
CITY OF KELOWNA

MEMORANDUM

Date: April 23, 2008
File No.: 0970-08
To: City Manager
From: Civic Properties Manager
Subject: Community Action on Energy Efficiency, Phase 3 Partnership Agreement

RECOMMENDATION:

THAT Council endorse the Ministry of Energy Mines and Petroleum Resources (MEMPR) Energy Efficient Buildings Strategy;

AND THAT Council endorse the MEMPR energy performance improvement target to reduce energy consumption in 20% of existing buildings by an average of 14% by 2010.

BACKGROUND:

In April 2007, City of Kelowna's the Energy Management Committee entered a Partnership Agreement with the Fraser Basin Council (FBC) for a "Community Action on Energy Efficiency Pilot Project" promoting energy efficient buildings. Council had endorsed the application in early 2004. The FBC committed to provide a maximum of \$10,000 to support the costs of the project. The project deliverables included Council endorsement of MEMPR's *Energy Efficient Buildings Strategy* (see Annex 1) pursuant to the *Energy Efficient Buildings: A Plan for BC* and one of 5 possible energy efficient building strategy targets (see Annex 2), as well as the research and development needed to plan the achievement of that target.

The Pilot Project was designed to facilitate collaboration between City departments, between levels of government, and between the public and private sectors as well as energy utilities, to build shared expectations, commitments and outcomes.

Key deliverables now submitted included:

- the energy and environmental enhancements to the Mission Recreation Park Aquatic Centre endorsed by Council in early-2007
- the "Kelowna Sustainability Checklist" endorsed by Council in mid-2007
- the Energy/Carbon Management Plan for Civic Properties" to reduce greenhouse gas emissions in Civic Properties buildings by 20% in 2012 endorsed by Council on April 7, 2008

These deliverables demonstrate that Council has already approved tools to increase public awareness of sustainable building best practices, and to adopt and implement plans to achieve the selected energy efficient building strategy target. Endorsement of the MEMPR *Energy Efficient Buildings Strategy* and of the energy performance improvement target to reduce energy consumption



in 20% of existing buildings by an average of 14% by 2010 has already been put into practice and is now simply a housekeeping issue.

LEGAL/STATUTORY PROCEDURAL REQUIREMENTS:

All required deliverables under the Partnership Agreement with the Fraser Basin must be submitted by April 30, 2008, or the entire \$10,000 grant will be forfeited. The recommended Council resolutions in this report are the only outstanding deliverables.

FINANCIAL/BUDGETARY CONSIDERATIONS:

Most of the anticipated revenues from this agreement were committed to purchase consulting services from Willis Energy Services Ltd.

PERSONNEL IMPLICATIONS:

The project has benefited from several hundred hours of contribution by City staff, as well as the staff time and financial contributions of Fortis and Terasen.

Considerations that were not applicable to this report:

INTERNAL CIRCULATION TO:

LEGAL/STATUTORY AUTHORITY:


EXISTING POLICY:

TECHNICAL REQUIREMENTS:

EXTERNAL AGENCY/PUBLIC COMMENTS:

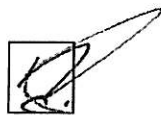
ALTERNATE RECOMMENDATION:

Submitted by:



R. Cleveland
Civic Properties Manager

Approved for Inclusion:



D. Graham, Director, Recreation, Parks & Cultural Services

Cc: Don Degen, Chair, Energy Management Committee
John Vos, Director, Works and Utilities
Paul Macklem, Acting Director, Planning and Development

ANNEX 1: Overview of related BC Energy Efficiency Initiatives (from www.saveenergynow.ca/news/07Apr04)

In the 2002 Energy Plan, the Province set out to update and expand its Energy Efficiency Act and work with the building industry, governments and others to improve energy efficiency in new and existing buildings. In September 2005, the Ministry of Energy, Mines and Petroleum Resources (MEMPR) released its strategy, *Energy Efficient Buildings: A Plan for BC*, along with the creation of a number of new energy efficiency and clean energy programs. The strategy includes energy efficiency targets for new and existing buildings in the year 2010, along with 10 policy and market measures to address barriers, including:

- Information, education and capacity building;
- Energy pricing and incentives;
- Voluntary measures; and,
- Energy Efficiency Act amendments for building components and equipment.

The notable MEMPR programs that have resulted from the strategy include the following:

- Community Action on Energy Efficiency Program (policy support and information for 29 local governments; including Kelowna);
- Market transformation program for windows (targeting Energy Star levels by 2009);
- Market transformation program for residential heating systems (Energy Star levels by 2008);
- First Nation and Remote Community Clean Energy program (10 communities);
- Energy Savings Plan (information and incentive program for home owners, low-income households, strata councils and small commercial buildings);
- Energy Performance Design Assistance for New Building Construction (for institutional, commercial, industrial and multi-unit residential buildings);
- Built Green BC and EnerGuide for New Homes Program (for new low-rise residential buildings);
- BOMA Green Buildings Foundation (for existing commercial and institutional buildings);
- Expansion of Green Buildings BC program (for government, education and health care buildings); and
- A number of industry training programs.

In partnership with over 70 public and private sector organizations, the strategy implemented a *market transformation* approach for achieving energy efficiency targets that aim to create a permanent social shift toward an energy conserver culture. The strategy will have the following impacts on the community:

- Reduce consumer energy costs by up to \$127 million in 2010 and \$474 million in 2020;
- Address energy costs in remote and First Nations communities;
- Create up to 52,000 person-years of skilled employment in BC between 2005 and 2020;
- Inject about \$2.5 billion into the economy in 2020 (\$660 million in 2010), with energy savings exceeding those investments by \$1.2 billion in 2020;
- Reduce electricity demand by up to 3,400 gigawatt-hours in 2020, equivalent to the demand of 340,000 homes;
- Reduce natural gas and fuel oil demand by up to 22 million gigajoules in 2020, equivalent to the demand of 200,000 homes; and,
- Reduce greenhouse gas emissions by up to 2.3 million tonnes in 2020, equivalent to the emissions created by 450,000 minivans.

The strategy has established a multiplicity of formal and informal relationships to extend the energy efficiency message to a very wide audience. This would simply not be possible without the partnership model established.

ANNEX 2: Energy Efficient Buildings Strategy Targets (from the Partnership Agreement)

The Agreement, pursuant to the *Energy Efficient Buildings: A Plan for BC*, requires that City Council endorse one of the five targets following:

Building Sector	Energy Efficiency Target
New single family and row house residential buildings	Achieve an EnerGuide for New Houses rating of 80 by 2010, reducing average energy consumption in new homes by 32%
New multi-unit residential buildings	Achieve energy performance of 25% better than Model National Energy Code for Building by 2010, reducing average energy consumption by 37%
Existing single family and row house residential buildings	Reduce the energy consumption in 12% of existing buildings by an average of 17% by 2010
Existing multi-unit residential buildings	Reduce the energy consumption in 15% of existing buildings by an average of 9% by 2010
New industrial, commercial and institutional buildings	Achieve energy performance 25% better than Model National Energy Code for Building by 2010 and reduce the average energy consumption by 20%
Existing industrial, commercial and institutional buildings	Reduce the energy consumption in 20% of existing buildings by an average of 14% by 2010.

The last two targets are relevant to the corporate building activity of the City of Kelowna. The focus of the former relates to new buildings and of the later relates to existing buildings. The final target was selected since it not only reduces energy consumption, but simultaneously builds carbon credits to help meet Kelowna's commitments under the BC Climate Action Charter. The Energy/Carbon Management Plan recently endorsed by Council substantially meets the intent of the selected target.