht
Haida — Old Masset Village Council	Kwikwasut'inuxw Haxwa'mis
Haíłzaqv (Heiltsuk)	Lhoosk'uz Dene
Dease River	Xeni Gwet'in
Haida — Skidegate Band Council	Nuxalk
Gitga'at	Ulkatcho



#### **LOOKING FORWARD**

Coastal First Nations Great Bear Initiative continues to invite remote First Nations to participate in the Indigenous Climate Action Network. They aim to grow the network of Climate Action Coordinators to 25 participants by 2025. Seven nations are in the process of signing agreements to join the network.

# **Project Funding**

## Community Energy Diesel Reduction (CEDR)

The Community Energy Diesel Reduction (CEDR) program is funded by the Province, PacifiCan, and BC Hydro and administered by New Relationship Trust. It supports remote community decarbonization through three streams of funding:

- 1. Community energy planning, including updates to existing plans
- Demand-side management, including energy efficiency improvements like housing retrofits and heat pump installations
- 3. Renewable energy generation, including feasibility studies, design, engineering, and construction

In January 2023, 12 remote First Nations received a total of \$7.1 million funding from CEDR's first intake:

In March 2023, CEDR received an additional \$30 million from the ministry, extending the program to 2028. This means more remote First Nations will be able to reduce dependence on diesel use for electricity generation and heating, contributing to the resilience and decarbonization of their communities.

In August 2023, BC Hydro joined CEDR as a funding partner, bringing rebates from the utility's Indigenous Communities Conservation Program (ICCP) under the CEDR umbrella. Remote communities will now have access to BC Hydro incentives for energy efficiency through CEDR and will only need to complete one program application.

For more details on CEDR, please visit https://newrelationshiptrust.ca/apply-forfunding/clean-energy-grants/communityenergy-diesel-reduction-cedr/

### Community energy planning

	551	3		
Dease River First Nation	\$95,000	Identifying renewable energy generation opportunities and load forecast modelling		
Kwikwasut'inuxw Haxwa'mis First Nation	\$40,000	Community engagement, demand side management analysis, and identifying generation opportunities		
Old Massett Village Council	\$40,000	Community engagement and demand side management analysis		
Energy efficiency				
Heiltsuk Economic Development Corporation	\$300,000	Energy audits on 300 homes in Bella Bella		
Xeni Gwet'in First Nations Government	\$100,000	Energy audits on residences to develop a plan for the implementation of retrofits		
Nuxalk Nation	\$300,000	Energy audits to plan for retrofits with a focus on heat pumps		
Renewable energy generation				
Gitga'at First Nation	\$2,000,000	Pre-construction and construction activities for a run-of-lake 948 KW hydroelectric facility to reduce 95% of diesel use for electricity generation in Hartley Bay		
Tll Yahda Energy (Haida Nation)	\$2,000,000	Construction of a 2 MW solar project with battery storage on Haida Gwaii's north grid, expected to displace almost 10% of diesel use for electricity consumption on the north grid		
Kitasoo Xai'xais Nation	\$962,4000	Upgrades to infrastructure for the community's electricity distribution grid		
Lhoozk'uz Dene Nation	\$350,000	Construction of a biomass combined heat and power system expected to displace up to 90% of diesel use for electricity generation in Kluskus		
Uchucklesaht Tribe Government	\$174,475	Installation of a 25 KW solar project and battery storage system for the community's wellness centre to offset demand on the diesel generator in Ehthlateese		
Ulkatcho First Nation	\$765,800	Pre-construction for a 3.8 MW solar project and battery storage system to displace up to 70% diesel use for electricity generation in		

Anahim Lake

### **LOOKING FORWARD:**

In January 2024, the second intake of CEDR awarded \$5.6 million to 13 planning, energy efficiency, and renewable energy generation projects.

# **Project Examples**

## Uchucklesaht Tribe Government

The Ehthlateese Wellness Centre solar photovoltaic project will offset demands on the diesel generating system as buildings and infrastructure in the remote community grow. Ehthlateese is a Non-Integrated Area community located on Uchucklesaht lands at the head of the Uchucklesaht Inlet on the West Coast of Central Vancouver Island.

### **Ulkatcho First Nation**

CEDR funding is helping support Ulkatcho's 3.8 megawatt solar photovoltaic and battery storage system. Ulkatcho expects the project, which is located at a former sawmill near Anahim Lake, to displace up to 70% of community diesel consumption for electricity generation.

