

Haitzaqv Renewable Diesel PILOT PROJECT



BELLA BELLA, B.C.



Heiltsuk Climate Action Logo

- Surrounding copper represents the authority and boundary of the Hailzaqv. The lightning represents creator's electricity, as we move through our own electricity. The sacred red cedar tree is of great importance to the Hailzaqv providing our shelter, clothing, transportation and oxygen. The human hands represent our responsibility and stewardship for the planet – Shirl Hall

Engagement and mandate

- IODI – 1 of 15 nations across Canada
- Not going to electrify our nation overnight
- Renewable Diesel is 1 of 10 priorities in our Nation's Resiliency Plan
- Goal is to 100% Switch to RD
- GBOGH – Hailzaqv design and implement own MSC certification – anyone operating in our territory to use RD to keep our waters environmentally and culturally intact



Háitzaqv Action Plan

To be Háitzaqv is to act and speak correctly, as human beings in balance with the natural and supernatural world; to live in accordance with our *qviláts*. Living up to our responsibilities means taking immediate and meaningful action on climate change.

For Our Future Generations



Over two years, the Háitzaqv community has collectively selected these 10 climate solutions to protect the abundance of our homelands and waterways for future generations. Together we will accomplish our vision of a carbon neutral community.



Háitzaqv Climate Solutions

TOTAL GHG REDUCTION: 24,258 TONNES

TOTAL COST: \$19,609,952



CONSENSUS ★★★★★★
 SUPPORT ★★★★★★
 CONFLICT ★★★★★★
 APPROVAL ★★★★★★

EFFICIENT HOME HEATING SYSTEMS	SWITCH 100%	\$1,600,000.00	1050t GHGs
RENEWABLE DIESEL	SWITCH 100%	\$200,000.00	5425t GHGs
SOLAR PROJECT	DO 50%	\$6,037,500.00	3750t GHGs
RETROFITTING COMMUNITY HOMES	RETROFIT 100%	\$10,000,000.00	3150t GHGs
FOOD SOVEREIGNTY	LOCALIZE 75%	\$425,250.00	1125t GHGs
PASSIVE HOUSE KIT	SPEND 75%	\$215,625.00	0t GHGs
CAPACITY DEVELOPMENT STRATEGY	SPEND 75%	\$93,750.00	0t GHGs
ELECTRIFICATION OF MARINE VEHICLES	ELECTRIFY 50%	\$750,000.00	200t GHGs
RETROFITTING COMMUNITY BUILDINGS	RETROFIT 75%	\$194,077.00	73t GHGs
COMMUNITY TRANSPORT	ELECTRIFY 75%	\$93,750.00	35t GHGs

Climate Grief & Climate Trauma

- Oct 13, 2016 Nathan E. Stewart a Texas owned tug and barge ran aground in our backyard spilling 119,000 l of diesel in a culturally integral part of our territory. Ancient clam garden, one of the 1st forms of aquaculture to cultivate and harvest clams in a sustainable way was impacted. 20+ subsistence species have not come back
- Shook our community consciousness to advance climate action
- 90,000 salmon died in salmon bearing stream last October after drought dried up our streams. 70% did not spawn. Cumulative damages are grieved.





Hailzaqv Renewable Diesel Pilot

- WHY?
- The Hailzaqv are ocean-going people who have lived and died by the sea for thousands of years.
- The pilot is to explore cleaner fuels for marine transportation.
- Marine transportation is integral to meet the nutritional, economic and spiritual needs of our people

What is Renewable Diesel or R99?

- Drop-in fuel replacement
- It is not biodiesel
- Produced from renewable and sustainable raw materials
- Has near zero contaminants and can be used 100% rate
- Requires no blending
- Colorless, odorless (dyed in this photo for safety reasons)





DIESEL ENGINE BOAT OWNERS

To participate in
Renewable Diesel Pilot Study

FOR OUR FUTURE
GENERATIONS

Participants Will:

- Use renewable diesel for 6 months
- Log information for study
- Be paid a monthly stipend
- Submit their log to HCAT
- End of study bonus

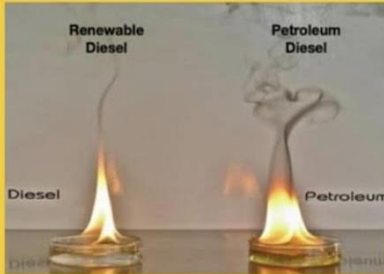
Simple switch to:

**Reduce our green house
gas emissions by 60-90%**

**Reduce marine toxins
Protect our environment**

Contact Us

heiltsukclimateaction@gmail.com



Renewable Diesel (R100) is high cetane, colorless, odorless, cleaner burning and very stable. It is a drop-in diesel replacement that meets the exact same Can/CGSB-3.520 and is real diesel. It can be made from renewable or sustainable materials, and requires no blending.

