

Haida Gwaii Renewable Energy Symposium

Old Massett Hall, Gaw Tlagee, September 29-30, 2018

Presenters:

- Local governments: Old Massett Village Council, Skidegate Band Council, Village of Masset, Village of Port Clements, Village of Queen Charlotte
- Plastic to fuel: Haana Edenshaw & Daniel Shulbeck
- **Showcasing Solar**: Meredith Adams & Rob Baxter
- What will our clean energy future look like? Ginaawaan Darin Swanson, Stephen "Buck" Grosse, Jaalen Edenshaw & Gwaliga Hart
- What options are being explored? Moon (tidal) small hydro, biomass
- Hlk'yak'ii (Keynote): Jisqang Nika Collison

Small group discussions: Xaad Kil Dialogue (Jaskwaan Amanda Bedard); Rights & Responsibilities in a Changing Climate (Kii'iljuus Barbara Wilson); Solar Cooperatives (Rob Baxter, Vancouver Renewable Energy Cooperative); Energy Democracy (Sue Elrington & Caitlyn Vernon, Sierra Club BC); Food Sovereignty (Elizabeth Condrotte)

Key questions: If the goal is energy independence, what do we need to achieve that? What are low cost or no cost things that we can do tomorrow to help reduce our diesel consumption? Who should own the renewable and local energy systems? Who should pay for it?

Organizing team: Michael Nicoll Yagulanaas, MC; Gud Uuwans Dana Moraes, Facilitator; Kara Sievewright, Graphic Facilitator; K'aayhlt'aa Haanas Valine Crist, Organizer; Kwiigee Jaad *Allanah Jacobson*, Coordinator

Marketplace for information: Living & Learning School, Gudangaay Tlaats'gaa Naay Secondary School, Turquoise Energy Ltd, Haida Gwaii Marine Planning, Spark! Sustainable Energy Solutions, Don's Heat Pumps, Yourbrook Energy, Haida Gwaii Watchmen Program

A Note on Language

Because the symposium was located in Gaw Tlagee Old Massett, the Haida language included in the symposium and in this publication is in Xaad kil (northern dialect) except for southern Haida Gwaii place names and language used by presenters, in which may be in Xaayda kil. Haw'aa/Haawa to . Jaskwaan *Amanda Bedard* and the Skidegate Haida Immersion Program for providing guidance and supporting our use of Xaad kil and Xaayda kil in the agenda and this publication. Any errors or inaccuracies are on part of the editors.

Publication: Unless otherwise noted, written and edited by Valine Crist and Kara Sievewright. Illustrated and designed by Kara Sievewright. Photos by Brady Yu.

Four Haida ways of being were offered as the basis for the Haida Gwaii Renewable Energy Symposium, all of the conversations were grounded in these principles. Sometimes referred to as Haida "laws," these four principles describe a way of living.

Yahqudanq Ahl kyaanang tlaagang TII vahda Gin 'waadluwaan gud 'ahl Everything Depends kwaagiidang

Respect Ask First Make it Right on Everything Else

Hosted by:







Oll drilling at Gaahlins Kun Cape Ball. Image by Sergius DeBucy courtesy of the Haida Gwaii Museum. Ph 02233

The cover illustration is inspired by sea cliffs around Gaahllns Kun Cape Ball that show the stratification of Pleistocene era rocks. The Pleistocene epoch spans from 2.6 million to 11,700 years ago and is when the most recent ice age occurred, it is also when humans evolved and started using fire. Gaahllns Kun

is an important ecological and ancestral place. In the 1950s, it was the site of one of eight oil wells drilled on Haida Gwaii.

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Talking Power at the Haida Gwaii Renewable Energy Symposium

By Michael Nicoll Yahgulanaas

On September 29 and 30, 2018 an impressive 160 people gathered in <u>Gaw Tlagee</u> *Old Massett* to talk power.

The Haida Gwaii Renewable Energy Symposium hosted by the Council of the Haida Nation and Swiilawiid Sustainability Society had informed presentations and a strong showing of support for unplugging the extension cord to fossil fuels.

Clear sunny skies under a light northeast wind underscored the track record of locally installed solar presentations. Conversations about challenges and successes were all part of the overall desire to get to ZERO diesel. Particularly noticeable was a locally designed and built power generator model moored at the Tlaga Gaawtlaas New Masset dock. Reports on very high efficient wooden homes using seasonally harvested low sap materials were also well received.



Michael Nicoll Yahgulanaas drawing on the Energy Timeline at the Haida Gwaii Renewable Energy Symposium

Haw'aa to the numerous hosts, leaders and citizens who continue the good work of building a sustainable culturally diverse and robust community.

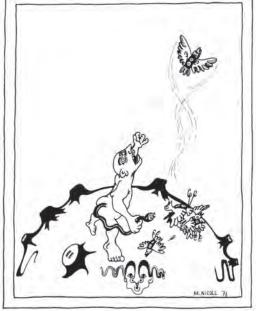
One weekend to build upon decades of dedication

For most of the 160 people who attended the symposium, the energy conversation started well before this weekend.

All Alone Stone and SpruceRoots were publishing articles on Haida Gwaii's diesel power in the 1970s. Over the years, tech experts, elected leaders, and Island residents have been building the small-scale solutions we need to become self-sufficient with our electricity.

The symposium was a continuation of this work; it was one weekend to build upon decades of dedication that have brought us to today. There were four purposes offered for the gathering:

 Create a space for people of Haida Gwaii to learn, connect, and share information about smallscale sustainable power.



By MNY, originally published in All Alone Stone, Volume IV, 1980.

- Share our values when it comes to renewable energy projects and shape our energy future.
 - Understand the role we have making decisions in the transition to renewable energy.
 - Foster unity and develop clear and collective goals for the energy shift.

Through presentations, the keynote address, and a series of small group discussions, the symposium offered an opportunity to learn and brainstorm. Everyone had a voice and there was time each day to envision our future and talk about our shared values together. One quote was offered as the foundation for the energy shift, "If you want to go fast, go alone. If you want to go far, go together."



