

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY: Original Signed by

Mike Labrecque, Acting Chief Administrative Officer

DATE: June 20, 2012

SUBJECT: **Future of Solar City Pilot Program**

ORIGIN

November 2, 2010, Regional Council motion: Community Solar Project
February 8, 2011, Regional Council motion: Community Solar Project
December 13, 2011, Regional Council motion: Solar City Solicitation

RECOMMENDATION

It is recommended that Halifax Regional Council direct staff to:

1. Discontinue development of the Solar City project as a municipally led program;
2. Cancel Request for Proposal 12-002 (Supply and Installation of Solar Thermal Domestic Hotwater Systems); and
3. Forward the complete project file to Efficiency Nova Scotia for future project consideration.

BACKGROUND

On November 2, 2010, Regional Council directed staff to explore the concept of Solar City, a program to encourage residents to adopt solar hot water technology that could be financed through a process similar to a Local Improvement Charge (LIC).

Over the last one and a half years, staff has reported back to Regional Council frequently on the development, risks and opportunities around this program. Some of the most significant highlights during this process have been:

- The public's response to the program;
- The active legislative and financial support of the program from the Province of Nova Scotia; with the amendment of the Halifax Regional Municipality (HRM) Charter security of financing energy conservation or environmental improvement of a property via lien authority was enabled, a first in Canada. The Province of Nova Scotia has also made the commitment to contribute up to \$1,250,000 in rebates to the pilot program through its agent Efficiency Nova Scotia as well as low interest financing;
- A collaborative and constructive approach with the Nova Scotia solar industry to build capacity, stream line building permitting processes, and agree on terms of reference for a competitive Request For Proposals (RFP) process; and
- A business case making the program financially self-sustaining without subsidy from non-participating taxpayers, while mitigating the technical and financial risks.

The purpose of this report is to cease development of the Solar City Project. Without the FCM Green Municipal Fund monies (loan and grant) applied for, the framework of the municipality acting as general contractor, the basis of the project concept, cannot be delivered as a commercially competitive offering to residents.

DISCUSSION

Program Framework

In 2011, Regional Council approved the following framework for the development of the project:

Statements	Status
User pay	Achieved
No costs borne by general taxpayer	Achieved
Financially self-sustaining	Not Achieved
Priced such that there is a reasonable contribution to either the Energy Efficiency or Sustainable Communities Reserve to act as seed money for future projects and act as a risk reserve	Achieved

Priced such that the energy savings justify the homeowner's annual payment over a reasonable and acceptable term	Not Achieved
That overhead/administrative costs are fully recaptured	Achieved
That HRM is successful in an application to the FCM Green Municipal Fund (GMF) for a \$5 million low interest loan and an additional grant, or comparable from another funding agency	Not Achieved
That HRM is successful in securing minimum grants and rebates required to provide a viable business mode	Not Achieved
The supply price received from vendors is within the range needed to make the program financially viable	Achieved

Project Barriers

Despite best efforts, and support from the Province of Nova Scotia, and Regional Council, staff has not been able to develop a project to meet all of those parameters.

Namely, the barriers to successful project development include:

1. The unknown take-up of the program with the current costs;
2. At the developed project budget, the anticipated annual savings are not broaching equilibrium with the financing costs;
3. The level of rebates available has depleted by approximately 2/3; and
4. HRM has not been successful yet in the FCM financing application.

Payback period: During the public meetings and initial concept discussions, a payback period of five to ten years was envisioned. With only a single (\$1,250) rebate available, and municipal overhead/project costs built in to participant costs, the current payback timeframe is over 20 years.

While the concept of the project was and is sound, the framework that HRM endeavoured to develop the project with does not work. With other Nova Scotian municipalities recently receiving the comparable authority to offer residents the ability to finance energy projects as a supplement to their tax bill, staff look forward to regional collaboration on a model development that would achieve community expectation, deliver a competitive market offering, and provide no risk to the tax payer. The lessons learned from this project development will inform future models.