## B.C. Indigenous Clean Energy Initiative

Established in 2016, the BC Indigenous Clean Energy Initiative (BCICEI) helps fund First Nation communities developing clean energy projects. The initiative has been funded jointly by the Province and PacifiCan and is administered by New Relationship Trust.

All final funding decisions are made by an Advisory Committee of First Nation clean energy leaders, and representatives from New Relationship Trust, the clean energy industry, BC Hydro, and the federal and provincial governments. The initiative provides funding to both grid-connected and off-grid First Nations through three project streams:

- 1. **Project Planning**, such as feasibility and site studies, project design and engineering, and environmental review and permitting.
- Small Scale Energy & Efficiency for demand-side management activities and small-scale communityowned energy generation projects to power the First Nation community in whole or in part.
- Pre-construction for clean energy projects that have an existing energy purchase agreement or an impact benefit agreement and are expected to generate revenue and jobs for a First Nation's community.

For details on BCICI, please visit <u>https://</u> <u>newrelationshiptrust.ca/apply-for-funding/clean-energy-</u> <u>grants/indigenous-clean-energy-initiative-bcicei/</u>

In the January 2023 intake, three remote communities were awarded funding.

Daylu Dena Council	\$300,000	pre-construction, cultural centre 96 KW solar project
0Dzawada'enuxw First Nation	\$500,000	pre-construction, Padakus hydropower project
Kwadacha Nation	\$264,500	Solar PV feasibility study, project design, environment review, and permits

### **Remote Communities' BCICEI funding**

#### **LOOKING FORWARD:**

In 2023, the Province provided an additional \$140 million endowment to the New Relationship Trust to expand the initiative and further support small-scale, Indigenous-led clean energy projects. The program development team intends to release a discussion paper on the new funding stream in spring, 2024. There will be opportunities for First Nations to provide feedback on the proposed program design.

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## BC Community Climate Funding Guide

The BC Community Climate Funding Guide is a comprehensive online guide of funding opportunities for climate action projects in communities. The guide helps First Nations and local governments identify eligibility requirements and upcoming application deadlines for programs offered by the provincial and federal governments, non-governmental organizations, private businesses, financial institutions, and trusts.

The guide contains funding programs for:

- sustainable transportation
- community energy planning
- renewable energy projects
- energy efficiency upgrades
- climate preparedness and adaptation
- community infrastructure

In 2023, the ministry evaluated the funding guide with the assistance of the University of Victoria and found that 6,500 individuals made 10,300 visits to the guide, representing an increase of nearly 50% over the same period the previous year.



#### LOOKING FORWARD:

Based on evaluation results, the ministry will make several improvements to the guide between January and April 2024, including:

- an automated e-mail notification service
- improved search functions for Métis and Modern Treaty Nations

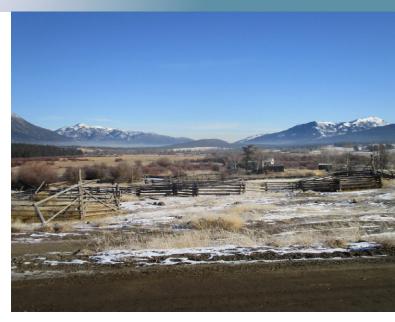
To see the funding guide, please visit <u>https://</u> communityclimatefunding.gov.bc.ca/\_\_\_\_\_



### Low Carbon Fuel Credits

The Low Carbon Fuels Branch manages regulations for the low carbon fuel credit market. The ministry is implementing an Initiative Agreement program to support increased supply of low-carbon fuels, which replaces the Part 3 Agreement program for B.C. fuel suppliers. The Initiative Agreement program is now available to all First Nations for transportation related purposes. The ministry will be discussing with remote community representatives how low carbon fuel credits may be an added opportunity for Indigenous renewable energy projects.

For more information on the Initiative Agreement program, please visit <u>https://www2.gov.bc.ca/gov/content/industry/</u> <u>electricity-alternative-energy/transportation-energies/</u> renewable-low-carbon-fuels/initiative-agreements



Nemiah Valley looking east.

# Policy

## **Regulatory Engagement**

In the fall of 2023, ministry staff engaged with First Nations and civic governments on a proposed amendment to the Greenhouse Gas Reduction (Clean Energy) Regulation. The proposed amendment is intended to enhance regulatory certainty for renewable energy project development in Non-Integrated Areas served by BC Hydro. If adopted, it will require the British Columbia Utilities Commission to allow BC Hydro to recover the costs of Energy Purchase Agreements for renewable energy projects signed before Dec. 31, 2029.

