

Alberta

Alberta has few remote communities and a policy landscape that is not supportive of community-led renewable energy development.

Alberta's deregulated electricity market and recent restrictions on renewable development exacerbate the already challenging economic conditions of developing diesel-reducing clean energy projects. The Alberta government has not prioritized supporting Indigenous-led diesel reduction. Despite these challenges, as of 2025, Alberta hosts the largest operational off-grid solar array in Canada, co-owned by Three Nations Energy and the utility ATCO.

● Diesel Microgrid Community



Collaboration with rights-holders

Little to no collaboration with First Nations on diesel reduction or energy policy.



Plans and strategies

Provincial emissions reduction plan only has passing mention of remote communities with no detailed plan to support community energy priorities.



Funding and financing

Some funding for Indigenous-led projects, but gaps in coverage for community-scale projects and no funding earmarked for remote community projects.



Programs for efficient buildings

Few programs for efficient buildings, and none tailored to remote communities.



Independent power producer (IPP) market

No market tailored to remote communities; the general market does not support the financial viability of community energy projects.





Restoring the flow: Alberta

Alberta has two diesel-dependent remote communities, both serviced by the private utility ATCO. The province's electricity system is a deregulated market, where power producers compete to produce the cheapest electricity.

In 2024, the province introduced an array of restrictions and strict requirements around where renewable energy projects can occur, how much of a financial guarantee needs to be provided upfront for clean-up costs, as well as other changes.¹⁵⁹ This has created an environment that makes renewable development in remote Indigenous communities quite challenging.

The competitive prices of the deregulated market do not favour the development of community scale projects. The provincial government had started to make progress towards enabling renewable energy in remote communities by listing diesel reduction as a government priority and offering programs to support Indigenous-led renewable energy development.¹⁶⁰

Unfortunately, the provincial government's priorities have shifted; the majority of the enabling programs were not renewed, and current energy plans do not acknowledge the priority of diesel reduction or Indigenous community energy security.

¹⁵⁹ Will Noel and Jason Wang, "Alberta's renewables sector is down, but let's not count it out," op-ed published in *The Hills Time*, June 2, 2025. Available at <https://www.pembina.org/op-ed/albertas-renewables-sector-down-lets-not-count-it-out>

¹⁶⁰ Dylan Hereema and Dave Lovekin, *Power Shift in Remote Indigenous Communities* (Pembina Institute, 2019), 14-15. <https://www.pembina.org/reports/power-shift-indigenous-communities.pdf>

Photo: David Dodge, Green Energy Futures; Three Nations Energy Solar, Fort Chipewyan, AB, Nov. 17, 2020.



Collaboration with rights-holders

There are no active working groups or consultations on diesel reduction for remote communities or provincial support for local energy initiatives.

ATCO's activities to support remote communities includes meaningfully engaging with Indigenous groups and forming partnerships with First Nations, hiring Indigenous summer students, gathering input from the utility's Indigenous Advisory Board.¹⁶¹ ATCO has partnered with one of Alberta's remote communities, Fort Chipewyan, on a large solar installation to reduce diesel.



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Plans and strategies

The Alberta government released its Emissions Reduction and Energy Development Plan in 2024, which details its overall approach to tackling emissions across the province. The plan does not mention diesel reduction targets or strategies though it does identify geothermal energy as a potential power source for enhancing energy security and community resiliency in Indigenous and remote communities.¹⁶²

ATCO has not published any specific strategies, targets, or long-term resource plans to support diesel reduction in remote Indigenous communities but says that it is committed to working with diesel-dependent communities to offset diesel with emissions-free sources.¹⁶³



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¹⁶¹ ATCO, *ATCO Sustainability Report* (2023), 35. <https://www.atco.com/content/dam/web/our-commitment/sustainability/2023-sustainability-report.pdf>

¹⁶² Government of Alberta, *Alberta Emissions Reduction and Energy Development Plan* (2024), 36. <https://www.alberta.ca/emissions-reduction-and-energy-development-plan>

¹⁶³ *ATCO Sustainability Report*, 20.



Community project funding and financing

Through the Alberta Indigenous Clean Energy Initiative, established by the federal government and the province, Indigenous communities can apply for funding for renewable energy generation and energy efficiency projects. The funding can be used to support any stage of a project and can help with building capacity, identifying community priorities, and exploring partnership opportunities, among other activities.¹⁶⁴

Indigenous communities can leverage additional funding from the province. The Aboriginal Business Investment Fund will cover part or all the capital costs for economic development projects that are owned by Indigenous communities and ready for construction (grants range from \$150,000 to \$750,000).¹⁶⁵ In addition, the Indigenous Reconciliation Initiative provides funding for Indigenous-led economic development and cultural projects. Eligible projects can receive a maximum of \$100,000 towards capacity building projects intending to enhance strategic planning, or governance development.¹⁶⁶

There are also opportunities for guaranteed financing through the Alberta Indigenous Opportunities Corporation, which is a provincial corporation that offers government-backstopped loan guarantees for Indigenous groups seeking to source funding for business ventures, infrastructure investments, and cultural support.¹⁶⁷ In 2024–2025, the corporation is able to guarantee loans to a combined total of \$3 billion, with the minimum and maximum available for a project being \$20 million and \$250 million, respectively.¹⁶⁸



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¹⁶⁴ Prairies Economic Development Canada, “Alberta Indigenous Clean Energy Initiative.”