Despite this particular revision of the project being unsuccessful, there has been some notable successes in this endeavour including the development of a streamlined permitting system, achieving legislative authority to offer residents a potential financing solution, and increased demonstration to multiple levels of government and agencies on the current barriers and potential solutions around widespread adoption of energy efficiency and renewable energy solutions. It has also uncovered a variety of planning and policy opportunities for municipal and provincial consideration, ranging from right to light issues, solar orientation, and removing barriers to market based renewable energy solutions. Some of the issues identified are informing the project work of RP+5.

Program Budget

Over the last one and a half years, there have been significant changes in funding programs for solar hot water systems. The Federal government ceased their Eco-Energy program in January 2012. Efficiency Nova Scotia programming has also changed. The end result is approximately \$2,500 less in rebates are anticipated for homeowners, making the business case more challenging to HRM and residents. On average, homeowners will save \$330/year on today's energy costs with a solar hot water installation.

Based on the budget, it is estimated homeowners would pay the following for the systems:

System Size	Option A - Lump Sum With \$1,250 Rebate from Province of Nova Scotia (not including HST) ¹	Option B - Financed Payment Per Year (12 years @ 3.5%)²
1-2 person, 1 panel*	\$5,574	\$577 Annually
3+ people, 2 panel*	\$6,774	\$701 Annually

*To be determined through the technical screening process and individual homeowner analysis. ¹Includes HRM administration costs. ²Anticipated finance rate.

Other Budget Impacts and Impact on Residents:

Federation of Canadian Municipalities (FCM) Green Municipal Fund

As directed by Regional Council, HRM staff has been working closely with the FCM Green Municipal Fund (GMF) for support of the program. The GMF was closed between February 2011 and December 2011 and a funding application was submitted in February 2012. There is still uncertainty in the funding application and the timing of approval. FCM GMF support could impose a minimum of 4-6 months upon the program. Such a delay is now unacceptable and could negatively impact resident's enthusiasm for the program.

Policy Direction/Municipal Mandate

In the Province of Nova Scotia, Energy Efficiency is the legislative mandate of Efficiency Nova Scotia. Under the Efficiency Nova Scotia Act, this corporation was established to manage electricity demand-side management programs in the Province and establish a fund to be used to defray the costs of electricity demand-side management programs. Efficiency Nova Scotia was born slightly before the initiation of Solar City, but as the HRM project was developed and the organization of Efficiency Nova Scotia realized and matured, it has become clear to staff that the general management of renewable and energy efficiency programs are the domain of this new and effective organization. The original community energy efficiency objectives desired under the Solar City concept are well served by Efficiency Nova Scotia.

As a result of poor commerciality with the approved conceptual project framework, the increased risk an unsuccessful project poses to the taxpayer and the duplication of the effective policy mandate of Efficiency Nova Scotia, staff recommends ceasing efforts on this project development and referring the project to Efficiency Nova Scotia for future consideration.

BUDGET IMPLICATIONS

There are no budget implications with deciding not to proceed with the Solar City initiative.

FINANCIAL MANAGEMENT POLICIES/BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Project and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Project and Operating reserves, as well as any relevant legislation.

COMMUNITY ENGAGEMENT

There has been extensive community engagement on this project as per the background and discussion sections.

ALTERNATIVES

Regional Council may wish to approve the start of the Solar City pilot program with funding from the Solar City By-Law S-500 and cost sharing from the Province of Nova Scotia, or its agent Efficiency Nova Scotia. This would also involve approving an increase of \$3,851,925 to Project No. CD990001 for homeowner financing and to reflect up to \$625,000 in cost sharing from the Province of Nova Scotia, with the balance to be funded by homeowners through the Solar City By-Law. Staff would be required to return to council with an RFP award report.

ATTACHMENTS

None

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Richard MacLellan, Manager, Energy & Environment Office, 490-6056

Financial Approval by: _____
Greg Keefe, Director of Finance and Information Technology, 490-6308

Report Approved by: _____
Peter Stickings, Acting Director, Planning and Infrastructure, 490-7166