Hlk'yak'ii To Start a Fire

Jisgang Nika Collison

Executive Director & Curator at Haida Gwaii Museum at Kay Llnagaay Keynote at the Haida Gwaii Renewable Energy Symposium

<u>K</u>'uljaad <u>G</u>aa.nga, Kilslaay <u>G</u>aa.nga, <u>X</u>aayda<u>G</u>a 'láa isis. Dalang 'waadlu<u>x</u>an <u>G</u>a hll kil 'láa ga. Dii Kaay'ahl Laanas jiina ga, Jisgang han.uu dii kii<u>G</u>a ga. Haawa to all of you for being here today. As Gerry Johnson said several years ago, the world is run by the people who show up.

We all know our Islands rely heavily on diesel power. In looking at the purpose of this renewable energy symposium, we have come together to "share information about small-scale sustainable power; to share our values when it comes to renewable energy projects and shape our energy future; to understand the role we have making decisions in the transition to renewable energy; to foster unity and develop clear and collective goals for the energy shift."

Id Kuuniisii *our Ancestors* created energy in many ways, in many forms. For heat and light, it took striking the right rocks together or rubbing the right wood together to create a spark big enough to start a fire. It takes a lot of work, a lot of energy, a lot of skill and a lot of commitment to get a fire going in this manner. Firekeepers were integral to taking care of this energy, to keeping the fire alive.

How did they keep the fire going when moving from place to place? A long time ago Nang King.aay 'uwans *James Young* told me how our Ancestors carried fire, which I will summarize by saying our Kuuniisii would take an ember, wrap it carefully in moss, house this bundle in a certain type of clam shell and tie it shut. In this, one could both carry fire for a long time, and, start a new one.

I am taught by my Aunty Gwaa<u>c</u>anad *Diane Brown* who learned from Nang King.aay 'uwans *James Young* that we as humans first came out of the air but did not survive. We did not survive our next iteration either, when we came from the earth. We as Haida today, we come from the ocean. The Supernaturals took pity on us. That is why we are here.

And while each clan has their own origin story, the commonality we share is that we all came out of the ocean. If you are familiar with western science and theories, the understanding is the same. As Haida histories tell us, we have lived through vast changes in environmental conditions for thousands upon thousands of years. Our environment dictates who we are. We have lived as grasslands people, ice people, ocean people. How? By responding and adapting to our environment, to the life Haida Gwaii gives us; by understanding we must take care of these gifts; and, by the wisdom and quidance of the Supernaturals.

That being said, we are not perfect, and we must always remember this. The earliest lesson on what happens when we don't uphold our responsibilities to Haida Gwaii (that I know of) is when Raven brought us saaw *oolichan*

thousands of years ago. We are taught to take only what you need, and then, only from what the land can bear. But we fished out the saaw. We asked Raven for more. He said no, obviously.

That ancient lesson was forgotten when the Europeans came. Our mistake in this instance was participating with the Europeans in the naak'ii sea-otter fur trade to the point where the kuu sea otter was hunted to near extinction. This is another lesson that continues to impact us to this very day, as without natural predators for the kuu, the guuding.ngaay sea urchin have their way with the kelp forest. This forest is critical to the health of waters, the land, the air and all that depend on all of these things. Haawa

to Gwaii Haanas/Parks Canada for their new initiative to lessen the impact we have made, by harvesting and sharing guuding.ngaay with our communities. Haawa for taking care of our ocean forests while respecting the guuding.ngaay by sharing them with us.

Colonial regimes wreaked havoc on our people, spirit and territory. Introduced epidemics with vaccines withheld brought our people's population to less than 600 on Haida Gwaii. Previously, we ran from well over 10,000 to

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Gwaii, the Supernaturals

and each other; to forget

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surviving Ancestors not only

upwards of 30,000 or more as a people. The Indian Act and Residential School system hurt and denied too many from their family and greater community. These mechanisms tried to keep us from our lands and waters. They outlawed our social, economic and legal systems. The colonizers tried to destroy our spirit; our identity; our language; our Haida-ness. They wanted us to forget our responsibility to Haida Gwaii, the Supernatural and each other; to forget our understanding of who we are.

But amazingly, our surviving Ancestors not only survived, many thrived, and I know that all of them worked very hard together so that we could be here today. So that we could be here today talking about our responsibilities, talking about how we can do this important work

How did id Kuuniisii do this? Many have told me of our Ancestors' abilities to adopt new ways that worked to their benefit, adapting them to a Haida way of being. That which was forced upon our Ancestorsthat which was created to work against us-was overcome by adapting some of these things to a Haida way; making them useful in our world by turning them into acts of resistance or refusal, taking on these issues with a diplomatic but firm approach in order to bring

change for the better. These practices continue. I have seen this time and time again growing up, watching our Elders, our leaders, watching our greater Nation navigate life. Haida Gwaii keeps us grounded and living a good life. Haida oral histories and our art forms keep

together with our Canadian friends and beyond.

us grounded in the samereminding us who we are and where we come from, helping us make sense of our place in the world. The environmental, social and spiritual ecologies of

Haida Gwaii positively affect all that live here-Haida, our friends and family, other Beings.

But colonial assaults against people and place continue today, all around the world. In my opinion, this happens through capitalist minds. This mindset favours no nation, race or gender. It can catch any of us if we are not careful, if we do not self-reflect and adjust our way of thinking.

As Guujaaw once told me, "This is the story of the World."

Violence against the land is violence against women, which is ultimately violence against all living things, what we all know and enjoy. In 2013 the Haida Gwaii Museum created an exhibition called *Thanks*, but No Tanks. It's important to say that this show was not a platform for protest. It was a critical inquiry into how people's relationship with land, body and spirit change under perceived threat or perceived opportunity, using the Enbridge Northern Gateway Pipeline (NGP) as a catalyst.

