

REGIONAL DISTRICT OF NANAIMO

**BOARD MEETING
TUESDAY, MAY 22, 2007**

A D D E N D U M

PAGES

SCHEDULED STANDING, ADVISORY STANDING AND SELECT COMMITTEE REPORTS

2-6 **Climate Change Select Committee.** (All Directors – One Vote) (Report included for information)

That the Board endorse the Provincial Ministry of Energy, Mines and Petroleum Resources' Community Action on Energy Efficiency targets for new and existing buildings.

That the Board implement the Provincial Ministry of Energy, Mines and Petroleum Resources' Community Action on Energy Efficiency target for new industrial, commercial and institutional buildings to achieve energy performance 25% better than the Model National Energy Code for Buildings by 2010 and reduce the average energy consumption by 20%.

That the Board implement a policy that sets an energy efficiency target of at least 25% below Model National Energy Code for Buildings (MNECB) for new local government funded, owned, managed or occupied buildings.

That the Board pursue a comprehensive retrofit of at least 50% of existing local government owned and managed building floor space with energy efficiency improvements that provide simple paybacks of 7 years or less through energy savings; and

That the Board participate in a working group with MEMPR, the Ministry of Community Services and the Office of Housing and Construction Standards to implement incentive and/or regulatory measures to achieve one or more of the targets for new and existing buildings that align with the 2007 BC Energy Plan.



RDN	
CAO	GMF&IS
GMDS	GMR&PS
GMES	GMTS
MAY 14 2007	
SMCA	
CHAIR	BOARD

MEMORANDUM

TO: Paul Thorkelsson
General Manager, Development Services

DATE: May 10, 2007

FROM: Paul Thompson
Manager, Long Range Planning
Carey McIver, Manager, Solid Waste

FILE: 5290-05

SUBJECT: Community Action on Energy Efficiency Gold Pilot Project

PURPOSE

To seek approval from the Board to participate in the Ministry of Energy, Mines and Petroleum Resources' (MEMPR) Community Action on Energy Efficiency (CAEE) Gold Pilot Project.

BACKGROUND

In November 2006, the Regional District of Nanaimo (RDN) became a Project Partner in the MEMPR's CAEE program after a successful application for funding to support energy efficiency in community buildings. In return for a \$17,500 grant, staff agreed to consider and recommend that the Board endorse the MEMPR's Energy Efficient Buildings Strategy and implement at least one of the targets contained within it:

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 16% 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 grant provided through the CAEE program has been used to: review existing CAEE building energy efficiency policies and tools and consider region-wide implementation (particular attention is being paid to the sustainability checklist for new construction); estimate CAEE reductions; develop an implementation plan that includes full cost accounting; hold information sessions with RDN member municipalities and the development community; and develop a strategy for future involvement with the CAEE program.

On February 23, 2007, the MEMPR released another call for applications for the CAEE Gold funding program. Under this funding call the MEMPR agreed to grant between \$50,000 and \$200,000 per community provided the council or board commits to undertake the following:

1. Implement at least one of the targets in the provincial energy efficiency strategy for buildings;
2. Develop a work plan to achieve the target(s);
3. Implement a policy that sets an energy efficiency target of at least 25% below Model National Energy Code for Buildings (MNECB) for new local government funded, owned, managed or occupied buildings;
4. Pursue a comprehensive retrofit of at least 50% of existing local government owned and managed building floor space with energy efficiency improvements that provide simple paybacks of 7 years or less through energy savings; and,
5. Participate in a working group with MEMPR, the Ministry of Community Services and the Office of Housing and Construction Standards to implement incentive and /or regulatory measures to achieve one or more of targets for new and existing buildings that align with the 2007 BC Energy Plan.

A new application was submitted on March 16, 2007 requesting \$150,000 to undertake the following projects contained in the approved Green Buildings Action Plan and RDN Corporate Climate Change Plan:

CAEE Initiative	Project	Costs
Energy Efficiency Targets	Assessment of Green Buildings Opportunities	\$10,000
	Assessment of Green Buildings Barriers	\$25,000
	Assessment of Options for Retrofitting Existing Stock	\$15,000
	Assessment of options for encouraging Green Building construction	\$30,000
Targets for RDN Buildings	Feasibility Study for geothermal heating for Ravensong Aquatic Centre	\$20,000
	Design costs for Energy Efficient Addition to Administration Building (min. standard is 25% below MNEC)	\$20,000
Internal Staff Education	Linking CAEE Targets with existing programs (Regional Growth Strategy, State of Sustainability, and the RDN Strategic Plan)	\$10,000
	Hire Sustainability Coordinator 3.5 months earlier than planned	\$20,000
TOTAL		\$150,000

The MEMPR advised the RDN on March 30, 2007 that it was one of 10 communities selected for CAEE Gold funding. Each successful community has been offered a financial incentive of \$50,000 to assist with the costs of implementing energy efficiency targets for both private and public sector new and existing buildings.

MEMPR recognizes that the amount of funding is less than requested but hopes that it still allows the RDN to make significant strides in implementing energy efficiency. Based on a \$50,000 incentive, staff recommends that the following projects be undertaken if the Board agrees to commit to the CAEE Gold targets:

CAEE Initiative	Project	Costs
Energy Efficiency Targets	Assessment of Green Buildings Opportunities	\$10,000
Targets for RDN Buildings	Feasibility Study for geothermal heating for Ravensong Aquatic Centre	\$20,000
Internal Staff Education	Hire Sustainability Coordinator earlier than planned.	\$20,000
TOTAL		\$50,000

ALTERNATIVES

1. That the Board support continued RDN participation in the Community Action on Energy Efficiency Pilot Project and agree to meet the five conditions of the CAEE Gold funding program.
2. That the Board not support continued RDN participation in the Community Action on Energy Efficiency Pilot Project and decline to commit to implementing the five conditions of the CAEE Gold funding program.

