

Northern Regional Energy Dialogues is an Accelerating Community Energy Transformation (ACET) project led by Sinead Earley, Tamara Krawchenko and Kara Shaw in partnership between the University of Victoria and University of Northern British Columbia and with support from the Community Energy Association and Northern British Columbia Climate Action Network (NorthCAN). We are working with diverse communities and First Nations across Northern British Columbia to help them identify their interests, needs and opportunities in support of renewable energy transitions. The current phase of the project is focused on convening community based and regional energy dialogues. Future phases will support targeted and community-identified capacity building initiatives and help formalise them with enduring peer networks.

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Community Report Back: Kitimat

This document shares a summary of the Community Energy Dialogue held in Kitimat January 27th 2025. The Dialogue was facilitated by Tamara Krawchenko and convened 12 community members, including representatives from the District of Kitimat, a trade union, industry, transportation sector and community groups. All direct quotes have been reported anonymously.

The Kitimat Community Dialogue highlights a complex interplay of energy-related themes. Key assets include hydroelectric power and industrial facilities, while actors range from community members to industry stakeholders. Opportunities exist in transitioning to renewable energy sources and leading in efficient production methods. However, vulnerabilities such as affordability, environmental concerns, and lack of leadership pose significant barriers. Capacity issues, including skills and information gaps and financial constraints, further complicate progress. Prioritizing leadership, education, and implementation of sustainable energy plans will be essential for navigating these challenges and ensuring a sustainable energy future for Kitimat.

Key messages we heard

- Energy Assets: Hydroelectric power, LNG facilities, and smelters are key energy assets.
- Actors: Community members, local government, and industry stakeholders are involved; there are asymmetric power gaps between local stakeholders and industry with no intermediary organisations.
- Opportunities: Transitioning to renewable energy and leading in efficient production methods.
- Vulnerabilities: Affordability, environmental concerns, and lack of leadership.
- Capacity Barriers: Skills and knowledge gaps, financial constraints, and regulatory complexities.
- Priorities: Enhance leadership, implement sustainable energy plans, promote efficient industries, circular economy planning.

Key recommendations:

- Increase Education and Access: Provide more information and services for renewable energy adoption.
- Streamline Regulations: Simplify permitting processes to support sustainable energy projects.
- Community Engagement: Involve residents in decision-making to ensure inclusive energy planning.
- Invest in Infrastructure: Develop demonstration projects for solar and wind power.
- Global Perspective: Recognize the global benefits of sustainable practices.

What does energy look like in your community? How is it discussed and what are the greatest concerns?

Energy is a central and complex issue in the community of Kitimat, British Columbia. The community's economy is heavily dependent on energy-intensive industries like aluminum smelting and LNG production, which consume vast amounts of energy comparable to large cities. This industrial focus shapes many of the energy-related discussions in the community.

There is significant debate about the balance between industrial development and environmental conservation. The community grapples with transitioning to more sustainable energy sources, including electric vehicles and renewable energy like solar and wind power. However, there is a lack of education and infrastructure to support these alternatives. The community also discussed energy efficiency in buildings and the potential for circular economy initiatives, such as using waste heat from industries for municipal buildings.

The main concerns related to energy include affordability and reliability, with rising costs for various energy sources affecting both residents and businesses. Participants expressed concern about the community's heavy reliance on hydroelectric power, especially given changing weather patterns and reduced snowpack. Environmental impacts of energy production and use are a significant concern, including effects on wildlife and local ecosystems. Concern was also expressed about the lack of youth engagement in energy and environmental issues, as well as the need for more diverse representation in local decision-making processes related to energy.

Participants expressed frustration about the lack of leadership and coordinated efforts to address energy challenges, with some feeling that there is insufficient dialogue between different stakeholders, including industry, government, and community groups. The community struggles with balancing the economic benefits of energy-intensive industries with environmental stewardship and long-term sustainability goals.

What energy assets and infrastructures exist in your community?

Kitimat's energy assets and infrastructure are primarily centered around large-scale industrial operations. The community hosts major energy-intensive industries, including an aluminum smelter (operated by Rio Tinto) and an LNG facility. These industries consume vast amounts of energy, with the aluminum smelter reportedly using as much energy as a large city like Vancouver. The main local source of energy is hydroelectric power, which the community heavily relies on. There are mentions of a pipeline infrastructure for natural gas, which feeds both industrial and residential needs. There is an existing arena that uses waste heat to warm a swimming pool, suggesting some level of energy recycling infrastructure.