The ministry sought feedback on the proposed amendment. Representatives from Non-Integrated Areas provided verbal and written comments. Many representatives were in support of the proposed amendment, while also indicating the need for more robust regulatory change, such as legislative reform. The full engagement report can be found on the the ministry website. For the ministry website, please visit https://www2.gov.bc.ca/gov/content/ industry/electricity-alternative-energy/ community-energy-solutions

Engagement on the ministry's proposed legislative and regulatory initiatives is a continued priority of the Indigenous Clean Energy Opportunities (ICEO) initiative, which is co-led by the ministry and the BC First Nations Energy and Mining Council. The ICEO hosts ongoing dialogues and knowledge-sharing events with the goal of strengthening First Nation participation in the clean energy sector and aligning related provincial policy.



LOOKING FORWARD:

The ministry plans to bring forward the GGRR amendment for Cabinet consideration in spring 2024 and will continue exploring additional avenues for regulatory support.

Konni Lake, Xeni Gwet'in First Nation

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# Research

## **Renewable Resource Assessment**

To meet the CleanBC target of 80% diesel reduction by 2030, the RCES Working Group has recommended setting incremental targets and regularly reporting on progress. In 2023, to better understand the impact of diesel reduction efforts to date and determine the feasibility of setting additional targets, the ministry and BC Hydro initiated the Renewable Resource Assessment, a research project to track diesel reduction and assess further opportunities for renewable energy penetration.

BC Hydro hired the Pembina Institute and Hatch, an engineering consultancy, to examine the impacts of diesel reduction efforts by First Nations, the Province, and BC Hydro since January 2020. The research team has collected and evaluated data from upcoming and operational projects in remote communities, including both those served by BC Hydro and those who own and operate their own microgrids.

### LOOKING FORWARD:

The research will be completed in early 2024 and will provide insight into the effort and investment required to meet various diesel reduction targets.

## Sustainability Scholar Research

To identify and strengthen capacity-building opportunities for members of remote First Nations, the ministry hired graduate student researcher, Victoria Ibrahim, through the University of British Columbia's Sustainability Scholar Program. The research aimed to:

- Better understand the roles of Indigenous organizations with mandates related to clean energy and climate-change adaptation
- Document formal and informal learning opportunities for representatives of Indigenous remote communities related to clean energy and climate-change adaptation
- Identify training gaps so that the Province might consider bolstering support or creating new initiatives

The resulting report was delivered to the RCES Working Group with a map of Indigenous clean energy and climate groups, a list of current training opportunities, and recommendations to address gaps in training. The report highlighted the need for multifaceted support as First Nations shape their own energy systems to enhance community and ecosystem well-being.

## Haíłzaqv (Heiltsuk) Renewable Diesel pilot project Híkilaxsi gņts hála'ážv — to protect our world

In 2023, Haíłzaqv Nation and the ministry advanced a pilot project to test the use of renewable diesel in fishing boats. With the support of the Inside Passage Decarbonization Project, a grassroots movement to create demand for a green marine fueling system, the pilot project group met regularly over the course of the year to collaborate on research and planning.

Leveraging funding from RCES and NRCan's Indigenous Off-Diesel Initiative, Haíłzaqv Nation's Climate Action Team began by recruiting six Haíłzaqv members to participate in a study over the summer fishing season. The participants filled their boats with renewable diesel derived from used cooking oil, the cleanest renewable diesel available. They then recorded their observations on engine function and air quality. The chemical composition of **renewable diesel** is nearly identical to diesel fuel and is fully compatible with Haíłzaqv vehicles and existing infrastructure.

Participants reported that renewable diesel fuel worked well in their engines and produced no soot or smell. The Haíłzaqv marine fleet was able to achieve the same mileage as with conventional diesel but lowered their carbon footprint by reducing greenhouse gas emissions.



Haíłzaqv RD project lead, Leona Humchitt, takes a heart-centered approach to sustaining aquatic life. Haíłzaqv Nation is grateful to the following parties: North Arm Transportation for delivery and logistical support, Parkland Refining for providing renewable diesel at the same cost as petroleum diesel, and Haíłzaqv's Lamas Pass Fuel for service and support.

#### LOOKING FORWARD:

Haíłzaqv plans to retrofit the nation's diesel fuel tanks and conduct a winter pilot project to better understand how renewable diesel performs in colder temperatures. Haíłzaqv is also working to connect the renewable diesel pilot project to the nation's food security and restorative justice activities.

For more information on the Haíłzaqv renewable diesel project, please visit <u>https://www.decarbthepassage.net/</u> hazaqv-fuel-project







Atlin Lake, Taku River Tlingit First Nation