I couldn't find a pro-oil artist, I even searched the internet. We wound up showing works from Haida Gwaii, BC, and Alberta. All artists were against the NGP. We asked them to look deep into how their own actions contribute to the supply and demand of oil and gas. They all recognized their role in our collective dependency on dirty energy, and Let's not forget, we

that we need to pull up our socks and change the way we do things. It was pointed out that the NGP was about furthering exploitation, rather than dependency. But exploitation comes in many forms through these industries, including we are here today. the exploitation of our spirit.

Gwaai Edenshaw's piece in the show, Hollow Promises, spoke to the social impact of these industries that we ourselves are reliant on. The piece was cast in cotton rag from the face of a high-ranking woman on the Two Brothers Pole. Mounted on a half-oil barrel, her face was torn and

smeared with our beloved red and black colours. Gwaai spoke to the environmental impacts of dirty industry, but his main focus was on something else. Something just as precious. He was focused on, as he said, "our girls."

Boom and bust industries such as oil and gas bring transient workers, many with no connection to place or community. When the oil industry exploded in Newfoundland, so did the number of working girls. Industry helped to grow this through recruiting and advertising "opportunities," even to university students. If my memory is correct, the rise in sex workers was over 300%.

Gwaai's artist statement read:

A hollow, torn form smudged with greasy fingers. A worn soul under the heel of "away from home." The price of money... we cannot bare it. The price of oil we will not carry it.

He listed his materials as: "Two hundred years of pain and exploitation, cotton rag, rust and paint." Let's not forget, we are all users of oil and gas. This is why we are here today.

Historically and often-times even now, Haida oral histories are thought of or referred to as "myth" by the outside world. But these narratives tell of very real times-of events and Beings dating back to the time of the Supernaturals—Beings who continue to help and teach us today. Other stories document great environmental and social changes that have occurred over thousands and thousands of years; most stories are a combination of both. The natural and Supernatural are intertwined.

I mentioned we've been people of the grasslands, people of the ice. Today we are ocean people. We've been here much and gas. This is why longer than 10,000 years. Each environment gave us a different culture—we adapted our way of life to our surroundings.

> This knowledge helps science. I would like to recognize Captain Gold for his critical contribution to the bringing together of Haida knowledge with that of science. Together, we better understand our past, which helps us understand today, and helps us prepare for a future. Across these

A Brief Timeline of **Energy on** Haida Gwaii

Time Immemorial

Id Kuuniisii created energy in many ways, in many forms. For heat and light, it took striking the right rocks together or rubbing the right wood together to create a spark big enough to start a fire. Fire was transported by putting a moss wrapped ember in a certain type of clam shell. Id Kuuniisii also burned K'aas pitch

are all users of oil



Islands are initiatives to uphold our responsibilities to Haida Gwaii. Using hindsight we have foresight.

Just as our Ancestors have had to go through hard transitions to survive us as a people, and to survive Haida Gwaii as our home, we are here today to commit to continuing this legacy, and to be able to do it with our friends. These will be hard transitions. Adopting and adapting to a different way of life.

This past summer Delores Churchill mentioned to me an idea that had been shared with her: weaving might be considered an invention more important than the wheel. I can't help but agree, as on Haida Gwaii—where we needed canoes for transport, baskets and nets to gather food, and hats and blankets to clothe us—the wheel is not necessarily the yardstick for a great invention. Today we are weaving together different minds, different ways of knowing. Piecing together different technologies and ways of living in order to invent change for the good.

We must look to the wisdom of the past, to our Ancestral teachings. All of them exist in us today. Lucy Bell's 2016 master's thesis <u>Xaad Kilang T'alang Dagwiieehldang – Strengthening Our Haida Voice</u> is about saving the Haida language. The foundation of this amazing piece is the question, "What would our Ancestors do to save our sick language?" Our Haida language is knowledge, wisdom and *energy* stored. We must look to this and through it to answer another question: what would our Ancestors do to save our sick lands, waters and airways? Our responsibility goes beyond Haida Gwaii. What would our Ancestors do to save our sick world? I applaud the many



from our Islands and from away who are looking at local and world wide initiatives.

In the beginning it was both light and dark, they say. Raven stole the light and now we can see. As Terri-Lynn Williams-Davidson recently said, do not let this act of Raven have been in vain. I ask that we pray to the Ancestors for a clear vision, that we ask the Supernatural for help, too. Ask them to take pity on us, again. Do not forget to send them food and medicine through the fire, they need energy too. Do not forget to give thanks.

Id Kuuniisii *our Ancestors*. Please help us be good people. Help us find new ways.

If we as humans do not survive as ocean beings, surely our next appearance would come through the fire. This may happen, but in the meantime let us keep the fire we have today, alive.

Sins Saanaawaay *Power of the Shining Heavens*. Please shine light on what we need to do, help us find new ways.

Jiigawaay sun. Please direct us with your warmth, help us find new ways.

Kwahgyang *flowing tide water*. Please have your powers surge through us, help us find new ways.

Xyuu south-east wind. Please use your power to propel us forward, help us find new ways.

Please let new materials and technologies be adopted and adapted to a Haida way of being, to a *Haida Gwaii* way of being.

Four Haida ways of being have been offered as the foundation for this gathering. They are ways we can all embrace.

Yahguudang Ad kyanang tlaagang Tll yahda Gina 'waadlu<u>x</u>an gud ad kwaagida Respect Ask First Make it Right Everything Depends on Everything Else

Gwaaganad and Guujaaw have taught me that the Supernaturals taught us everything we know about how to appreciate and respect what Haida Gwaii provides. Gwaaganad also taught me about the first national meeting held after we settled into these Islands, as told to her by Solomon Wilson. She likened it to the first sustainability conference. It was here that we learned about, talked about and agreed on how we would coexist with Haida Gwaii.

1850s

The 1850s saw the beginning of colonial exploration and exploitation of energy sources on Haida Gwaii. At this time in what is now called North America, whale oil lamps were replaced by kerosene distilled from coal. In the 1860s oil was drilled for the first time and coal oil started to be replaced by kerosene distilled from petroleum.

1850s

European prospectors take coal samples from Xaana Kaahlii Skidegate Inlet.

