# MUNICIPAL EFFICIENCY EXCELLENCE

Alberta Energy Efficiency Alliance Virtual Summit

May 19, 2021



A partnership of











#### **About the Action Centre**

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











### **Our Impact**



**355 participants** completed 673 projects



\$85.3M energy savings over projects lifetime



507,099 t of CO<sub>2</sub>e avoided over projects lifetime



20.5 MW installed solar energy capacity including 52,559 solar panels



**573 full time job years** created in energy efficiency and solar industries







## ALBERTA MUNICIPAL SOLAR PROGRAM

#### Funding 30 per cent

of equipment and installation costs

- Over 100 projects completed totaling 20 MW
- Est. \$1.47M annual energy savings
- Est. 12,627 tCO<sub>2</sub>e/year reduction



### Village of Carmangay: Ground Mount Solar

\$145,920

- 146 kW system at Carmangay Lift Station
- Most recent of 9 Alberta municipalities electrically netzero in their operations







## SOLAR FOR SCHOOLS PROGRAM

#### **Funding 50 per cent**

of equipment and installation costs

- Participation to date from 5 school authorities, more to come this summer
- Innovative student education component included in each project





### **Canmore Collegiate High School: Rooftop Solar**

\$80,976

- 97 kW system at Canmore Collegiate High School
- One of 4 systems installed across Canadian Rockies Regional Division No. 12







### MUNICIPAL COMMUNITY GENERATION CHALLENGE

- Delivered in partnership with Alberta Innovates
- Support municipalities with the development of innovative community scale renewable electricity projects and knowledge transfer across the province
- Three-stage application process ran during 2020
- Providing a total of \$6M in funding across two projects to cover a wide range of development activities until their completion in 2023



### **Town of Smoky Lake: Métis Crossing Solar Project**

### \$3,900,000

- 4.86 MW ground mount system at Métis Crossing
- Will be the most northern grid connected community generation solar project in Alberta





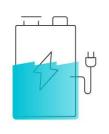
### Municipal District of Taber: RenuWell Project

### \$2,100,000

- 2 MW solar installed at two abandoned oil and gas sites
- Training 15 oil and gas workers to equip them for jobs in the renewable energy sector







## RECREATION ENERGY CONSERVATION PROGRAM

### Funding 75 per cent

of equipment and installation costs

- 145 completed and inprogress projects
- Participation from 22% of AB municipalities
- Est. 6,800 tCO<sub>2</sub>e/year reduction





### City of Leduc: Leduc Recreation Centre Lighting Retrofit

\$605,000

- Saves 726,000 kWh and \$80K annually
- Reduction of 413 tCO<sub>2</sub>e/year
- 55% GHG reduction from lighting, 8% reduction facility-wide







## MUNICIPAL ENERGY MANAGER PROGRAM

#### Funding 80 per cent

of annual salary values to a maximum of \$80,000 per year

- 22 MEMs hired representing 32 municipalities across Alberta
- Average GHG reduction goal of 5.3% against baseline
- 534 in-scope facilities



### Town of Banff: Municipal Energy Coordinator

**16%** (355 tCO<sub>2</sub>e)

**GHG** reduction achieved (est.)

- Inventory: 2,217 tCO<sub>2</sub>e (2019 as baseline)
- The Town of Banff aimed to reduce their emissions by 10% (220 tCO<sub>2</sub>e) but reduced emissions by 16% (355 tCO<sub>2</sub>e) against the baseline with Sally's help.







## ELECTRIC VEHICLES FOR MUNICIPALITIES PROGRAM

#### \$7,000 to \$14,000

per EV, stackable with federal funding for up to \$19,000 per EV

- Up to 30% for heavy-duty and non-road vehicles
- Feasibility studies
- 23 completed and in-progress projects
- EV savings calculator available at mccac.ca



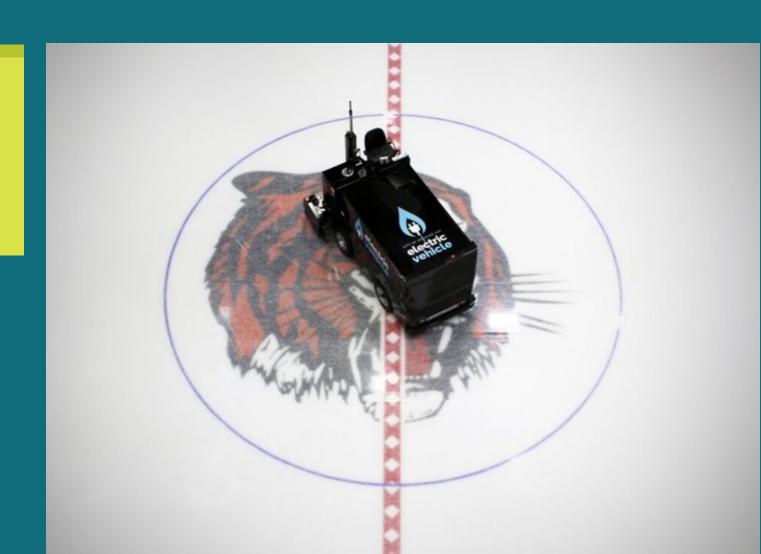


### City of Medicine Hat: Zamboni 450 EV

### \$100,000

- 80% fuel cost savings, 30% maintenance cost savings
- 66% GHG reduction even when charging via Alberta grid
- Improved indoor air quality





### **Programs and Services**





ALBERTA MUNICIPAL SOLAR PROGRAM



MUNICIPAL COMMUNITY
GENERATION CHALLENGE



CLIMATE ADAPTATION PROGRAM



MUNICIPAL ENERGY
MANAGER PROGRAM



ELECTRIC VEHICLES FOR MUNICIPALITIES PROGRAM



RECREATION ENERGY
CONSERVATION PROGRAM



ELECTRIC VEHICLE
CHARGING PROGRAM



SOLAR FOR SCHOOLS PROGRAM

### THANK YOU



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