



PO Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

BRIEFING FORM

SUBMITTED TO: Environment and Sustainability Committee

DIRECTOR'S APPROVAL:

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DATE OF MEETING: January 6, 2010

SUBJECT: Community Recreation Centre Solar Hot Air Initiative

ORIGIN

Energy and Underground Services Committee Information Report, October 15, 2010: Supply and Install of Solar Air Space Heating Panels

RECOMMENDATION/ DECISION REQUIRED

(NONE REQUIRED IN THIS CASE, INFORMATION ONLY)

BACKGROUND

In an effort to:

1. Enhance community awareness on renewable energy opportunities; and
2. Assist Community Groups in reducing their operating costs;

Staff have undertaken an approximately \$20,000 project to supply and installer solar space heating panels on a variety of Community Operated Recreation Centres.

Creative Solar was the low bidder on Request for Quotation No. Q10M128.

Following award of the Purchase Order, it was learned that the project would be more effective and appropriate if the locations had double panel installations instead of single panel installations. This has resulted in a decrease of the number of facilities that were initially to receive solar panels. The initial list included:

- Moser River Recreation Centre;

- Upper Hammonds Plains Community Centre;
- Harrietsfield Williamswood Community Centre; and
- Grand Dessert West Chezzetcook Community Centre.

Plus, we are working with the vendor to identify two more facilities with solar potential to complete the project, striving to get one location in Sackville or Lower Sackville.

A number of the facilities we had listed were not good candidates, either due to solar potential or due to the building construction (i.e., at Wallace Lucas Centre, the panels would have only heated a kitchen area). It is intended to work through the building stock that includes Recreations/Community Centres and Rural Fire Stations (that have a Community Centre component to them) for future suitability.

This project was funded from Community Sustainability Projects D948. This is the operating account that the Sustainable Communities Reserve - Q127 - funds. The funds are remaining funds that were set aside for matching EcoTrust Building projects that were not used and must be spent before the end of this fiscal year, as per the Reinvestment Load Agreement with Green Municipal Fund.

This technology and project was selected as staff is currently limited in their ability to execute energy efficiency projects right now, due to the completion of the EcoTrust and stimulus program monies. This project was a self-contained and simple project not requiring time from Facility Development staff.

An example of the installation is the below picture of Moser River Community Centre:



The Product used above is called the Solarheat 2pak made by Your Solar Home.

ALTERNATIVES AND ASSOCIATED RISKS

HRM has a building stock of close to 300 buildings. There is opportunity for Energy Efficiency or Renewable Energy projects at all Buildings.

IMPACT/BENEFITS:

For each installation of a double solar hot air panel (costing \$3,995.00), we should save the Community Recreation Centre operating group, or HRM, several hundred dollars per year in heating costs.

Each installation will reduce GHG's by approximately 0.7 tonnes per year.

COMMUNICATION ISSUES/OPPORTUNITIES:

One of the key reasons for the project was to communicate renewable energy solutions to communities in HRM. There will be signage and communications efforts following the installations.

Additionally, this project would support awareness around any efforts related to Solar City.

ATTACHMENTS:

EUGS Report: Supply and Installation of Solar Hot Air Panels

KEY STAFF CONTACT: Richard MacLellan, Manager – SEMO, 490-6056



P.O. Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

**Energy and Underground Services Committee
October 15, 2010**

TO: Chair and Members of Energy and Underground Services Committee

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SUBMITTED BY: _____
Phillip Townsend, Director, Infrastructure and Asset Management

DATE: October 4, 2010

SUBJECT: Supply and Installation of Solar Air Space Heating Panels

INFORMATION REPORT

ORIGIN

This report originates from staff.

BACKGROUND

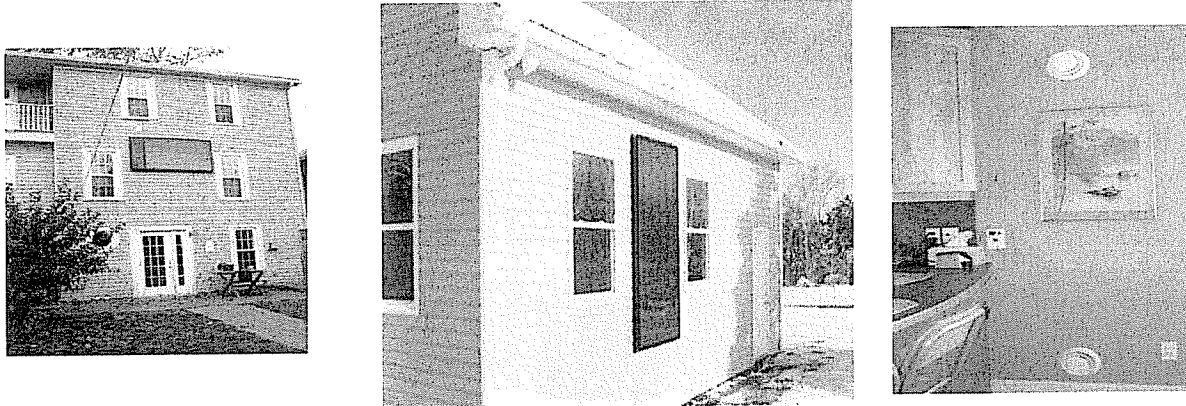
In an effort to:

1. Enhance community awareness on renewable energy opportunities;
2. Assist Community Groups reduce their operating costs;

Staff are undertaking an approximately \$20,000 project to supply and install single solar space heating panels on approximately 10 Community Facilities.

DISCUSSION

Several manufacturers make a solar air space heating panel which can be installed, as depicted in the picture. Supply and install of single panels should be approximately \$2,000 with existing rebates available.



Installation is very simple. By cutting an intake and exhaust diffuser hole, the panels are typically mounted on the south facing wall of a building (you can see the inside diffusers on the third picture above). A solar powered fan draws air from the house into the panel, it is heated by the panel and then exhausted back into the home.

These panels will provide space heating during the daytime and reduce the need for oil or electric space heating.

In order to best impact the municipality with this project, several community centres will be assessed for viability (solar access, etc). The panels will be installed with appropriate signage to enhance community awareness around the availability of various renewable energy alternatives.

This project will reduce annual GHG's by approximately 0.35 tonnes per year (per panel). It will reduce operating costs borne by community groups. It will also increase community knowledge of renewable energy.

BUDGET IMPLICATIONS

Costs for the supply and installation will be funded from Sustainable Community Projects D948

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

None

ATTACHMENTS

None

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

Report Prepared by : Richard MacLellan, Manager, Sustainable Environment Management Office, 490-6056