1878

Geologist George M. Dawson reports of hearing of seeps of "bitumen" on islands near T'aanuu.

These and many other teachings were kept intact for us by our Ancestors. They passed them down so that we would remember, we would know. We must continue the passing down of this knowledge. Look to our Ancestors again, listen to the Supernatural, listen to Haida Gwaii. Pray for their help. Listen to our children, they are our Ancestors reborn. Speak with our Elders. Continue to learn the teachings. Think critically. Carry and act on our responsibilities. Keep this knowledge and way of being alive. It is a privilege.

The Islands' leaders have signed the People's Clean Energy Declaration for Haida Gwaii. This is an incredible moment! It is also an incredible challenge. We need to remind ourselves every day to stay on track and uphold this responsibility.

I have seen what change can be made by keeping ourselves firmly rooted in the foundation on which this symposium is built. The 1985 Athlii Gwaii stand changed things we might have thought were never possible. But we trusted in Haida Gwaii and in our culture. Islands Spirit Rising is another great achievement. Today, while not perfect—as there is always work and adaptation to do-we have over half of Haida

Gwaii protected; we have ground-breaking (still today!) co-management structures, and a perpetual fund (the Gwaii Trust) that contributes to the environmental, social, economic, physical, cultural and spiritual health of Haida Gwaii.

Gwaaganad told me that the Hopi told her they were watching what was going on very closely at the Athlii Gwaii stand, that what happened there would "set the trend for the rest of the Earth, how it would make out." They sent an amethyst and quartz crystal to be buried in a certain direction, which Gwaaganad did. John Broadhead has a great story as to how these precious materials were transported to Haida Gwaii.

We have made change in the world. At the end of the day—it's the work and commitment of *two worlds* working

together that continues to inspire our work, and that of the greater world. And there is so much work yet to be done. But we can look at these achievements and know that great things are possible, and that achievements are an *ongoing* process. With dedication and care they can be nurtured, redirected, built-upon.

We must not only ask what our Ancestors would do to heal our sick earth, we must look to Haida Gwaii. We must look within ourselves. The teachings and knowledge are there. The fire is in us all.

Why are we here today? The Supernaturals took pity on us. Our Ancestors fought for us. Haida Gwaii sustains us. We have to honour this, honour our responsibility to earth. We need to give ourselves back, we are all too far away. We are just starting to return.

In talking with Gwaaganad about our origins, we figured that if we as humans do not survive as ocean beings, surely our next appearance would come through the fire. This may happen, but in the meantime let us keep the fire we have today, alive. The Islands' leaders have signed the People's Clean Energy Declaration for Haida Gwaii. This is an incredible moment! It is also an incredible challenge. We need to remind ourselves every day to stay on track and uphold this responsibility.

Today we are making a new fire from the embers our Ancestors carried. Let us carefully carry this fire from place to place, through our journey in life. Let us hand it down to the next generation and all that follow.

Our intent is the spark.
Our commitment is the ember.
Our actions are the new fires to
be lit.

We are all firekeepers. Together we can do great things.
Together we can do this.

Haawa. Ad dalang sding dalang 'waadluxan s<u>a</u>aawdagii <u>a</u>ahl kil 'láa.



1900s-1920s

At the beginning of the century, Haida Gwaii experienced a rapid increase in industrial activities including whaling, logging, fishing, mining, and fish processing. Coal oil or kerosene lamps were used for lighting, boilers fueled by wood or coal and water wheels were used for heating and power generation.

1900s

Hydro dams start to power Victoria and Vancouver.

1908

Oil is drilled along the Yakoun River.

Hospital opens in Daajing Giids. Power is generated by a Pelton Wheel at a nearby creek.



Let the language guide us

On Sunday afternoon, Haida language learner and teacher, Jaskwaan Amanda Bedard, led a small group discussion on Xaad kil and its role in renewable power on Haida Gwaii. "How do you translate 'sustainability' into the Haida language? How do you translate energy use into Xaad kil?" she asked. These are the concepts within the word yahgudang, which isn't simply "respect" as we understand it in the English language. "English allows for generalized ways of thinking where you don't have to put your mind to what actions are connected to the words," Jaskwaan said.

The impact that we have on the earth now is different than the origin of these words, but the principles are the same. Today, we learn about the 4Rs: reduce, reuse, recycle, and repurpose. These concepts are embedded within words like yahgudang: living in a way that is respectful to ourselves, our neighbours, the plants and animals we share this place with, and the world as a whole.

In her summary of the small group discussion, Jaskwaan used the concept of a common utensil to describe this fundamental shift in our way of being and our footprint:

"In the past, it wouldn't have been a question of reusing something again. You wouldn't just have a beautiful spoon for a feast and then throw it out. What was put into making that spoon meant that you use it continuously and honour all of the energy that was put into making that spoon. However, nowadays we have a different reality where sometimes when we're at a feast and there's a plastic spoon put in front of us; there's a different way of treating the energy that's put into that spoon if it's just going into the landfill. We need to think about using things in the way we used to use things."

Janine Gibbons, Haida artist from Petersburg, Alaska, elaborated on this. "There is so much more attention and love that goes into a beautiful handmade spoon that's passed down from generation to generation ... A lot of what we talked about was the depth and connections the Haida language has; it encompasses so much."

It is in this depth that individual and collective actions and responsibilities are captured in <u>X</u>aad kil. When we are talking about reducing our reliance on diesel and the impact that has, we must "let the language guide us," as Jaskwaan said, so we act in a proper way. We must live yahgudang and what it means to be in balance.

Image courtesy of the Haida Gwaii Museum. Object number: Nb1.628

1913-15

The first oil wells drilled in BC are drilled on Haida Gwaii at Tian Bay, on the Duu Guusd west coast of Graham Island.

1940s-1960s

Small communities, in what is currently called BC, started to be powered by diesel generating stations and for the first time, households on Haida Gwaii were hooked up to the electrical grid. Skidegate was likely the first community to get electricity on island.

1941

Tlaga <u>G</u>aawtlaas <u>Masset</u> gets electricity through a diesel generator.



