

Demand Side Management in Alberta's Electricity and Natural Gas Distribution Systems

WHAT IS DEMAND SIDE MANAGEMENT?

- Demand response
- Energy efficiency
- Energy management practices
- Distributed generation
- Electricity storage
- Distributed energy resource management systems (DERMS)
- Voltage optimization
- Smart grid technology

CONSUMER BARRIERS TO DSM

- Busy people and organizations
- Limited awareness and access to information/expertise
- Upfront costs (despite positive return on investment)
- Split Incentives
- Missing price signals for demand response and other DSM benefits

DSM Investment Savings

\$1,200 \$1,000 \$800 \$ Millions \$600 \$400 \$200 -\$200 2019 2022 2023 2020 2027 202 2030 2040 204, 204, 2043

DSM INVESTMENTS VS. SAVINGS

DSM IN ALBERTA

- DSM ↑ competition and ↓ utility bills.
- DSM \uparrow demand flexibility and \checkmark price fluctuations.
- DSM ↓ emissions and supports CCUS, hydrogen and other emission reduction efforts.
- DSM attracts private investment and creates jobs across the province.

DSM increases economic competitiveness.

HOW ARE THESE BARRIERS ADDRESSED?

- DSM has been used in every province in Canada and state in the U.S. to reduce utility costs.
- DSM costs can be less than 1% of bills with a 7.5 to 1 return on program investment.

Source: Navigant Consulting, 2019-2038 Energy Efficiency and Small-Scale Renewables Potential Study, 2018.

The following organizations support the use of DSM in Alberta to help manage utility costs and contribute to the economic competitiveness of the province.

Add your logo and show your support for DSM in Alberta at <u>www.aeea.ca/contact</u>.

