

Is Alberta's renewable energy industry being treated fairly?

How to assess the outcome of the Alberta Utilities Commission inquiry into the ongoing economic, orderly and efficient development of electricity generation

by Jason Wang, Courtney Smith, and Scott MacDougall | February 2024

Summary

On February 29, 2024, Alberta's seven-month moratorium on renewable energy development is scheduled to end and the Alberta Utilities Commission (AUC) is expected to make recommendations to the Government of Alberta about land impact issues including land use, reclamation and "pristine viewscapes." While the Pembina Institute supports the responsible development of natural resources, we hold that this unprecedented moratorium itself unfairly targeted the renewable energy industry. Our research shows that the renewable energy sector is already being held to stricter standards than other land uses that have a larger impact on the same issues that were cited for calling the moratorium. Further, the Government of Alberta could have held an inquiry into rules and regulations of the sector while continuing to process applications, as they have done for other parts of the energy sector.

We will consider fairness of the outcomes through the following seven criteria: companies' ability to develop projects with willing landowners, reclamation security requirements, the municipal government approval and stakeholder intervention process, "pristine viewscapes," access to lands held by the Crown in Right of Alberta, access to the grid and access to Alberta's open market.

We are looking forward to seeing evidence that the renewable energy sector, landowners, and communities who wish to benefit from this form of economic development are being treated consistently and fairly, and are not subjected to stricter rules than other land uses that have a demonstrably larger impact on the values mentioned. A fair outcome is critical for all Albertans to be able to maximize the opportunities in the global transition to a clean economy.

Context

Wind and solar has been a fast-growing industry in Alberta with the province hosting over 90% of Canada's wind, solar, and energy storage additions in 2023. This growth has been supported by the low cost of electricity generation from wind and solar and declining equipment costs lower than new gas plants in many cases² — and significant interest from large commercial consumers that require clean electricity. Since 2019, corporate power purchase agreements have brought in \$6.4 billion in wind and solar investment, creating more than 6,000 jobs.³ These investments and the growth of renewable energy sources, including geothermal, is critical for meeting increasing electricity demand, ensuring grid reliability and affordability, and achieving a competitive net-zero economy in Alberta.

Despite these benefits, Alberta announced an unprecedented seven-month pause on renewable energy development in August 2023, citing concerns around reclamation security, agricultural land use, system reliability, and impacts on "pristine viewscapes." The announcement came as a shock to many developers, municipalities, First Nations, and investors, among others.

The Pembina Institute holds that the moratorium unfairly targets the renewable energy sector and unfairly blocks landowners from engaging in economic activity on their land. There are already measures in place for the responsible development of renewable energy in Alberta and, where improvements can be made, these could have been undertaken through a robust, timely and transparent process — as has been done numerous times in the history of the Alberta energy sector — without sending a shockwave of investment uncertainty through the entire industry.

The government and system operator are also now considering other unprecedented barriers on renewable energy, such as allowing congestion on transmission lines, 4 limiting low-cost, fuelsaving renewable electricity generation, and forcing renewables developers to pay for new transmission infrastructure or grid reliability services. For other sectors, in contrast, the government has helped to first build infrastructure such as pipelines, roads, and internet cables to where it was needed.

Further, there are other resource extraction activities in Alberta that have a significantly greater impact on land use and reclamation that have raised substantial landowner concerns, with major outstanding liabilities that the provincial government is failing to address. For example, the Auditor General of Alberta has noted that oil and gas liability management needs substantial reform, but this has yet to see sufficient action by the Alberta Energy Regulator (AER).5

The moratorium has negatively impacted the renewable energy sector, affecting at least 118 projects representing at least \$33 billion of investment, 6 creating uncertainty in the market and encouraging renewable energy developers to take their investments elsewhere. This comes at a time when every other Canadian provincial government (except PEI) has announced, or is already implementing, plans for major new renewable energy development in a bid to draw developers and investors alike to those marketplaces.

It is appropriate for the Government of Alberta to review rules concerning renewable energy development (as it should for all industries), but the outcomes from this process should be fair and consistent with how Alberta treats other industrial sectors. A fair outcome would be that the renewable energy sector is not held to punitive standards that exceed the standards applied to other industries. A fair outcome would ensure that Alberta maintains its competitive advantage in scaling up low-cost renewable energy on the grid.