1949-1951

Eight oil wells are drilled on Haida Gwaii. No discoveries are reported. 1950s

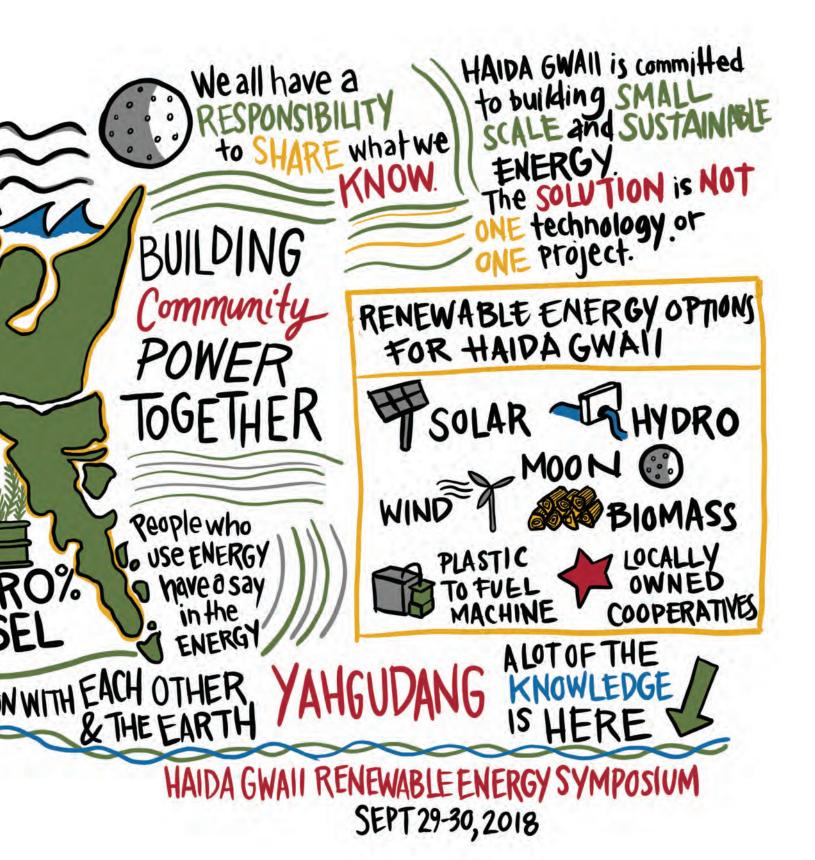
A water wheel in Hlgaagilda powers the community centre.

1964

<u>G</u>aw Tlagee Old Massett gets electricity. 'Waan kun *Port Clements* gets
electricity

1967

BC Hydro takes over diesel generator in 'Waan kun *Port Clements*.



Shell Canada drills 14 offshore oil wells from Nuu-cha-nulth Territory, north into Haida Territory, Siigaay *Hecate Strait* where they experience 65 feet waves. Non-commercial levels of oil are found off of Haida Gwaii.

1970s-2010s

This period saw a large increase in the exploitation of oil and gas around Haida Gwaii, as well as proposals for large-scale energy projects from off-island corporations. This period also was a time of increased resistance to and activism to the use of fossil fuels.

Talking Community Power

We are all firekeepers. Together we can do great things. Together we can do this.

Michael Nicoll

Yaghulaanas

Unity-we need to do this together. Our connection with each other and our connection with the earth. Those are the themes that I heard throughout these past two days.

Gaagwiis Jason Alsop

Why I'm so happy to be here is, as you figure out and as I hear you figuring out the electrical future and the self-sustainability of power on this Island, you will be investing in a stable future that few other people on this planet can even dream of.

Just like everything else we do on Haida Gwaii, it's all going to come down to working together as Islands communities and individuals and continuing to build the momentum together to make the changes

that we want.

A lot of people have spoken about local autonomy and ownership, which is energy democracy. What you're talking about is truly exciting.

Ruth Wheadon

Sue Elrington Podcast Producer (Sierra Club BC)



1970s

Coalition Against

SuperTankers forms to

behalf of Haida Gwaii.

oppose tanker traffic on

1971

The British Columbia legislature passes a resolution opposing tanker traffic off the west coast.

1972 Canada puts a moratorium

on tanker traffic and further drilling in the Hecate Strait and Queen Charlotte Sound.

1976

BC Hvdro sets up a wind turbine experiment on North Beach.

Due to environmental and local concerns, a proposed oil port in Kitimat and pipeline is quashed by the Canadian government.

Local governments, local leaders

In the first panel presentation at the symposium, it became very clear that the transition away from diesel power is well underway, in large part due to the leadership of staff and elected representatives from local government. Through the Island Protocol table—the Council of the Haida Nation, Village Councils, municipalities, and regional districts—have made a significant step away from fossil fuels by signing the Haida Gwaii Clean Energy Declaration, a shared commitment to work together and become energy sovereign by 2023.

Old Massett Village Council, Gaw Tlagee

Actions

- Partnered with BC Hydro to train local home energy
- Installed biomass boiler that provides heating for all community buildings
- Piloted residential solar hot water

Priorities

Expand on BC Hydro Power Smart program

Village of Port Clements, 'Waan kun

- Installed solar panels on multiplex building
- Installed heat pumps at Port Clements community hall & museum
- Installed biomass boiler that provides heating for community buildings

Priorities

- Increased energy efficiency in public buildings
- Exploring more biomass pellets, landfill or sawmill

Village of Queen Charlotte, Daajing giids

- Installed solar panels on village office
- Implemented an LED street light trial
- Received a bicycle network lane grant

- Promote clean energy and bicycle tourism
- Energy audits for municipal residences

* North Coast Regional District representatives were invited to provide an update, but unfortunately neither were available to attend.