Human and wildlife benefit from 35-50% particulate reduction, the most acute health impact of petroleum diesel use. Overall CO2

Reduces GHG emissions by 60- 90%

- Premium quality, high seating, cleaner burning and very stable
- Endorsements are available from manufacturers as drop in ready, cleaner fuel for major equipment, boats, etc
- R99 is like petroleum diesel – made from hydrogen and carbon atoms extracted from waste materials (ie: plastics, forest slash, soy & waste plant oils, coffee grounds and even sewage) Algae has promise and is part of our long term goals

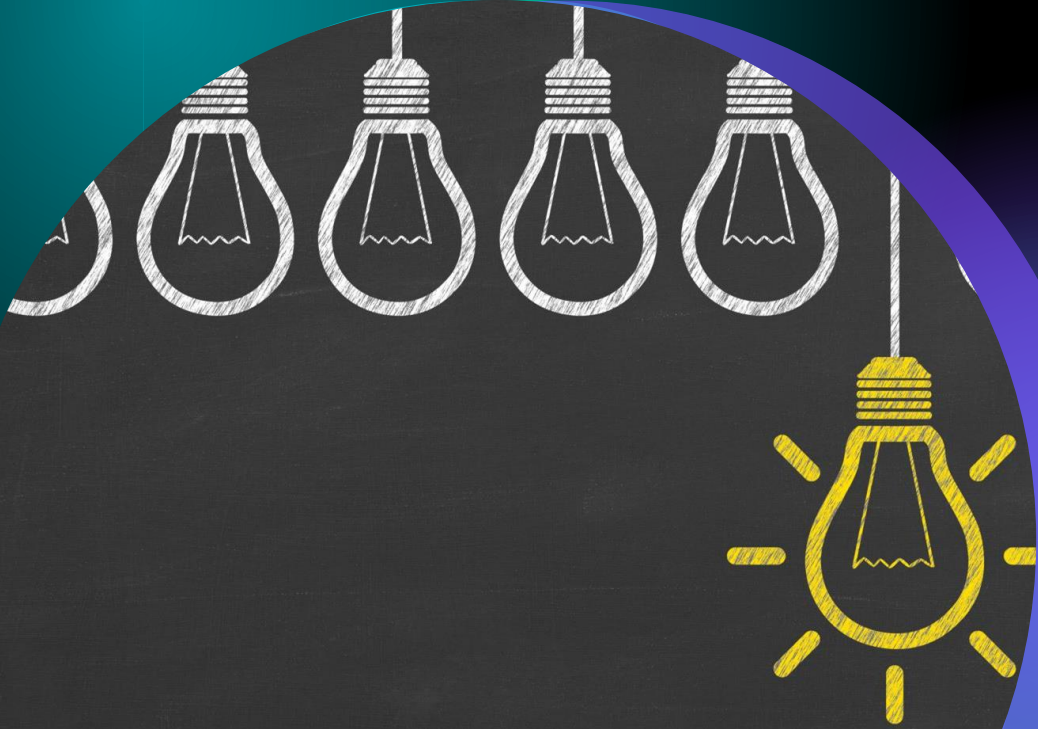


Other benefits:

- Pilot boats are getting same nautical mileage as conventional diesel
- R99 is purer version of exact same molecule, a hydrocarbon called Cetane
- Cleaner version tendencies show use of RD may extend life of your engine (Capt Peter Wilcox – less maintenance on his sailboat, been using for a few years)
- Burns completely and cleaner exhaust (no smoke or diesel smell) 35-56 % less soot
- 60-90% less GHG, and 60% less SOx/NOx

- EVALUATION TEAM
- Heiltsuk Climate Action, EMLI, NrCAN, North Arm Transportation, Fraser Basin Council, Heiltsuk Economic Development Corporation (Lama Pass Fuel), Inside Passage Decarbonization Project
- Had standing meetings every week since Sept 2022
- Went live with RD in March /23

Collaborative Leadership





Hailzaqv RD Pilot Participants

- YuWala Marine Charters
- “using RD to power our charter boat, helping reduce our carbon footprint and promote sustainable tourism in our territory, implementing our commitment to a cleaner, greener future for my grandson Gwa’ni – Frank Brown, owner



6 local Fishermen

- Our local Fishing Fleet comprised of seine and gillnet boats are diesel operated.
- We are 4 months in and the fishers take great pride in utilizing cleaner fuel, less ghg, less black smoke particulates
- They appreciate that they are able to do their part



Local Shunt Truck

- Godfrey Williams joined as a fisher participant. He drives a shunt HD diesel truck and wanted to pilot his work truck.
- He was never able to drive with the cab window opened due to strong fumes and black soot/particulates.
- With use of RD, he reports he can now enjoy driving his truck with windows down – no smell or soot



Cost/Incentives

RD or R99 is currently more expensive than petroleum diesel

BC Low Carbon Fuel Standard is designed to help reduce costs difference

Heiltsuk Climate Action RD PILOT with support from NORTH ARM TRANSPORTATION negotiated RD Pilot inventory/procurement from Parkland “at par” or same pricing as petroleum.

Heiltsuk Climate Action has further utilized their IODI funds to provide incentives to our participants for their data collection and commitment to only primary use of RD for duration of project



Protecting our world – for future generations

- ST – collate data for nation to make informed decision on 100% switch to RD
- MT – toxicity in salt water (good report from fresh water reports)
- LT – feasibility using kelp (rich in our waters) for feedstock



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Thank
you!

PLEASE DO NOT HESITATE TO REACH ME AT
LEONA.HUMCHITT@HEILTSUK.CA FOR MORE
INFORMATION!