

Community Solar Project

Environment and Sustainability Committee February 3, 2011



Can HRM be Canada's Solar City?



The Community said: YES!

COMMUNITY SOLAR PROJECT- CONCEPT



- \$5 million pilot project to encourage individual homeowners to install solar panels for heating domestic hot water.
- Typically 2 solar hot water panels
- Financed through property tax bills
- User pay
- Cash flow neutral or positive
- Payback 5-10 years depending upon available rebates and interest rates
- 500 700 homes (1000 panels)
- Economies of scale purchase & install

COMMUNITY SOLAR PROJECT – COUNCIL RECOMMENDATION



- 1. Council endorsement of public consultation
- 2. Endorse amendment to HRM Charter
- Continue to explore the potential financial, administrative, environmental and local economic impacts of this project



Consultation Results

250 residents at Cole Harbour Place

120 residents at Sackville Heights

- 200 residents at St Marys Boat Club
- 100 residents at Alderney Library
- 150 residents at Capt Wm. Spry
- Over 5000 unique hits at <u>www.halifax.ca/solarcity</u> prior to December 15th
- 200 e-mails to solarcity@halifax.ca prior to December 15th
- Numerous phone calls and face to face discussions
- Extensive media coverage

2000 Signed up



- Economies of Scale
- Contract Management
- Project Management
- Risk Management



Done

• 1st Municipality in Canada to have

Explore the potential financial, administrative, environmental and local economic impacts of a community solar project

Economic Impacts:

- Initial economic impact figures:
- 48,000 man-hour project
- 30-40 jobs
- \$300-\$700 annual energy savings per resident
 - \$500,000 of wealth currently leaving HRM for foreign energy will remain locally

Explore the potential financial, administrative, environmental and local economic impacts of a community solar project

Environmental Impacts:

• 2,000 tonnes of GHG's displaced annually



Explore the potential financial, administrative, environmental and local economic impacts of a community solar project

Administrative Impacts

- Project Manager
- Project Administrator
- Project Accountant
 - Project Clerk

Quality Assurance may be Contracted in or out

Principles for developing a viable HRM Financial and Business Model:

- User Pay
- No costs borne by general taxpayer
- Financially self-sustaining
- 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
- Priced such that the energy savings justify the homeowner annual payment over a reasonable and acceptable term
- That overhead / administrative costs are fully recaptured. This likely to include a Project Manager, a Project Administrator, an Accountant, an Administrative Assistant, and a Quality Assurance function.
- That HRM is successful in an application to the FCM Green Municipal Fund for \$5 million low interest loan and an additional grant or comparable from another funding agency.
- That HRM is successful in securing minimum grants and rebates required to provide a viable business model.
- The supply price received from vendors is within the range needed to make the program financially viable.

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The project is being established in a similar concept to the Energy and Underground Services Reserve and Sustainable Communities Reserve which have enabled significant HRM progress in corporate Energy and Environmental initiatives without impact on the general tax rate.

COMMUNITY SOLAR PROJECT Environment and Sustainability Committee recommendation

- Accept the results of the community consultation efforts and conclude that: residents support this project and further work on this project requires on-going industry consultation;
- 2. Direct staff to investigate and apply for the funding, grants, loans, and rebates required to proceed with a financially viable community solar project.
- Accept the principles and conditions used to develop a financially viable business model as outlined on page 6 of this report.