



City of Edmonton Solar Electric Pilot Project - Overview & Results

2011 FCM Sustainable Communities
Conference

Pilot Project Context

- The Way Ahead - Edmonton's Strategic Plan
- The Way We Green - Environmental Sustainability Plan (one of six plans supporting The Way Ahead)
- Energy & Climate Goal within TWWG (accompanying Objectives and Policies)
- Funded from City's CO₂RE (Carbon Dioxide Reduction Edmonton)
- Related Initiatives - Renewable Energy Task Force & Green Building Strategy

Pilot Project Overview

- \$200,000 program - target of ½ residential & ½ commercial
- \$3 per installed watt up to \$9,000 per residential & \$18,000 per commercial installation
- Application period September 1 - 30 with installation by December 31, 2010
- Installations to meet minimum system requirements (e.g. orientation, grid connected)

Pilot Project Goals

- Increase the total number of PV installations in Edmonton
- Determine demand for renewable in the community / evaluate incentive
- Identify process barriers - permitting (development/building/electrical), net meters
- Identify capacity barriers - installers capacity and competency, material availability
- Determine community support

Pilot Project Results

17 residential installs

- Average size: 2.4 kW
- Total: 41.2 kW
- Average cost: ~ \$7.50 per watt
- Range: \$5.50 - \$7.80

5 commercial installs

- Average size - 6.8 kW
- Total - 34.2 kW
- Average cost ~ \$6.75 per watt
- Range: \$4.60 - \$9.10

Recommendations

- Develop into an on-going program
- Adjust incentive to maximize installs
- Streamline approval processes and increase City staff capacity
- Accommodate east/west orientation
- Allow more time for application and installation (more quotes)
- Provide stronger linkage to energy efficiency initiatives

Observations

- Solar access rights will become an issue
- Need to integrate with other sustainability policies to avoid conflict (e.g. Infill / Urban Forest)
- Solar PV may become competitive to grid electricity sooner than we expect - will we be ready?
- A segment of the public is ahead of the sustainability wave





















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