Criteria for assessing the outcomes of the AUC inquiry into renewable energy development

When the renewable energy moratorium ends (scheduled for February 29, 2024) the Pembina Institute will evaluate if the Government of Alberta made reasonable changes. We will consider the fairness of the outcomes in relation to management of other sectors, such as the oil and gas sector, which has a demonstrably larger impact on the values of concern. We will view changes through the following criteria:

Criteria 1: Companies' ability to develop projects with willing landowners

Fair outcome:

Industrial-scale renewable energy projects are not excluded from certain classes of private land while other types of industrial-scale energy development continue to be permitted even without the consent of landowners.

Notes: Currently, landowners must agree to develop renewable energy on their land whereas landowners can be compelled to provide surface access to oil and gas companies to drill and produce oil and gas. As well, conventional oil and gas, which is allowed on all classes of agricultural land, is 125 times more land intensive than wind and solar development.⁷

Criteria 2: Reclamation security requirements

Fair outcomes:

Standards of reclamation for new renewable energy projects are reasonable; for example, requiring a proportion of reclamation costs upfront and more as the project nears end of life.

• Reclamation standards seek reclamation outcomes equivalent to conventional oil and gas, but use science-based assessments of the cost to reclaim to that end-point.

Notes: Renewable energy proponents are currently accountable to meet the reclamation requirements specified under contract with the landowner. Oil and gas companies are required to meet provincial regulatory requirements that do not include security and offer no recourse to landowners if the company ceases production but does not secure the wellbore and reclaim the site.

Criteria 3: Municipal government approval and objections from adjacent landowners, corporate interests and members of the public

Fair outcomes:

- Municipal government approval is not required (as is the case for other energy sectors) and the opportunity for stakeholders to intervene in the regulatory process is the same as other parts of the energy sector.
- Developers work with adjacent landowners, members of the public, corporate entities, and local municipalities to resolve objections to the project prior to seeking provincial regulatory approval.

Criteria 4: Pristine viewscapes

Fair outcome:

Any new "pristine viewscapes" requirement that is introduced applies to all largescale developments (industrial, commercial, residential or agricultural).

Criteria 5: Access to lands held by the Crown in Right of Alberta

Fair outcomes:

- Development on public lands is allowed.
- All developments, including oil and gas, are subject to consistent wildlife directives and equal protection of habitats.

Notes: Renewable energy cannot currently be developed on Crown land; the projects that have been developed in recent years and those in the queue are exclusively on private land.

Criteria 6: Access to the grid

Fair outcome:

Development and infrastructure fees do not disrupt and unfairly impact cost structures and hurt investments for renewables projects relative to fossil generation. Notes: Renewable energy lowers the overall total cost of electricity for consumers, even with the upfront cost of the connecting infrastructure. Transmission wires should be seen as public infrastructure, like roads, that enables economic growth, with more public funding from both the federal and provincial governments.8

Criteria 7: Access to Alberta's unique open market

Fair outcomes:

- Any market changes do not single out renewable energy.
- Any revenue opportunities for providing grid services should be technology-neutral and allow fair, efficient competition.

Notes: The costs for performing grid services should not be placed on renewable energy projects, as the government has suggested. Facilities that provide grid services, such as energy storage and emergency gas peakers, should have the opportunity to generate revenue. 10

Other jurisdictions have deployed innovations such as demand response, virtual power plants, grid-forming inverters, and synchronous condensers. 11

Conclusion

By considering these criteria, we aim to understand if Alberta remains a highly attractive place for renewable energy investment after the moratorium concludes and any new rules are announced. These criteria can also be used to assess whether there is evidence of unfair treatment of the renewable energy sector compared to other land uses.

The inconsistency between the treatment of the renewable energy sector and the oil and gas sector is especially concerning given renewable energy lowers costs to consumers, ¹² generates stable revenues for landowners and municipalities, creates job opportunities, and is a critical solution for addressing the climate crisis. This contrasts with the oil and gas sector's troubling legacy of unfunded liabilities, and orphaned and abandoned assets. The Alberta government should make it a priority to improve its rules for the sectors with the largest issues, which need the most substantial reforms.

The Pembina Institute believes that the moratorium was unnecessary while a review was underway and that the renewable energy sector has therefore received unfair treatment. The seven-month halt has had a negative economic impact and created undue uncertainty in the market. Timely resolution of the inquiry is critical. Ending the moratorium is of course necessary, but not sufficient. Clear statements of fair outcomes from the inquiry are also urgently needed, or else the impacts of unfair treatment and investment uncertainties created by the Alberta government will limit opportunities for renewables, and the communities and investors who want them.

