Community Energy Leadership Program (CELP)
Stories of Success

City of Kamloops
WEST HIGHLANDS COMMUNITY CENTRE SOLAR PROJECT

Total Project Cost: $100,738.21	**Energy savings**: 299 GJ/year
Total CELP funding support: $30,855	**GHG reductions:** 14.88 tonnes Co2-e

Summary of Project: *The City of Kamloops has installed a 24 kW solar PV (photovoltaic) array on the roof of the renovated West Highlands Community Centre.*

Partners:
Michael Doll, B.A. Urban Geography, Bachelor of Landscape Architecture, Parks Planner and Sustainability Supervisor, City of Kamloops. Mr. Doll is the Project Owner of the overall West Highlands Park redevelopment project.

Matt Kachel, AScT, Dipi.T, Capital Projects Supervisor, City of Kamloops. Matt served as the City's Project Manager for the overall West Highlands Park project and is responsible for both design and construction delivery.

Glen Cheetham, B.A., Sustainability Services Supervisor, City of Kamloops. Glen coordinated the internal/external funding of the Solar PV Array project and assisted Matt Kachel with the energy management components of the project. Glen will lead the development of the City's public engagement strategies around the solar project in support of the Sustainable Kamloops Plan and Corporate Energy and Emissions Management Plan.

Mr. Ben Giudici, P.Eng, Riverside Energy Systems, was contracted to complete the design, supply and installation of the West Highlands Community Centre 24 kW solar system.

Background: The City of Kamloops is in south central British Columbia, located at the confluence of the two branches of the Thompson River near Kamloops Lake. With a population of 85,678 (2011), Kamloops is the fourth largest municipality in British Columbia outside of the lower mainland. It encompasses almost 30,000 hectares of land and stretches 25 km up the Thompson River valley across diverse landscapes. The City's corporate energy needs are supplied by electricity (62%), natural gas (26%), and gasoline/diesel (12%).

In accordance with specific targets in the City's Corporate Energy and Emissions Management Plan, the Solar PV Array Project will: a) reduce corporate electricity consumption and energy costs; b) increase alternative energy

production; c) increase building energy self-sufficiency; and d) position the City as a community leader in sustainable energy and emissions management.

"Kamloops is British Columbia's second-sunniest city with over 2,000 hours of sunshine annually."

Despite our surplus of sunshine, the uptake of solar system installations in our city has been modest.

The new solar PV array will be highly- visible and attract curiosity, creating opportunities for the City to engage nearby residents and park visitors on the benefits of renewable energy as well as the other featured sustainable initiatives at work in the West Highlands Park and Community Centre. Community project staff enjoyed strong support from City Council and administration. Community staff developed a business case and presented it to Council (at in-camera session as per terms of CELP application) a proposal to supplement the original funding for the solar component of the West Highlands Park renovation in order to a) leverage the CELP opportunity and to b) create a high impact demonstration of solar energy at work in our city.

Innovation: At the time of the CELP funding announcement, the project represented the largest solar installation in the history of Kamloops, and attracted a lot of interest from our local and regional media outlets. Shortly after the project announcement, other news stories emerged featuring other local solar installations including a larger private system as well as an innovative 'solar-compass' project proposed for Thompson Rivers University.

Once the City's solar installation is fully commissioned, there will be more press and communication featuring the new system and the benefits of renewable energy specifically and energy conservation generally.

Project Reflections: One challenge that had the potential to put the project at risk was the scale of 'mark ups' added to each layer of sub-contract making up the general contract. At one point these unanticipated mark-ups inflated the estimated project cost by more than 30%. Fortunately, in this case, the City was able to mitigate this additional cost exposure without impacting the project scope.

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