Village of Masset, Tlaga Gaawtlaas

Actions

- Installed solar panels at the Masset Municipal Airport & public works building
- Official Community Plan found renewable energy is important to community

Priorities

Looking into alternative ways of financing home retrofits so the money borrowed stays with the house, not the owner

Skidegate Band Council, Hlgaagilda **Actions**

- Working on energy for 13 years
- Researched current and future electrical usage
- Information sharing workshops
- Piloted residential solar hot water
- Installed air-source heat pumps in every home in the village
- Monitor energy usage in all Skidegate homes
- Installed solar panels at George Brown Rec Centre and Haida Heritage Centre
- Partnered with BC Hydro to train local home energy advisors
- Installed electric car station at the Haida Heritage Centre

Priorities

- Replacing all street lights with energy efficient LED lights
- Feasibility for solar panels for every household in Skidegate
- Exploring upgrading the hydro facility at Mitchell Inlet
- Looking into opportunities for electric cars

Council of the Haida Nation

Actions

- Attended 20/20 Catalyst Program that brings together Indigenous people working towards energy independence
- New CHN buildings have efficient heating and insulation
- Community Electricity Plan (2008) & Island Energy Plan (2012)

Looking at options for Haida Gwaii including ocean energy, solar, and wind

1989 1980-81 1984

Subsea cables installed from Moresby to Graham Island to deliver power to the southern grid.

A BC Hydro study recommends designing a 10MW waste woodfired thermal generating station on Haida Gwaii.

spills 11 million gallons of crude oil into Alaska's Prince William Sound.

The Exxon Valdex oil tanker British Columbia announces there will be no drilling offshore for at least five years. Canada announces it will not consider any offshore development until requested by BC.

What options are being explored?

There is no quick or easy solution to our diesel problems. The most robust way to transform our electrical systems is through small-scale and diverse projects. We already have great examples of solar photovoltaic and solar hot water working here. The hydroelectric dam in Mitchell Inlet has proven to be clean and reliable and there are many more prospective and possible solutions in our future. With local decision-making and ownership, Haida Gwaii can build a series of smaller projects that meet our needs and uphold our values.

Solar

Solar panels are visible in every community on Haida Gwaii these days. While the price of electricity continues to rise, the cost of solar technology is decreasing.

Solar panels and battery storage are becoming more efficient, making this a tried, tested, and trusted option, even on these misty isles. One of the most frequently asked questions is how to make solar panels affordable for homeowners and businesses, a topic that was explored at the symposium (see page 16 for a summary of solar cooperatives).

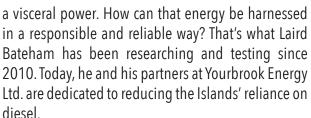
Run-of-River Hydro

Looking to fresh water, Run-of-River (ROR) hydro projects-sometimes called small-hydro or micro-hydro – are another option that have been used at a residential scale here on Island. ROR utilizes the natural flow of a stream or creek, and any elevation differences to help harness clean energy via turbine(s). This is something that Van Inlet Hydro Corporation (VIHC) has been researching in Haida waterways since 2006. VIHC is wholly owned by George Pattison, commonly known as "Island Joe." Island Joe's home and business has been utilizing small hydro, and VIHC's project expands on his knowledge and experience channelling water for power. Located near Rennell Sound, VIHC is eyeing up two potential creeks to generate power.

Learn more: <vaninlethydrocorp.com>

Moon (Tidal)

There are few things in this world as predictable as the tides. As everyone on Haida Gwaii witnesses, the ocean is in motion at all times and carries



Yourbrook, a locally-owned company, has designed and piloted a tidal project that offers unique potential for two important reasons. First, all sensitive parts are located above water, which makes servicing and maintenance much easier. Second, it is connected to a reservoir that serves as a storage system, making the energy consistent and reliable (this is called "firm power"). The National Research Council is currently validating the technology and advising on how to increase efficiency. Yourbook is also continuing to consult with the CHN about the future of tidal on Haida Gwaii. **Learn more:** <yourbrookenergy.

Geothermal and wind have also been identified as possible sources of regenerative power on Haida Gwaii, although nobody with this technical expertise or experience was available to present at the symposium.

1990

Moresby Lake reservoirbased hydroelectric generating station commences operation.

1996

Queen Charlotte Power Corporation proposes constructing a tunnel to draw water from Takakia Lake to the Moresby Lake reservoir.

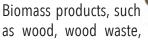
1997

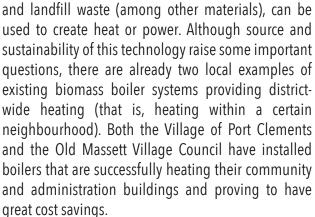
Shell relinquishes offshore oil and gas rights within the proposed Gwaii Haanas Marine Conservation Reserve in return for tax benefits. Shell, Petro-Canada, Chevron and other companies still hold on to offshore oil and gas rights around Haida Gwaii.

Hydroelectric

Hydroelectricity is yet another way of harnessing the power of water and this option already has a prominent place on Haida Gwaii. In fact, a reservoir-based hydroelectric generation station at Moresby Lake provides up to 80% of energy for the south-grid (Sandspit to Tlell). Solely owned by Atlantic Power since 1990, the company's agreement with BC Hydro is due to expire in 2022. The Skidegate Band Council and Old Massett Village Council are currently in discussions with Atlantic Power to consider expanding this project. **Learn more: <atlanticpower.com>**

Biomass





HaiCo has also been exploring the notion of biomass and has recently completed a feasibility study looking at the possibility of a biomass electrical production facility. The study reviewed the viability and financial feasibility, as well as size and environmental concerns with this technology. Currently, HaiCo is considering a 1.5-megawatt station and reported that the next steps are: ensuring there is consent to continue pursuing this idea, further technical studies, and discussions about purchasing price with BC Hydro.

