

Enabling Community Renewable Energy Development Through Aggregation – Summary Document

Municipalities in Alberta can pool their energy demand or supply to enter the renewable energy market. This practice is called aggregation. Together with a few additional measures, Alberta communities can make aggregation work for them to reduce their emissions and their energy costs.

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This document provides an overview of the research report; *Enabling Community Renewable Energy Development Through Aggregation*. This report was written in partnership between the Pembina Institute and the Municipal Climate Change Action Centre.

About the Pembina Institute

The Pembina Institute is a national non-partisan think tank that advocates for strong, effective policies to support Canada's clean energy transition. We employ multi-faceted and highly collaborative approaches to change. Producing credible, evidence-based research and analysis, we consult directly with organizations to design and implement clean energy solutions, and convene diverse sets of stakeholders to identify and move toward common solutions.

About the Municipal Climate Change Action Centre

The Municipal Climate Change Action Centre (Action Centre) was founded in 2009 as a collaborative initiative of Alberta Municipalities, Rural Municipalities of Alberta, and the Government of Alberta.

The Action Centre delivers funding, technical assistance, and education to help Alberta municipalities and community related organizations advance actions that lower energy costs, reduce greenhouse gas emissions, and improve climate resilience.

Why do communities want to buy into the boom?

Communities want to buy into renewable energy for many of the same reasons that attract large businesses and institutions.

For one, they can save money in the long run by securing non-emitting power at set prices under long-term contracts. This is especially true when considering the scheduled carbon tax hikes which will apply to gas-fired power, which still dominates the Alberta power pool. Buying renewable energy through these long-term contracts provides protection from rising electricity costs. In addition, the procurement of renewable power has proven to be cost competitive today.

For communities who want to have wind or solar plants built in their community, there is also the benefit of some economic activity and a type of energy independence and resiliency.

Many communities have also made commitments to reduce their greenhouse gas emissions, as part of the global effort to tackle climate change. Renewable energy is seen as an important way to meet that commitment.

Enabling Community Renewable Energy Development Through Aggregation

Alberta is amid a renewable energy boom with more than 2.2 gigawatts of renewable energy deals in place by the end of 2022 – enough to supply the energy needs of more than a million households. The problem for the more modestly-sized communities or other organizations that want to participate in the boom is that the individual wind and solar projects being built keep getting bigger – and increasingly out of reach for smaller budgets.

This challenge appears from both sides of the procurement coin: as generators when community projects are individually too small to attract a large buyer; and as buyers when a community's electricity consumption is too small, on its own, to cost-effectively buy anything.

What is aggregation and why does it work?

Pooling the energy demand or supply of several municipalities, known as aggregation, presents a unique avenue to address the barriers brought on by scale. Stacking the power demand of several smaller municipalities could make them an attractive partner for renewable energy developers. In a similar manner, combining the generation capability of several smaller community energy projects, or pooling funds to develop a single larger project, may entice potential buyers.

What is the Level of Interest Among Municipalities in Renewable Energy and in Municipal Aggregation?

Of the 29 municipalities that were surveyed for this report, 18 believe that renewable energy is one potential solution in achieving their climate goals, with nine stating that it will be very important. Half of the 36 respondents indicated interest in pursuing aggregation to achieve scale, with another 13 looking for further information before taking a stance.

What Else Needs to Happen to Make Aggregation Work?

Municipal staff pointed out ways to make it easier for them to participate in aggregation, including:

- educate community leaders and decision-makers to challenge some of the historical assumptions about renewable energy,
- community-oriented webinars and information-sharing hubs are needed to link communities with knowledge and experts,
- create or promote a dedicated aggregator to streamline the aggregation process for smaller communities,
- pair several smaller municipalities with a larger “anchor” community to open access to deals with greater economies of scale.