While not currently a significant source, there are discussions about the potential for solar energy in the community. Some participants mention the installation of solar panels, though there seems to be a lack of widespread adoption or infrastructure for this renewable energy source. There is also mention of exploring the potential of hot springs for energy, though this appears to be in the conceptual stage. There are ongoing discussions about energy efficiency in buildings and the potential for circular economy initiatives, such as using waste heat from industries for other purposes.

We're so dependent on hydro energy. There is a lack of education in terms of the use of solar panels. I've talked to so many people who have no way of getting anybody to install them. And there's a fear, you know. We live in the North, but with global warming, we've had some incredible summers, and we get a lot more sunshine.

Community also discussed energy efficiency in buildings and the potential for circular economy initiatives, such as using waste heat from industries for municipal buildings.

We are looking for investors so that three businesses downtown can be carbon neutral in all of their heating and cooling needs. Thursday, February 6, there's going to be an online session where you can learn how you can invest, receive an annual dividend, and become a co-owner of a community energy project that will power these businesses in downtown.

Who are the key actors/organizations involved in energy initiatives and projects and what do they do?

Large industrial players, particularly Rio Tinto (operating the aluminum smelter) and LNG Canada, are significant actors due to their high energy consumption and impact on the community. BC Hydro is also mentioned as a key player, controlling energy pricing and influencing the feasibility of new energy projects. The District of Kitimat plays a central role, with its council and staff involved in decision-making and implementation of energy-related projects. The Haisla Nation are important stakeholders and rightsholders in local energy discussions.

Community organizations like KVN (Kitimat Valley Naturalists) and a watershed working group are involved in environmental education and stewardship efforts related to energy and its impacts. The Chamber of Commerce is identified as having potential to engage more community members in energy discussions and initiatives. The Community Energy Association is noted as supporting communities with energy planning and communications. Educational institutions, including local schools, were discussed as having a role in shaping future energy workforce and awareness. Lastly, SolShare Energy is seeking investors for a community energy project to power businesses in downtown Kitimat.

What are the vulnerabilities and barriers around energy in your community? What barriers exist that are preventing your community from moving forward on energy issues and projects? What kinds of capacity barriers exist?

Kitimat has a heavy reliance on hydroelectric power, which is becoming increasingly vulnerable due to changing weather patterns and reduced snowpack. This dependence on hydro energy raises concerns about the future sustainability of the power supply, especially as the community transitions to electric vehicles and other electrified technologies.

A major barrier to addressing energy issues is the lack of leadership and coordination in moving forward with plans to reduce fossil fuel dependence. While the community has developed reports and blueprints for energy transition, implementation has been slow or non-existent. This is partly due to financial constraints, as many energy efficiency projects, particularly for buildings, require significant funding and effort.

Another barrier is the limited public engagement and education on energy issues. There is a lack of information and accessibility regarding alternative energy sources like solar power, leading to misconceptions and hesitancy among residents to adopt new technologies. The community also struggles with engaging younger generations in energy and environmental discussions, with many young people showing little interest in these issues.

There is a significant disconnect between industry, government, and community stakeholders. There is a lack of early and meaningful consultation with local knowledge holders, leading to conflicts and missed opportunities for collaborative solutions. The polarization between environmental concerns and industrial development often hinders productive dialogue and action on energy issues. There is a lack of information and accessibility regarding alternative energy sources, leading to misconceptions and hesitancy among residents to adopt new technologies.

Institutional barriers also play a role. The community lacks the capacity for long-term, strategic planning on energy transitions. Kitimat does not have a climate action coordinator – a position that the Government of BC supports through a shared funding program. As such, there is a need for outside support to facilitate multi-stakeholder dialogues and provide the necessary skills and tools for addressing complex energy challenges. The

There's really no leadership by any group, government or otherwise around how to start to move forward to lessen our use on fossil fuels. I know the district did. Back in 2020, we brought a few groups together to develop ideas through the community energy and emissions project. This gave us a bit of a blueprint around how we should move forward and electrify vehicles including buses, supporting people to shift how they're heating their homes... But it seems to not have moved forward and that's a bit of a concern to me.

political landscape, with some decision-makers skeptical about climate change, further complicates efforts to address energy issues.