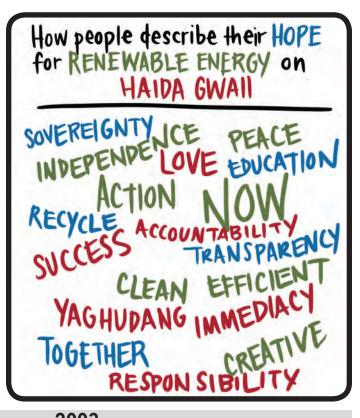
Learn more: <haico.ca>

Plastics to Fuel

Plastics are everywhere – they are in our landfills, overflowing at the recycling stations, and they are in our oceans and on our shorelines. How can these materials be up-cycled until we can find a way to transition away from disposable plastics? Over the past few years, Daniel Schulbeck and his students at Gudangaay Tlaats'gaa Naay High School



have been researching the possibility of reusing plastics as a fuel source. The gist is: plastics are put through a pyrolysis system that melts, evaporates, "cracks" and then re-condenses it. What you have at the end of this process is a petroleum product that can be used as a fuel. The high school recently purchased a desktop version of the machine from the Kingdom of Tonga. Learn more: Search "North of Ordinary: Ep 8 – Plastic to Oil Machine" on YouTube and keep an eye on **chloethemacine on Instagram** for updates.



2001

The Offshore Oil and Gas Taskforce comes to Haida Gwaii. 50,000L of diesel spill into the Kumdis River when an Esso truck has an accident.

2002 | The T

The Takakia Lake power plan is given a final no by the province after public hearings indicate Takakia's significance in Haida history and culture.

2003

The Offshore Oil and Gas Taskforce finds that all participating First Nations felt that lifting the moratorium would not be in their best interests.

The Cooperative Model to Renewable Energy

How can I get solar panels on my house?

This is a commonly asked question here on Haida Gwaii. We have enough experience to know solar energy is an important part of the clean energy equation. From individual homes to municipal offices, schools, and community buildings, solar panels are visible in every community on Haida Gwaii these days.

Even though the price of electricity continues to rise and the cost of solar technology is decreasing, when we start to crunch the numbers, solar electricity can begin to lose its appeal to many residents (if not become outright out of the question). Rob Baxter, co-founder and president of the Vancouver Renewable Energy Co-op (VREC) shed light on a different way: the cooperative model.

For nearly 15 years, VREC has been developing a unique and cooperative model for renewable energy

solutions. "Early on in our journey, we decided that we wanted to make solar energy more accessible," Rob explained. "Not everyone owns a home where they can put solar energy on it. Not everyone can afford the cost of a full system." The cooperative has installed over 100 systems from Vancouver to Baffin Island and Rob traveled here to share this model and offer support. "We're here to help develop a cooperative that works for you." One-way he described is to start a new local coop. Another way is to operate under the umbrella of an existing coop, like VREC.



Five Steps to Building a Renewable Energy Cooperative

- 1. Create a group of people committed to working together.
- 2.Decide what type of group you want to be (do you incorporate your own cooperative or join an existing group).
- 3. Determine the size, location, and type of installation you want (this model can apply to wind and any other sustainable energy project).
- 4. Consult with the community to ensure there is broad support for the proposed project.
- 5. Develop a proposal to BC Hydro (if necessary).

Rob facilitated a small group discussion to further explore this option. The session generated huge interest and excitement and clearly identified an interest in a community-owned model. With his experience, Rob recommended five steps to building a cooperative for renewable energy on Haida Gwaii.

Solshare, a subsidiary coop of VREC, sells solar shares for \$500 and offers regular dividends to shareholders. Additional financing options can be available through other community groups, cooperatives, and Credit Unions to ensure true local control and ownership.

Learn more: <vrec.ca>

2007

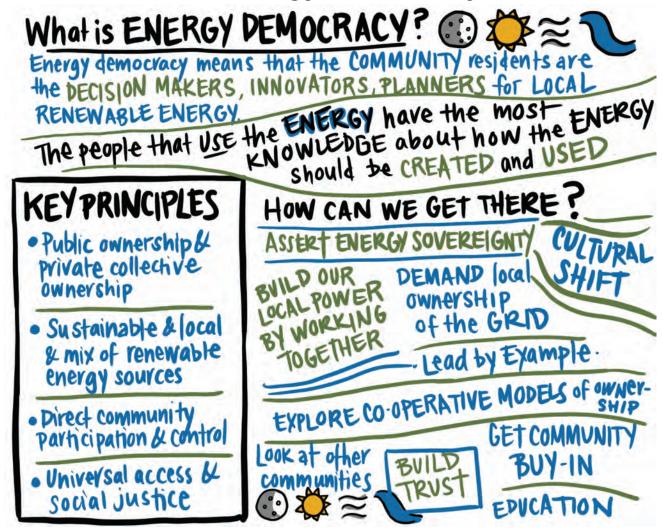
NaiKun Wind Development Inc. proposes to develop an offshore wind energy project of 110 turbines in the Hecate Strait, 8 km from northeastern Haida Gwaii. Community Electricity Plan commissioned by the CHN and BC Hydro looks into both the use and supply of electricity on Haida Gwaii.

2008

NaiKun and the CHN sign a tentative partnership when NaiKun agrees to hook up Haida Gwaii to power generated by the wind project. NaiKun gets provincial environmental assessment approval.

2009

Energy Democracy



Food is our medicine

There are so many conversations we need to have as an Island community in order to become self-sufficient and sovereign. Elizabeth Condrotte is a pioneer in the recent efforts to see Islanders become more self-reliant with our food systems, and she offered to host a small group discussion on food sovereignty. As she said, "we can't talk about energy without talking about food."

As the group discussed, growing food, packaging it, and shipping it to consumers is energy intensive. Only when we have become self-reliant with our food and energy systems will we be truly autonomous, and what better place to do that than somewhere as rich as Haida Gwaii.

2010

The Village of Queen Charlotte opposes the proposed Enbridge Northern Gateway project.

2011

Haida Gwaii CoASt is resurrected to fight the Northern Gateway project.

Takakia Lake is protected under the SGaay Taw Siiwaay K'adjuu Management Plan in order to remain as Id Kuuniisii have known it. President of Enbridge comes to Haida Gwaii to propose building the Northern Gateway pipeline from the tar sands to Kitimat.

