

Northern Regional Energy Dialogues is an Accelerating Community Energy Transformation (ACET) project led by Sinead Earley, Tamara Krawchenko and Kara Shaw in partnership with the University of Victoria, University of Northern British Columbia, and through support from the Community Energy Association and the Northern British Columbia Climate Action Network (NorthCAN).

We are working with 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 formalize them with enduring peer networks.

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Community Report: Mackenzie

This report summarizes the Community Energy Dialogue held in Mackenzie on April 15th, 2025. The town has a population of just over 3,000 residents, and is located within the District of Mackenzie, which covers 213km². The conversation involved sixteen community members and was facilitated by Sinead Earley. Quotes have been reported anonymously.

Summary: The meeting discussed the challenges and priorities for energy in Mackenzie, focusing on the need for economic transition following mill closures, reductions in the industrial tax base, and the need to identify and attract new investors to the community. The discussion covered the role of key actors, such as BC Hydro. There is uncertainty in the community around energy supply and access despite sitting at the edge of the Williston Reservoir; particularly in relation to prospects for new industrial development, they are seeking more information and transparency around near- and long-term power supply. Key themes included affordability, cost barriers associated with renewable energy adoption, capacity limitations in municipal staffing, and political sensitivities surrounding climate and energy discussions. Priorities discussed were the need for improved energy reliability and grid resilience, with particular concern over the impact of wildfires, and more information on small-scale solar, wind, and bioenergy systems. The group also emphasized the importance of energy efficiency and conservation, and community energy independence.

Key Actors: District of Mackenzie Mayor, Council, and Director of Recreation Services; BC Hydro; Fortis; Enbridge, Conifex Timber (biomass power plant); Centerra (Mount Milligan copper-gold mine); mining exploration companies; TransAlta; IREN (AI data centre).

Key Assets: Industrial-zoned land and infrastructure; transportation corridor (highway and rail) providing regional connectivity; solar installation and heat-recovery system at the community recreation center; proximity to Williston Reservoir; Conifex biomass power plant; IREN Data Center with a dedicated sub-station and high-speed fibre-optic network.

Key Assets & Actors

Mackenzie sits at the southern end of Williston Reservoir on a site that was cleared in 1965 during construction of the W. A. C. Bennett Dam by Alexandra Forest Holdings Ltd. Since, pulp mills, sawmills, and other logging operations have been the primary employer in the region. Canfor Corporation (successor to BC Forest Products, operating since the mid-1960s) closed the sawmill in 2019 and the pulp mill in 2020. Mining, oil and gas pipeline construction, and tourism are growing as economic drivers.

A key asset in Mackenzie is its available land base, with industrial zoning and infrastructure already established on former mill sites. The community has direct access to a transportation corridor (Highway 97 and CN Rail) connecting to the Peace Region and Alberta, and sits at the edge of a Williston Reservoir, the seventh largest in the world by volume. BC Hydro is a key actor in the region, given the proximity of the reservoir and the construction of the Site C Project. The South Peace is experiencing significant drought levels and low system inflows in the Parsnip Watershed. Reservoir levels were low in 2025, and BC Hydro plays a major role in ensuring adequate water supply for the Conifex mill and log transport on the lake.

Conifex Timber continues to bring energy and employment benefits to the community, through their harvesting and lumber operations, and the biomass plant that has been producing power since 2015. The plant provides energy for operations but has also delivered excess power to the community. With the community's longstanding connection to surrounding forestlands and the forestry sector, wood heat in homes is common and bioenergy and biofuels potentials exist. Mines and mining exploration are bringing increased economic activity and employment to the region, and the town is a supplier/transit location for the Mount Milligan copper-gold mine (Centerra) to the northeast. Enbridge is also a key stakeholder, currently in the process of determining route feasibility for their Westcoast Connector Gas Transmission (WCGT) project that would link the gas fields west of Fort St. John to Prince Rupert.