Alberta has entered a period of instability in oil and gas activity with changes in global demand and increasingly severe climate-related shocks impacting weather, water availability, and agriculture. Alberta landowners and rural municipalities will need more — not fewer opportunities and choices for economic development in the coming years.

The Pembina Institute acknowledges that the work we steward and those we serve span across many Nations. We respectfully acknowledge the space our organization is headquartered in as the traditional and ancestral territories of the Blackfoot Confederacy, comprised of the bands Siksika, Piikani, and Kainai, the İyârhe Nakoda Nations, including the bands of Goodstoney, Chiniki, and Bearspaw, and the Tsuut'ina Dené. These Lands are also home to the Métis Nation of Alberta — Region 3 whose Peoples have deep relationships with the Land.

These acknowledgements are some of the beginning steps on a journey of several generations. We share them in the spirit of truth, justice, reconciliation, and to contribute to a more equitable and inclusive future for all of society.

¹ Canadian Renewable Energy Association, "News release: New 2023 data shows 11.2% growth for wind, solar & energy storage," January 31, 2024. https://renewablesassociation.ca/news-release-new-2023-data-shows-11-2-growth-for-wind-solar-energy-storage/

² Clean Energy Canada, *A Renewables Powerhouse* (2023). https://cleanenergycanada.org/report/a-renewables-powerhouse/

³ Business Renewables Centre Canada, "Deal Tracker – Q4 2023." https://businessrenewables.ca/resource/brc-canada-renewables-review-2023-0

⁴ Congestion results when there is not enough capacity on a transmission line to carry electricity. The current Transmission Regulation requires any generated electricity to be delivered. The Government consulted stakeholders in November 2023 on allowing congestion in the transmission system, which would put this promise at risk. Alberta Ministry of Affordability and Utilities, *Transmission Policy Review: Delivering the Electricity of Tomorrow* (2023), 14. Accessed from https://ablawg.ca/wp-content/uploads/2023/11/Transmission-Policy-Green-Paper-2023.pdf

⁵ Shaun Fluker, Drew Yewchuk, and Martin Olszynski, "Auditor General Updates Recommendations Unaddressed by the AER on the Effectiveness of Regulating Closure Liabilities in Conventional (Non-Oil Sands) Oil and Gas," University of Calgary Faculty of Law Blog, December 22, 2023. https://ablawg.ca/2023/12/22/auditor-general-updates-recommendations-unaddressed-by-the-aer-on-the-effectiveness-of-regulating-closure-liabilities-in-conventional-non-oil-sands-oil-and-gas/

⁶ Jason Wang and Will Noel, *Investment Impact of Alberta's Renewable Energy Moratorium* (Pembina Institute, 2023), 2. https://www.pembina.org/pub/investment-impact-albertas-renewable-energy-moratorium

⁷ Jason Wang, Simon Dyer, Ecojustice and Big Spruce Law, *Alberta Utilities Commission Proceeding 28501: The Pembina Institute's Written Submission* (Pembina Institute, 2023), 10. https://www.pembina.org/reports/2023-11-22-auc-28501-submission-of-pembina-institute.pdf

⁸ Jason Wang and Karambir Singh, *Transmission Policy in Alberta* (Pembina Institute, 2023), 3. https://www.pembina.org/pub/transmission-policy-alberta

⁹ Transmission Policy Review: Delivering the Electricity of Tomorrow, 19.

¹⁰ Further, the main cause of recent increases in grid service costs has been the constrained supply and high concentration of supply ownership. *Transmission Policy in Alberta*, 4-5.

¹¹ Demand response encourages customers to adjust their energy use depending on when electricity systems are experiencing high or low demand. Virtual power plants allow small-scale energy resources, such as residential solar and storage systems, to coordinate with each other and the grid to provide grid-scale reliability services. Gridforming inverters and synchronous condensers allow wind and solar to support grid reliability by responding to supply and demand conditions.

¹² Decarbonizing the grid could save Albertans \$600 per year in household electricity costs. Will Noel and Binnu Jeyakumar, *Zeroing In: Pathways to an affordable net-zero grid in Alberta* (Pembina Institute, 2023), 41. https://www.pembina.org/pub/zeroing-in