Building Community Power Together

As Island people, we take our independence very seriously; we innovate and we invest to ensure the well-being of each other and the land, waters, and air. Surrounded by the powerful Pacific Ocean, we know our boundaries and inherently understand our place, collectively we have power and Island residents have seen what we can achieve when we pull together. The transition to local and regenerative power is our next big opportunity, and over the course of two days, we witnessed Island residents embrace this responsibility.

Everyone in attendance shared excitement, inspiration, and demonstrated the many ways that we are already charting a path to energy sovereignty. This isn't just something we are doing for ourselves, it is honouring the strength of our ancestors, it is a responsibility to our children and grandchildren, and it is building a model that the rest of the world needs to see.

"We have the knowledge and expertise that we need here," this was one of the themes that emerged at the symposium. While there are important lessons and models that exist abroad, we have the people and skills to achieve this transition utilizing our knowledge here on Haida Gwaii. Several more messages that came out of the 2-day gathering were:

• We need to chart a different path because we know what kind of energy we don't want. Many Haida Gwaiians became engaged in energy discussions of a dramatically different nature: Enbridge Northern Gateway and liquified "natural" gas (for some, it was much earlier, like the oil import facility proposed in Kitimat in the 1970s). "Renewable energy is our opportunity to build a proactive and solutions-based yes. This can unify our communities and give us a way forward that isn't always working in opposition," explained one of Swiilawiid's founding directors, Lucy Neville. This was echoed by Islanders over the two-day event.

- Look to the past to lead us into the future. We have all the energy that we need here. Respecting the elements—earth, air, fire, and water—is something that Haida have done for millennia.
 Ancient laws tell us how we can live in balance. We should look to the lifeways born out of this place, the language and principles that have allowed for people to thrive for thousands of years. Our hope for the future is grounded in this past, in the long history of learning and knowing how to make things right.
- Local ownership and control is a must. Independence. Autonomy. Sovereignty. Selfsufficiency. These words came up throughout the course of the weekend and gave a clear direction for moving forward. It was resounding: Haida Gwaii wants to break away from the corporate model of electricity and capitalism. This means we need to invest in and own clean energy projects that power the Islands. The opportunity in this transition is to separate power from energy and build an electrical system that fits with our values, lands and waterways, and communities. Being decisionmakers and owners of these projects comes with a lot of responsibility and the people of Haida Gwaii have made a collective commitment to transform our energy systems by signing The People's Clean Energy Declaration for Haida Gwaii.

Let us know our power and continue navigating this together.

BUILDING COMMUNITY POWER TOGETHER

2011 2012 2016

Citizens of the Haida Nation vote an overwhelming no to partnering with NaiKun over environmental, cultural, and financial concerns. Island Energy Plan, developed for the CHN, advocates for community energy and focuses on: energy and waste reduction, heating, and transportation.

The people of Haida Gwaii resoundingly say no at the Northern Gateway Joint Review Panel hearings.

The Canadian courts quash the Enbridge Northern Gateway. Haida Gwaii holds a celebration in <u>Gaw Tlagee</u>.

Haw'aa/Haawa

In so many ways, the Haida Gwaii Renewable Energy Symposium was a show of our community spirit and collective vision. Countless volunteers stepped in and supported this event: haw'aa to everyone who presented, attended, helped set-up, clean-up, and everything in between. You all made this a fruitful, successful, and beautiful event!

We extend special gratitude to the core organizing team and co-hosting organizations: Swiilawiid and the Council of the Haida Nation. Swiilawiid's success is due to an exceptional volunteer board of directors—Jaalen Edenshaw, Niisii Guujaaw, Gwaliga Hart, Mary Hart, Lucy Neville, Brady Yu, and Ruth Wheadon. You are all outstanding citizens with an inspiring vision and commitment to the future of these Islands and our people. From the CHN, Ginaawaan and "Buck" were integral to the planning process and demonstrated great dedication to this shared goal. Sincerest haw'aa to you all.

Much gratitude to:

- Old Massett Village Council for donating the venue
- All local government representatives who took time to attend, share, and listen
- Individuals and representatives who attended the symposium advisory meetings
- Ileah Mattice & Graham Richard for providing reliable technical and logistical support
- Courtney Bell & the Old Massett Youth Program for providing free childcare for the weekend
- Joyce Bennett & Tow Truck for keeping the conversation fueled with outstanding local cuisine
- Jaskwaan Amanda Bedard, Denver Cross and the Elders at SHIP for providing guidance and supporting our use of Xaad kil & Xaayda kil in the agenda and this publication
- Leslie Johnson & John Broadhead for your ongoing support
- Gid Uuwans Dana Moraes for your superb skills facilitating the discussions



- Michael Nicoll Yaghulaanas for taking the time to attend and enrich the conversations
- Jisgang Nika Collison for delivering a profound and uplifting keynote presentation
- Kwiigee Jaad for your support with logistics & coordination
- Kara Sievewright for your experience, patience and stellar artwork
- Off-Island guests: Rob Baxter, Vancouver Renewable Energy Cooperative; Sue Elrington & Caitlyn Vernon, Sierra Club BC
- Nathalie Macfarlane and staff at the Haida Gwaii Museum Archives, John Broadhead, and volunteers at the Port Clements Museum for research assistance on the timeline
- Our friends at LUSH Cosmetics, Tides Canada, glasswaters foundation and Gwaii Trust for believing in this vision and Haida Gwaii's leadership

We acknowledge generous donations from: Sitka Studio, Haida Gwaii Museum, BC Hydro, Old Massett Comprehensive Community Planning, Eagle Talon Adventures, Haida Gwaii CoASt, Kara Sievewright, and Jaalen Edenshaw

2017 2018 2019

Swiilawiid Sustainability Society is formed by local residents.

HlGaagilda installs solar panels on the Haida Heritage Centre making it one of the largest community-owned installations in what is currently called BC. Swillawiid and the CHN hold the Haida Gwaii Renewable Energy Symposium in <u>G</u>aw Tlagee.

With threats to Wet'suwet'en territory by the RCMP and Coastal GasLink, Haida Gwaii holds solidarity rallies and raises money for Wet'suwet'en clans.