FINANCIAL IMPLICATIONS

Alternative No. 1

Under Alternative No. 1 the RDN would receive a \$50,000 incentive that could be used to advance sustainability initiatives such as the Green Buildings Strategy and the Corporate Climate Change Plan. This money would be used to hire the recently approved Sustainability Coordinator position earlier than planned and to undertake a feasibility study of geothermal heating at the Ravensong Aquatic Centre, which is one of the actions identified in the recently approved RDN Corporate Climate Change Plan.

In exchange for this funding, the RDN Board must agree to the five conditions outlined on page 2 of this report. Conditions 1-3 and 5 will not require a further financial commitment from the RDN as they are largely policy and planning related and are either already in RDN staff work plans or will be covered by the \$50,000 incentive. However, condition No. 4 requires that the Board make a *“commitment to pursue a comprehensive retrofit of at least 50% of existing local government owned and managed floor space with energy efficiency improvements that provide simple paybacks of 7 years or less through energy savings.”*

Agreeing to this condition will require a commitment by the Board to budget for the costs of retrofitting 50% of floor space in RDN buildings. The intent is to recoup these costs through energy savings but they will still require an initial capital investment.

Comprehensive building retrofits is part of the RDN Corporate Climate Change Plan and includes lighting, heating and cooling systems, controls, insulation and windows. The first step is an energy audit of buildings and pumps. The cost of the retrofits will not be known until the audits are completed. With the current provincial and federal interest in reducing energy consumption and green house gases, there will likely be opportunities to acquire additional funding and grants for the retrofits.

By adopting the Corporate Climate Change Plan the Board has already committed to undertake the RDN building retrofits. Agreeing to the conditions of the CAEE Gold Pilot Project reaffirms that commitment.

Alternative No. 2

Under Alternative No. 2 the Board will not receive the \$50,000 incentive and will not be able to hire the Sustainability Coordinator earlier than planned nor proceed this year with the feasibility study on geothermal heating at the Ravensong Aquatic Centre.

STRATEGIC PLAN IMPLICATIONS

The CAEE Gold targets support the strategic priorities contained in the 2006-2009 Strategic Plan to:

- 1) Promote sustainable development initiatives and policies throughout the region
- 2) Increase understanding in the public, the media, and the development industry of the importance of growth management and sustainable development
- 3) Develop corporate and community energy and climate change plans for the region; and,
- 4) Promote public education on energy and climate change issues

INTERGOVERNMENTAL IMPLICATIONS

These new buildings standards are intrinsic to the Provincial government's new Energy Plan, released by the Premier and the Minister of Energy, Mines and Petroleum Resources on February 27, 2007. It is understood that changes to Provincial legislation are anticipated in support of the Provincial Energy Plan.

CITIZENS/PUBLIC RELATIONS IMPLICATIONS

The implementation of the new buildings targets will affect the development community since the onus will be on the developer to meet the targets for new buildings. A workplan will be developed that will outline the policy, regulatory and incentive measures that the RDN could take to achieve the targets. The workplan will include a consultation program to make sure the development community is aware of the targets and the processes to be put in place to administer application of the targets.

Since the CAEE targets are intrinsic to the Provincial Energy Plan, staff is of the opinion that the RDN is being proactive and progressive by adopting these targets at this time. In this manner, the development community will be better prepared when the Province mandates these targets.

ENVIRONMENTAL IMPLICATIONS

The MEMPR CAEE targets for new and existing buildings are designed to reduce energy consumption in buildings and therefore the harmful greenhouse gas emissions and air contaminants associated with energy consumption in buildings.

For existing buildings, the estimated reductions are 1,373 MJ of energy and an associated 26,071 tonnes of CO₂ (the 2002 baseline emissions for community buildings is 153,357 tonnes).

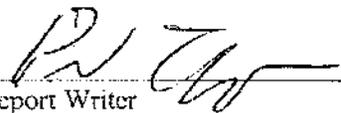
For new buildings, the estimated impact of the CAEE targets is approximately 400 MJ of energy and 3,500 tonnes of CO₂. These estimates are extremely conservative since the impact of offsetting natural gas consumption is difficult to estimate as market penetration of new building technology by the development community is largely unknown.

SUMMARY/CONCLUSIONS

The RDN is a member of the MEMPR CAEE Program and could receive \$50,000 as a result of a second application to the program in March 2007. This recent financial incentive was provided to the RDN subject to the Board agreeing to five conditions including implementing one or more of the MEMPR's Energy Efficient Buildings Strategy targets for existing and new buildings.

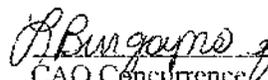
RECOMMENDATIONS

1. That the Board endorse the Provincial Ministry of Energy, Mines, and Petroleum Resources' Community Action on Energy Efficiency targets for new and existing buildings.
2. That the Board implement the Provincial Ministry of Energy, Mines, and Petroleum Resources' Community Action on Energy Efficiency target for new industrial, commercial and institutional buildings to achieve energy performance 25% better than the Model National Energy Code for Buildings by 2010 and reduce the average energy consumption by 20%.
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5. That the Board participate in a working group with MEMPR, the Ministry of Community Services and the Office of Housing and Construction Standards to implement incentive and /or regulatory measures to achieve one or more of the targets for new and existing buildings that align with the 2007 BC Energy Plan.


Report Writer


General Manager Concurrence


Report Writer


CAO Concurrence

COMMENTS:

Development Services\Long Range Planning\MISC\Reports\CAEE Gold Report to Board May 9 2007.doc