

## CHALLENGE STATEMENT #8

# Empowering consumers to exercise choice and meet their energy needs simply and economically

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### What is the systemic barrier?

Consumers in Alberta lack effective tools and incentives to manage their electricity bills. Depending on the type of consumer, electricity bills are typically made up of one or both of the following components:

- 1) total electricity consumed over a period of time (consumption,) and
- 2) the maximum amount of electricity they need to power their home or business at any given moment (demand.)

These components impact different customers' electricity bills in different ways.

Residential consumers can offset or reduce a portion of their bill (consumption) if they can afford to install solar panels or high-efficiency appliances. However, these and other energy efficiency approaches may have limited impact on overall bill cost, as fixed costs (e.g. fees for distribution, local access, admin, etc.) can make up a significant portion of these bills. Rural and remote customers may pay even more than their urban counterparts for these fixed and variable fees, as some are calculated based on the distance power has to travel to reach the customer and directly influenced by the number of customers in that region.

Industrial and commercial customers have a few more tools to reduce their bills, given they may be charged based on a combination of consumption and demand, and may be able to participate in wholesale market services. However mechanisms currently available to these customers, including reducing peak demand or participating in [operating reserves](#) may not provide sufficient savings, or may require infeasible modifications to their business operations to meet the requirements for participation. Similarly to residential customers, installing behind the meter generation to provide more flexibility may not be feasible options due to space or cost constraints.

Finally, most customers in Alberta have low energy literacy. Alberta's electricity system is uniquely complex and current bill structures are confusing. If customers are even interested in understanding how to lower their bills through consumption and demand, there are few signposts to guide them on where to start.

## Why is this critical to achieving our vision?

At the heart of the changing electricity system in Alberta are changing customer expectations and needs. [Alberta's Electricity Future's vision](#) sees a future where customers are empowered to be as deeply (or as little) involved in all aspects of their interaction with electricity as they choose and where their proactiveness is rewarded with greater agency over what they pay for electricity. Because of advances in technology, the role of the customers, whether residential, commercial or industrial, is shifting from one of passive consumption to active participation. A simple example is customers who choose to sell self-generated electricity back onto the grid.

## What surface-level barriers are related to this systemic barrier?

Surface level barriers are often what actors see or experience as a result of a systemic barrier. Such barriers provide insights into areas that can be improved should the systemic barrier be resolved.

The following are examples of surface level-barriers related to consumers being deprived of the agency to materially affect their electricity costs:

- **Most residential customers in Alberta are paying an industry-accepted percentage for their electricity relative to their household income. However, the lowest income customers are paying a higher percentage and consequently experiencing a higher energy burden**
- **Opaque electricity services/options/bills make it difficult for consumers to make choices in their own greatest interest**
- **The current rate design does not incentivize consumers to use electricity efficiently or accurately reflect true system costs**
- **The lack of real-time metering limits rates structures and programs that can enable consumer choice and encourage behavioural changes**
- **The retail market's "rate of last resort" creates a pseudo-competitive market where offerings do not vary much in terms of overarching choice for customers.**
- **Customers who rent their homes or buildings may be limited in terms of what they can physically do to the building (i.e. energy efficiency improvements, solar installation, etc) to reduce their costs.**