There is a lack of diversity in local leadership and decision-making bodies, which limits the range of perspectives and experiences considered in energy-related discussions and planning. This homogeneity in representation can lead to overlooking important aspects of energy vulnerabilities and potential solutions.

Lastly, the community faces challenges in retaining and attracting skilled individuals who can drive innovation and change. The focus on trades in local education systems, while important for immediate job prospects, may limit the development of a workforce capable of addressing complex environmental and energy challenges in the long term.

Where's the internal capacity for implementation? When you're talking about this type of generational transition towards different economies of energy. I think it's like, yeah, 5, 7, 10 years. And you and you might be better off just doing it in like 5 communities in Canada through incubators. I don't see these changes just naturally occurring. There are large systems with a vested interest in upholding status quo, and you need a disruption that comes from the outside, but that supports the inside knowledge and voices to change and challenge that.

What are your highest priorities in relation to energy? What does the future of energy look like in your community in 5 to 10 years? What actions and resources are needed to advance these priorities?

Participants identified the highest priorities related to energy in Kitimat to be transitioning away from fossil fuel dependence, improving energy efficiency, and developing more sustainable energy sources. The community is grappling with its heavy reliance on hydroelectric power, which is becoming increasingly vulnerable due to changing weather patterns and reduced snowpack. There is also a strong emphasis on the need for better leadership, coordination, and public engagement in addressing energy issues.

If you think you are solving a climate crisis by reducing your footprint by having an electric vehicle in Kitimat while our 2 industries burn about 1.5 million times the energy input that you will ever save or ever use on an electric vehicle... It's economies of scale. We're all involved here. We turn our back on the elephant in the room, which is this town only exists because it consumes unbelievable amounts of energy.

Looking 5 to 10 years into the future, the community envisions a transition towards more electric vehicles and electrified technologies. However, this transition raises concerns about the sustainability of the current power supply. There is interest in exploring alternative energy sources like solar power, though misconceptions and lack of information currently hinder widespread adoption. The community also sees potential in developing circular economy initiatives, particularly around using waste heat from industrial processes for community benefit.

To advance these priorities, several key actions and resources are needed. First, there is a critical need for improved leadership and coordination in implementing existing energy transition plans. This could involve creating a dedicated climate coordinator position or establishing an environmental advisory commission to bring diverse community voices together. Second, there is a need for increased public education and engagement on energy issues, particularly targeting younger generations. Third, the community requires support for long-term, strategic planning on energy transitions, possibly through government-supported incubator processes or multi-stakeholder dialogues facilitated by outside experts.

Financial resources are also crucial, both for implementing energy efficiency projects and for supporting innovative circular economy initiatives. The transcript suggests that partnerships between industry, government, and community stakeholders could be leveraged to fund and implement these projects. Additionally, there is a

need for better data sharing and communication systems to help the community understand and make informed decisions about energy use and impacts.

Lastly, the community recognizes the importance of diversifying local leadership and decision-making bodies to ensure a wider range of perspectives and experiences are considered in energy-related planning and implementation. This includes efforts to remove barriers to participation in local governance and to actively cultivate new, diverse leadership within the community.

What would you like to learn from other northern communities?

Participants expressed a keen interest in how other communities are addressing the challenges of transitioning to more sustainable energy systems while balancing the needs of industry and the environment. This includes strategies for implementing circular economy initiatives, particularly around utilizing waste heat from industrial processes for community benefit. There was also interest in learning about successful models for engaging younger generations in energy and environmental discussions. Participants noted a significant lack of youth involvement in these issues, and interest in ways to inspire and educate young people about the importance of energy and environmental stewardship.

Another area of interest would be effective methods for facilitating multi-stakeholder dialogues and collaborative problem-solving. The community faces challenges in bringing together diverse perspectives from industry, government, environmental groups, and local residents to address complex energy and environmental issues. They would likely want to learn about successful approaches other northern communities have used to foster productive conversations and decision-making processes across different interest groups.

There was an expressed interest in learning about innovative approaches to local governance and leadership development. Other northern communities might offer insights into strategies for removing barriers to participation in local governance and cultivating new, diverse leadership within the community.

Lastly, participants expressed an interest in learning about successful models for community-based environmental education and stewardship programs. There are community-based efforts to develop projects that connect people with nature and foster appreciation for the local environment, but not enough is being done in the school system in this regard. Learning from other communities' experiences in this area could help Kitimat enhance its own initiatives and increase community engagement in environmental issues.