The municipal government has championed clean energy opportunities. The District installed a heat recovery system in 2024, powered by a 128 kW solar array on the [Community Recreation Centre](#). Built in 2021, the IREN AI Data Centre is connected directly to the BC Hydro grid through a substation (owned by IREN) and the company brought high speed fibre-optic connectivity to the town as part of the construction plan. The data center is a large consumer of power, and the substation is considered an asset in the community.

Challenges

Forest Sector Downturn

Recent struggles in the BC forest sector have been felt across forestry-based communities in northern BC, but the impact of mill closures in Mackenzie has been particularly acute. After closure of the Canfor lumber mill in 2019 and the pulp mill in 2020, the District faced a \$1.5 million loss in industrial tax revenue. The impact on employment and services in the community has been substantial, and it has

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left a concerning revenue gap: “A bigger industrial tax base. That's our biggest issue in this community. Yeah, there are jobs, but we've lost most of our industrial tax...[B]ig, amazing, life altering projects are pretty hard to get off the ground and are few and far between. So, our attention over the next few years is probably best focused on smaller, efficient actions that will generate tangible results.” Some community members are eager to attract new large-scale industrial investment, while others are more focused on community-scale energy efficiencies for the near term.

New employment opportunities in mining and tourism exist, but outmigration is still an issue. Participants want to see good jobs and skills generated in their community: “creating more jobs and more money for the North. Regrowing these talents in these communities that are dying. You can see the population dropping all over. They go to bigger centers like Prince George and eventually they leave to Vancouver. They can't keep staying here, because there's just less jobs.”

From a local government perspective, planning is very challenging when community demographics are in flux. Mackenzie has an ageing population but also a segment of new arrivals who are moving there, seeking affordable housing. This is a benefit and a challenge: “Housing prices are increasingly becoming a reason people are coming, but then that's also a different demographic of people who need different kinds of energy. It's hard to make political decisions when the demographics of the town are changing.”

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Affordability is a major issue, and people cannot see how to move away from fossil fuel dependence without some relief on their household budgets. As expressed by one participant, the “transition to electricity from natural gas is not feasible for many people, with respect to cost.”

For local government, staff capacity is low, and they have to be selective with their priorities: “From a municipal standpoint we are small. Our staff have a lot of priorities so it's difficult to give everything the attention it needs. [Energy] is no exception.” The community has had momentum on climate action in the past, with significant carbon reductions through the adoption of their Corporate Energy and Emissions Plan (CEEP) in 2021. Yet, the shock the community has had to navigate in terms of lost industrial tax revenue has had a big impact. From the perspective of Mayor and Council, climate action and energy system change seems out of reach for small communities with fast-shrinking budgets. They have had to make tough choices, and in the wake of Canfor's exit have been forced to reallocate the tax burden to the public through property tax increases. The community has had to address its priorities: “Staff have to choose what the biggest fire is and then put their attention there. Right now, we're limping along with the way the energy is. That's probably how it's going to stay, because you've got something more pressing happening.”

Some people are frustrated by the lack of options and are asking for diversification in energy systems. They compare it to their experience with food consumption: “Right now, we don't have options, the same way we

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Active transportation was brought up as a need, but few incentives exist, and the layout of the town is challenging. For instance, “we have a four-lane highway running right through the middle of a small town with logging trucks and family vehicles. We're a resource-based community. We have big vehicles and

that's the way the town is set up right now. You can't walk from one end where the Forest Service office is, because there's sidewalk on this side and then it moves to the other side. You're actually crossing a four-lane highway to walk on sidewalks. That's a huge deterrent for people to engage in active transportation.”

Politics and Climate Impacts

The politics of energy also surfaced as a challenge, in a community where debates about economic futures and climate change involve a diversity of perspectives. As expressed by one participant, “the politics of these issues is an impediment. A lot of these topics have such weight behind them, like people having debates about climate change and the seriousness of it. We're still having those debates in northern towns, and a culture that's really tied to oil and gas, and close to the Peace Region and being conservative in that nature, right? So, the politics. Even to talk about renewables sometimes gets people's back up because they don't want to get rid of oil and gas. The politics of these discussions is an impediment to discussing solutions.” Discussions about nuclear energy are also happening in the community, and are similarly divisive. These topics are heated. Particularly for elected representatives, this means that discussions about energy initiatives are challenging, leading to hesitancy around new ideas. Community members ask themselves: “How far can we go with certain things that aren't politically acceptable? What are the citizens able to actually give their social license to?”

