

July 9, 2012

Mayor and Council  
Halifax Regional Municipality  
1841 Argyle Street  
Halifax, Nova Scotia

To the Mayor and Council:

I am writing to express support for the HRM Solar City Program, in response to the staff report on this topic that was made available July 7, 2012.

Having read the HRM staff report, as well as the July 5, 2012 letter to Mayor and Council from the Nova Scotia Minister of Energy, having consulted with Ecology Action Centre staff and volunteers, and having considered comments from a number of HRM residents and industry stakeholders, we wish to express the following key message:

***The Ecology Action Centre supports the continuation and implementation of the HRM Solar City Pilot Project, and asks that HRM Council not accept the recommendation of the staff report that calls for its cancellation.***

*Instead, we ask that Council direct HRM staff to:*

- Continue developing the HRM Solar City program;*
- Continue to seek approval of the grant and loan from the Federation of Canadian Municipalities*
- Meet with the Nova Scotia Minister of Energy, Department of Energy staff and Efficiency Nova Scotia Corporation to understand and negotiate over what the province is prepared to contribute to the Solar City program now.*

Our reasons for this statement of support are given below, along with comments about the HRM staff report.

### ***Rationale***

The HRM Solar City program is of tremendous value to the residents of HRM. It will help us prepare and safeguard against ever-increasing energy costs, continue our economic development by growing the clean energy industries that contribute to a brighter future, and give us another innovative tool to reduce greenhouse gas emissions.

HRM Solar City is a positive, innovative and ground-breaking way to make solar energy more accessible to average homeowners. It lowers costs through bulk purchasing, simplifies solar

energy contracting for residents, and gives them the option of paying for the equipment over time on their property tax bill. Residents of HRM are interested in gaining access to solar energy, and HRM Solar City is an excellent way to facilitate that access.

This is a great program. Let's not give up on it now.

### ***The Municipal Element of Solar City***

The staff report is recommending that the files associated with HRM Solar City be transferred to Efficiency Nova Scotia Corporation (ENSC) for consideration for a future project. This would stall the project, as ENSC does not currently have the mandate to run such a program, while HRM does.

We agree that ENSC is an excellent potential partner in the project, because they have organizational experience and staff working on related and similar programs, and there would be significant synergy with their existing programs. We think it would be a great idea for ENSC to be involved in providing logistical, managerial and potentially financial assistance. For example, ENSC arranges and contracts for energy efficiency assessments of buildings, and we think they would be a great partner in the services of assessment, management and monitoring for solar installations.

However, the HRM Solar City program, at its core, is essentially a municipal program, because the municipality has the ability to assess a charge on a property tax bill. This is key to the proposition of the program. It needs the direction, support and participation of the municipality to work properly.

We recommend, instead of cancelling the program and transferring the program information to Efficiency Nova Scotia, that HRM negotiate a partnership with the Government of Nova Scotia and Efficiency Nova Scotia to work together on financing, management and delivery of the Solar City pilot program. This collaboration will enhance the success of the program and help reduce the administrative burden and workload for HRM staff. This would be a positive response, recognizing the challenges and opportunities of delivering the program and working together to make it work.

### ***Project Financing***

The financial barriers to the project listed in the HRM staff report centre around the lack of a grant and a loan from the Federation of Canadian Municipalities (FCM). While this is certainly a barrier, we would point out two things:

(1) The grant and loan from FCM have not been refused. They may still come through with more communication and negotiation. Just because they haven't come through yet is not a good reason to cancel the program. Though we understand very well the wish to proceed sooner rather than later, there was not and is not a deadline for securing an agreement with FCM.

(2) Meanwhile, the provincial government is offering to help. A letter dated July 5, 2012, from the Nova Scotia Minister of Energy to the Mayor and Council, indicates a willingness on the part

of the province to work out an arrangement to support the project that goes beyond what the province has previously committed. From our perspective, it seems that the province is definitely extending an offer of help and an invitation to talk about what's needed. At the very least, this offer of additional support should be explored. It would be an unfortunate mistake to cancel the effort when there is an offer on the table to negotiate for assistance.

### ***Return on Investment for Participating Residents***

The staff report uses simple payback times in a discussion of the value for residents of participating in the program. Even using the figures in the report itself, the investment proposition for a resident to participate in the program is more attractive than the calculation used in the report would suggest.

#### *Example:*

Example system size: Two-collector system.  
Estimated price: \$ 6774 + HST = \$ 7655 (from the staff report)  
Estimated energy cost savings in first year : \$350<sup>1</sup>  
***Estimated annual return on investment in the first year (%): 4.6%***

Approaching 5% in the first year is a reasonable return in today's investment climate, particularly for an investment like solar energy, with other benefits and relatively low risk.

Annual returns are likely to increase over time. Non-renewable energy prices will not remain fixed, but have increased over time and look likely to continue to increase faster than the general rate of inflation. Assuming a moderate average rate of increase in non-renewable energy costs of 2% per year, the annual returns increase gradually, to a 6.7% return in the twentieth year of operation of the solar heater. The equipment still has value after 20 years of use.

Assumed annual rate of increase in non-renewable energy prices: 2%/year (moderate)  
***Total estimated savings in energy bills over 20 year system operation : \$9,000***  
***Surplus of savings over cost: \$1345***

In other words, under the conditions assumed in this scenario, if a resident installs a solar water heater, they are likely to save \$9,000 over the next 20 years, for a net savings of \$1345 after subtracting the cost of the equipment. The solar water heater is a reasonable investment, even in the market conditions stated in the staff report. It gets even better if the FCM or the province grants assistance to cover some of the administrative cost and thereby lower the price to the resident, but it's already a decent investment under the present circumstances.

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<sup>1</sup> (Calculated in RETScreen for a typical home with 3 occupants, found savings of 2500 kWh/year – if displacing electricity at 14 cents/kWh this is \$350) – this is very similar to the \$330 quoted in the staff report.

## ***Participation***

Many people (over 1600) expressed interest in the Solar City program at the beginning, and we believe that many people are still interested in it now. It has been a while now since those original folks signed up, so some may no longer be interested, while other new people may wish to sign on.

The market conditions in terms of rebates have changed, so we agree that uptake and participation may turn out to be lower than in the original signup. But if even 1/3 of the number who originally signed up do proceed with a system, that would still exceed 500 systems, which would represent a huge success in HRM. We think it's best to proceed with somewhat reduced expectations of the number of installations.

## ***Summary***

The Solar City Program is a valuable, beneficial and innovative program. It's true that there have been many challenges that HRM staff have bravely faced, and that the conditions for going ahead are more difficult than would have been anticipated at the beginning. This is not the time to give up on the program, but the time to press on.

We recommend continuing to negotiate to obtain assistance from the Federation of Canadian Municipalities and from the Nova Scotia provincial government, to ensure that this innovative, first-in-Canada solar energy program can proceed.

If there is any way that the Ecology Action Centre can help ensure the success of the HRM Solar City Program, we will be glad to help. Please contact me at the coordinates listed below.

Regards,



Wayne Groszko  
Renewable Energy Coordinator  
Ecology Action Centre

email: [solargain@ecologyaction.ca](mailto:solargain@ecologyaction.ca)  
phone: 902 482 8817