<https://www.canada.ca/en/prairies-economic-development/services/funding/alberta-indigenous-clean-energy-initiative.html>

¹⁶⁵ Government of Alberta, “Aboriginal Business Investment Fund.” <https://www.alberta.ca/aboriginal-business-investment-fund>

¹⁶⁶ Government of Alberta, “Indigenous Reconciliation Initiative - Economic Stream.” <https://www.alberta.ca/indigenous-reconciliation-initiative-economic-stream>

¹⁶⁷ Alberta Indigenous Opportunities Corporation, *Mandate and Roles Document* (2022). <https://theaioc.com/wp-content/uploads/2023/05/2022-02-11-AIOC-Mandate-and-Roles-Documents.pdf>

¹⁶⁸ Alberta Indigenous Opportunities Corporation, *AIOC Annual Report 2023-24* (2024), 7. <https://theaioc.com/wp-content/uploads/2024/07/AIOC-11503-2023-24-NoSignatures.pdf>



Programs for efficient buildings

Through the Alberta Indigenous Clean Energy Initiative, Indigenous communities can design and develop energy efficiency projects, but Alberta does not offer any specific incentives for energy efficient retrofits.

The utility ATCO has a net metering program it calls “micro-generation” that allows consumers to generate small amounts of clean electricity to meet their needs, but the program is not tailored to remote or Indigenous communities.¹⁶⁹



Few programs for efficient buildings, and none tailored to remote communities.

¹⁶⁹ ATCO, “Micro-Generation.” <https://electric.atco.com/en-ca/products-services-rates/new-services-changes/micro-generation.html>



Independent power producer (IPP) market

ATCO does not have an IPP policy for remote communities. Instead, for projects with a capacity up to 5 MW, ATCO follows the Alberta government's small-scale generation policy. Under the policy, the Alberta Electricity System Operator promises to pay the small-scale power producer the wholesale market price for each hour in the previous monthly settlement period, with the final payment provided two months after electricity delivery.^{170,171}

The small-scale generation policy offers remote projects the same price as grid-connected projects, which often ends up being significantly lower than what is needed to make renewable projects in remote communities financially viable.

In addition, having fluctuating purchase rates creates uncertainty around the revenue stream of financed projects, especially since the market for electricity in remote communities is significantly smaller than it is for grid-connected communities. As a result, remote communities pursuing clean energy development face difficulty creating a compelling business case and will have to take on a high level of financial risk.



No market tailored to remote communities; the general market does not support the financial viability of community energy projects.

¹⁷⁰ Government of Alberta, *Small Scale Generation Regulation*, Alta. Reg. 194/2018. https://kings-printer.alberta.ca/1266.cfm?page=2018_194.cfm&leg_type=Regs&isbncln=9780779846337c

¹⁷¹ Alberta Electricity System Operator, *Power Pool Financial Settlement 2024-2025 Settlement Dates* (2024), 1. <https://www.aeso.ca/market/market-participation/settlement-credit/>

Community outcomes

Alberta does not have many remote communities, and diesel reduction in these communities has not been a priority for the provincial government. Much of the clean energy progress in remote communities was made under a previous government, which had several programs to fund Indigenous-led community energy plans, retrofits, and renewable energy development. These programs were not renewed in 2019.

First Nations in Alberta have used partnerships to advance clean energy. In 2020, Three Nations Energy, an Indigenous-owned energy company, and ATCO completed the Fort Chipewyan solar farm, which at the time was the largest off-grid solar farm in Canada. The project includes a 2,200 kW solar array, owned by Three Nations Energy, and integrated into an isolated microgrid, and a 1,700 kWh battery storage system and microgrid control system owned by ATCO. The project is expected to produce 25% of the community's electricity.¹⁷²

Priorities for action

Alberta would benefit from consistent, long-term, and focused policies to support diesel-reducing partnerships between First Nations and industry players. As a jurisdiction with a deregulated market and restrictions on renewable energy development, comprehensive policies are needed to make diesel-reducing projects easier to execute. These policies would need to address barriers in access to capital and create opportunities for long-term contracts for clean power generation to reduce diesel.

The Alberta government should work with First Nations to develop a long-term vision for diesel reduction and a strategy for building a viable market for diesel-reducing projects.



¹⁷² ATCO, "Fort Chipewyan Off-Grid Solar and Storage," August 26, 2019. <https://electric.atco.com/en-ca/community/projects/fort-chipewyan-off-grid-solar.html>

Photo: David Dodge, Green Energy Futures, Three Nations Energy Solar- Fort Chipewyan, AB.