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The remoteness of the community is a challenge, and participants described their experience with climate change and expectations that impacts will worsen. For instance, they are concerned about grid vulnerabilities during severe storms or wildfires: “Trees are going to fall and forest fires will happen. We had some pretty close calls here just a while ago. Those are the issues of sustaining

electricity to this town. Grids burn down too.” There is a single road and transmission line in and out of the

community. This also contributes to perceptions that infrastructure development will be costly and that energy is coming from elsewhere: “We are a long ways off the major grid, so any increase is going to be a very expensive proposition.” Considering increasing energy demands from new consumers, such as IREN, developing energy projects locally may alleviate some of these concerns.

Participants also made the point that climate change impacts are different in Mackenzie than they are to the south or on the coast. Historical “snowpacks are not there, potential energy is not stable,” and they are worried about “energy security in critical weather.” They are also concerned that BC Hydro is not taking into account differential impacts, particularly when it comes to line maintenance. On Vancouver Island, “BC Hydro

has decided that it is cheaper for them to send a person out and fix a line than it is to send crews out to knock trees down to keep them from going across the line. The likelihood of a fire is low, so they will accept that risk. They're doing that on the island. I wonder if they are doing that in the North Country, where we have way more volatile drought and they do not do any mitigation for trees along our line. They would rather let the trees fall and take the chances, right? That's from a cost benefit analysis perspective from the energy provider, but that's not taking into account community vulnerabilities.” Participants voiced their concern about provincial policies that do not take into account local and regional differences.

Furthermore, people are also asking more about the relationships between different levels of government and Crown corporations, and what goes into energy planning in northern BC: “What kind of cooperation does the government have with BC Hydro in these plans? They don't really discuss them. There are no public forums about how their future ideas of what they're going to do for BC. It's not really open to the public.” Community members note a “lack of information on energy availability.” Access to power is something that is frequently talked about in the community, particularly in relation to prospects for new industrial develop-

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ment. Mackenzie sits at the edge of the Williston Reservoir and deals with fluctuating water levels daily, yet there is uncertainty around access to power. For instance, “how can we market our industrial site for more development without knowing how much power is available? It's information that's very, very hard to come by. BC Hydro isn't very forthcoming about that.” This uncertainty around energy forecasting also pertains to other large energy consumers in town, such as the IREN AI Data Center.

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Opportunities & Priorities Going Forward

Economic Development

The community is trying to be creative about how to fill the gap left behind by a shrinking forestry sector, and they see opportunities that might attract new industrial investors. As expressed by one participant, “there needs to be jobs and economic reform. Reform along with new energy systems.” Mackenzie has the land base, and they would like to be

able to offer affordable and reliant energy to make those opportunities more attractive. As expressed by one participant, “it could be an economic development driver, right? It's like a positive feedback loop. If we do invest in new energies and more efficient energies and better energies, it could lead to better things for the town. We'll increase other types of

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industry and other types of business that want to move to Mackenzie.” Participants see the community as well-positioned in terms of access to energy. What is “in Mackenzie's favor is that we're close to existing electricity corridors already. So, it could make us an attractive location and you don't have to build as much infrastructure.” Still, as expressed early in the conversation, the expectations they have around energy forecasting, information transparency, and BC Hydro’s role in facilitating their bids for new investors, need to be fulfilled. There were also expressions of interest in opportunities associated with eastern-western connections and corridors rather than north-south

The community also wants to know more about the implications for heavy-duty machinery, particularly for small scale resource companies: “The resource industry works deep in [remote] places, using diesel for equipment. What does that mean for people in those industries? I don't know if there's any allowance for that, or people just haven't really been thinking about it yet.” They see information on medium and heavy duty transportation vehicles, but need more specific to off-road machinery.

