PEMBINA Institute

Demand-Side Management Programs that Work in Alberta

Reflections from Alberta's retrofit sector

Laura Hughes, Kari Hyde

June 2026

Introduction

A robust building retrofit sector maintains the usability of our homes and businesses, supports affordability, ensuring our homes and businesses are cost-effective to heat, cool and insure, and provides quality, local jobs. Across Canada and globally, programs that support energy efficiency and building upgrades are standard tools in retrofits. In Alberta, similar programs exist but they have not yet reached the consistency or scale needed to influence most retrofit decisions.

These programs, when administered through the utility system, are known as demand-side management (DSM). In simple terms, this means helping buildings use less energy, use energy more efficiently, or shift when energy is used. This makes the energy available to the utility for higher value uses, so programs typically include financial support to make those changes easier to carry out.

The value of retrofit-focused DSM programs

When structured effectively, retrofit-focused DSM programs deliver value on multiple fronts.

For the **electricity system**, these programs reduce overall demand, help manage peak periods, and defer the need for costly infrastructure upgrades. In many cases, improving how energy is used is more cost-effective than expanding the system to meet higher demand.

For **buildings and their occupants**, these programs support upgrades that improve comfort, performance, and long-term operating costs. They contribute to safer, more resilient homes and workplaces.

For **building owners and the retrofit industry**, they create a more stable and predictable environment for investment. Projects become easier to plan and finance, and a consistent pipeline of work supports workforce development and job growth.

These benefits are well established in jurisdictions where DSM is delivered at scale.

How demand-side management supports retrofits in other provinces

In jurisdictions where utilities administer and deliver DSM, programs operate as ongoing services rather than short-term funding windows. This predictability allows retrofits to be planned rather than pursued opportunistically.

Support is typically available at multiple stages of a project. Funding may be provided to assess retrofit opportunities, develop a plan, and carry out upgrades. Incentives are structured to meaningfully reduce upfront costs, making it easier to move projects forward. In some cases, programs also provide opportunities to reduce operating costs by shifting when energy is used.

These investment programs are not only designed to support retrofit activity; they also help utilities manage the performance and cost of the electricity system. By reducing overall demand or shifting when energy is used, these programs help utilities manage peak demand, defer or avoid infrastructure upgrades, and improve how existing grid assets are used. In many cases, supporting energy savings is less costly than building generation or expanding the system to meet higher peaks.

The result is a model where the needs of the electricity system and the needs of building owners are aligned. Retrofit projects become easier for building owners to justify and deliver, while utilities are able to manage cost and reliability more effectively.

Programs offered by BC Hydro provide one example of how this approach is structured. For multi-unit residential buildings, support is available from early-stage assessments through to implementation, with funding and guidance designed to reduce uncertainty and help projects move forward.[1] This can influence retrofit decisions.

How this could this work in Alberta

To explore how this could work in Alberta, the Pembina Institute spoke with contractors, building managers, and industry organizations to assess familiarity with DSM, share examples from other jurisdictions, and gather reactions to these programs. The purpose was to understand how these programs are perceived, what resonates and what would make them relevant in the Alberta context. What emerged was a clearer understanding of the conditions required for participation from the building sector.

[1] BC Hydro, "Multi-Unit Residential Building Retrofit Program." https://www.bchydro.com/powersmart/stratas-housing-providers/condo-rental-building/multi-unit-residential-building-retrofit-program.html

Existing programs have not shifted the market

Alberta is not starting from zero. Programs such as the Clean Energy Improvement Program and Energy Savings for Business have supported energy efficiency and retrofit activity in homes and businesses across the province.[2] These programs help advance individual projects and build awareness of what is possible. However, they do not provide the scope or scale to facilitate widespread uptake.

Participants described the need for a consistent, market-based experience. Funding is often limited and time-bound, creating uncertainty about whether support will be available when projects are ready to move forward. Program requirements can be complex and difficult to navigate within existing operational constraints. In many cases, the level of financial support felt insufficient in reducing upfront costs. As a result, most retrofit decisions in Alberta continue to be made without relying on program support.

What we heard from Alberta's retrofit sector

This starting point shapes how demand-side management is understood in Alberta today. Across conversations with building managers, contractors, and industry and economic development organizations, one theme stood out clearly. The gap is not a lack of interest in improving building performance. It is a lack of familiarity with how these programs work in practice and how they apply to day-to-day work.

As one participant noted, these programs have not yet been seen operating at scale in Alberta. Without that reference point, it is difficult to understand how they would fit into existing projects, budgets, and workflows.

This uncertainty does not translate into resistance. Market actors spoke about these programs from a largely neutral perspective. They asked questions and weighed trade-offs, considering how these approaches might apply to their work. And they were able to articulate what would make these programs relevant and worth engaging with in the Alberta context.

Financial value needs to be clear and credible

Participants consistently emphasized the importance of economic outcomes. Decisions are made based on financial considerations, and programs need to clearly demonstrate how they affect project costs, operating expenses, and long-term value. Framing these programs as practical

[2] Alberta Municipalities, "Clean Energy Improvement Program." https://ceip.abmunis.ca/
Emissions Reduction Alberta, "Energy Savings for Business." https://www.eralberta.ca/energy-savings-for-business/

tools to support cost management and investment decisions aligns with how retrofit projects are evaluated.

When the financial impact is clear and credible, programs become easier to incorporate into business cases.

Trust is built through people and experience

Participants highlighted that the messenger matters. Information delivered through peers — contractors, building managers, and others working in similar roles — carries more weight than general program messaging. This is particularly important in a context where these types of programs have not yet been widely implemented.

Consistency and transparency in program design and delivery are also critical. Clear expectations, stable program structures, and open communication about both benefits and trade-offs help build confidence over time.

Relevance depends on clarity and familiarity

Programs are more likely to be considered when they are presented in ways that connect directly to existing work. Participants noted the importance of clear examples that show how these approaches have been applied in similar buildings or projects. Familiar language, grounded in day-to-day experience, makes it easier to understand how these programs fit into existing workflows.

Avoiding overly technical terminology and focusing on practical application helps bridge the gap between concept and use.

Performance and durability remain central

Participants also emphasized the importance of delivering high-quality work. Durability, reliability, and long-term performance are central to how retrofit decisions are made. Programs that support these outcomes — by enabling better upgrades and reducing financial barriers — align well with existing priorities. Framing DSM in terms of performance, cost stability, and long-term value reflects how these decisions are evaluated in practice.

These principles apply across different roles within the retrofit sector, though they show up in slightly different ways. Building managers emphasized the need for simplicity and alignment with existing responsibilities. Contractors focused on cost transparency, long-term performance, and maintaining high standards of work. Industry and economic development organizations pointed to the broader opportunity to support local investment and economic activity.

Taken together, these perspectives reinforce a consistent message. Programs are most effective when they reflect how work is already being done, rather than requiring market actors to adapt to them.

From opportunity to implementation

The absence of utility-led demand-side management programs in Alberta presents a clear opportunity. The retrofit sector is already positioned to act. Contractors, building managers, and industry organizations are actively delivering projects and making decisions that shape energy use across the province. Programs that support this work need to be designed to reflect how these actors operate and how decisions are made in practice.

When programs align with financial priorities, reduce complexity, and demonstrate real-world results, they become easier to adopt and easier to support. Over time, seeing these programs operate in practice builds confidence and reinforces their value. In that context, demand for these programs does not need to be created — it develops as the conditions for participation are put in place.

The Pembina Institute wishes to thank the Alberta Ecotrust Foundation for their generous support.