Renewable Energy

The community sees opportunities related to biomass, solar, wind, and small-scale hydropower. With their historical connection to the forestry sector, and a workforce already embedded in forest practices, there is excitement around bioenergy and biofuels. Much of the discussion linked innovations in forest management to wildfire mitigation. There are opportunities through “increased biomass usage, because there is a lot of it sitting out in the woods presenting a wildfire risk.” That said, there remains a cautionary tone, with specific reference to Drax and the wood pellet sector, and there is a “concern would be losing forests to power.”

Mackenzie is a mountain town with significant stream flow generation in the area. They are interested in “tapping into solar and finding a way to make it more affordable and accessible. The high cost of solar technologies is a barrier. If we can figure out how to bring those costs down, it’s an opportunity...and find the sweet spot for siting wind power.” Participants recognize that “wind technologies continue to evolve. There are rotors now that spin vertically. So even at the household level, wind might be a possibility.” Wind energy mapping has been done (e.g. Morfee Mountain and other sites along the reservoir), but the region is challenged by intermittent and bi-directional wind: “I worked with TransAlta Power late 90s, early 2000s. They had a bunch of wind monitoring stations up and down the lake, and they were really interested in the [West Moberly] Nation because their model said that it was good for air, for wind. They said the problem they had with Williston Lake is that we had not enough or too much. It wasn’t in the gold zone where they could make money.” The heat recovery system and solar array on the recreation centre is a source of pride, but it is an energy supplement. Several community members are also looking at solar installations to power local food initiatives, such as a greenhouse and a modular food unit. Yet, “the quotes that we would get back just made it impossible to do it’s so expensive. The cost of new installation is too high.”

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In general, people are interested in technologies that will help increase self-reliance and flexibility. They brought up battery energy storage systems and made reference to self-driven or do-it-yourself attitudes in northern resource towns. For instance, “the idea that Mackenzie has a self-reliance culture where people are interested in doing things to make sure that they’re resilient themselves. Backup generators, solar panels.”

There was quite a bit of discussion about conscious use, energy conservation, and the role of old technologies that were smart and efficient. For instance, “take old technology and see how you can use it today in such a way that minimizes the draw on the energies. Be smart about what you do.” As noted earlier, given the immediate affordability and District budget challenges, some community members would like to “improve efficiency over building a lot of new infrastructure”. “A bigger priority for me is around truly clean energy. Clean and truly clean and renewable and efficient, that should be everyone’s goal.”

Regional Collaboration

The group was asked which other communities Mackenzie is connected to and why. Answers linked them to other towns in the South Peace, as well as Fort St. James and Valemout (where experience with geothermal options might be shared). Members commented on the innovative approach that McLeod Lake Indian Band is taking towards hydrogen and recognize that community as “a neighbor who’s thinking about energy solutions.”

They are connected to Chetwynd and Tumbler Ridge, as a transportation corridor and through common employers. With Tumbler Ridge, “we share a common history in terms of the nature of the towns and how they were established: instant towns around a single industry at around similar times. So, I think there's an interesting partnership there. It's tourism, with the Geopark and all that sort of stuff. I mean, certainly it's a coal town, like in its depths, but thinking about tourism as

one piece, right? It's not going to run the town, but as one piece of economic activity.” Mackenzie residents do see potential around tourism development, and the experience that Tumbler Ridge has gone through to try to build that up might be useful.

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As noted, common employers connect one town to another. Mining and long-distance labour commuting now has a greater presence in the community, and this is a similar dynamic felt in Fort St. James. Both communities are “at the base of vast mineral and mining explorations, to the north of them. So, we share a similar geography and economy that way. What they're dealing with we're dealing with too, especially at Mount Milligan right in the middle, and employees coming [from both places].” Other large projects and employee travel connect Mackenzie to Chetwyn and McLeod Lake; busses run to Conuma Resources' Willow Creek coal mine just south of Chetwyn, and the Duz Cho Group has offices in Mackenzie and Chetwynd.