

**Salt Spring Island Solar  
Community Project:  
Report to Solar BC**

**March 31, 2011**

**Marion Pape for  
Earth Festival Society**

## **Salt Spring Island Solar Community Project: Report to Solar BC**

### **CONTENTS**

Introduction	2
Targets	2
Community engagement and outreach	3
Building local capacity	3
EnerGuide rating and SolarBC	4
Survey to identify barriers to installation	4
Existing Salt Spring SHW installations	5
Institutional sector potential	6
Conclusion	9
Appendix 1 SolarBC Estimated Energy Savings for Salt Spring Island	
Appendix 2 News Release	

### **ACKNOWLEDGEMENTS**

Thanks to Daniel Ruane from Transition Salt Spring for his research on the potential for solar hot water for the institutional sector on Salt Spring, the Salt Spring institutions for contributing time and information, Nitya Harris of SolarBC for her motivating presentation, Judi Stevenson of Minerva Communications and Research for assistance in the survey design, Liz Kelly of Solar BC for providing the Salt Spring data chart, CityGreen Solutions for promotion, delivery and administration around the Salt Spring EnerGuide rebates and Elizabeth White of Earth Festival Society for project oversight.

## **INTRODUCTION**

Salt Spring Island became a Solar Community in September 2010 and the Islands Trust Local Trust Committee contracted with The Earth Festival Society (EFS) to carry out the project. The following goals were established in order to expand solar community activities on Salt Spring Island:

- I: Establish a target of 20 Solar Hot Water (SHW) installs by 2011 and 10% of homes by 2020.
- II: Form a buyers group to reduce costs and share information about SHW for homeowners
- III: Facilitate other institutional SHW installations eg indoor pool, new library and schools
- IV: Gather info about other solar hot water installations, which could be used as a model
- V: Encourage completion of EnerGuide Rating as a part of the SHW installation

## **TARGETS**

A target of 20 Solar Hot Water installs by 2011 and 10% of homes by 2020 was submitted in a proposal for funding to SolarBC. We were not sure how realistic this target was given the lack of information we had about community interest, local suppliers/installers, and cost or availability of equipment. However, we proceeded with a plan to market SHW, partner with other organizations and market the program.

When the rebate time frame for SHW had expired, we contacted SolarBC to send us the number of people from Salt Spring who had applied for a SolarBC rebate and they replied that eight to ten applications had been received. EFS also learned that there were two more installs on Salt Spring which did not qualify for SolarBC funding for a potential total of twelve solar hot water units installed on Salt Spring.

Given the short time frame and other challenges experienced before the rebate deadline of Dec. 31, 2010, the SolarBC program was quite successful on Salt Spring Island.

SolarBC contributed data for the 10 rebate-eligible Salt Spring Island Solar Hot Water installations. (See separate attachment Appendix A) Selective summary data and data for a typical Salt Spring system are as follows:

- All of the SSI systems are displacing electricity, and are in owner occupied, single family detached homes
- Total average Annual Energy Savings are 65.79 Gigajoules (GJ).
- A typical Salt Spring system would save 6.58 GJ
- Total average Lifetime Energy Savings are 1973.82 GJ.
- For a typical SS system 197.38 GJ (The lifetime savings are assumed savings over the lifetime of each system, which is estimated at 30 years)

- Total annual GHG Savings 0.658 Tonnes of CO<sub>2</sub> equivalent.
- For a typical SS system, 0.066 tonnes of CO<sub>2</sub> equivalent (The CO<sub>2</sub> savings are calculated using BC Hydro emission factors. Emission factors for Canada are much higher)

Targets for 2020 will be included in the SS Climate Action Plan currently under development. The plan will also suggest actions to be implemented to help Salt Spring reach its solar hot water targets.

## **COMMUNITY ENGAGEMENT AND OUTREACH**

Because of the limited time that Salt Spring householders had to install SHW in order to receive the SolarBC rebate, the EFS immediately began to reach out to the community to engage interest.

EFS set up displays in coordination with Transition Salt Spring (TSS) to collect names of interested people at relevant community events eg Fall Fair, Green Drinks, TSS potlucks. An e-list was developed to keep those who signed up informed of the program and its opportunities.

An interactive discussion group, previously established for Solar and Appropriate Technology was set up on the TSS NING website served a valuable function for sharing ideas and experiences. This proved to be a very successful communication tool. Announcements about events and other information were also sent out to a large, community-wide list serve.

A public meeting with SolarBC, describing the SHW advantages and the opportunity available to Salt Spring residents, was held in conjunction with a Transition Salt Spring Potluck. This event was well publicized and included a news release that was published in the Driftwood newspaper. This meeting attracted a large audience of close to 100 persons. There was a high degree of interest in the program as a result of these initiatives. It was clear that we had reached our main target audience in the community.

## **BUILDING LOCAL CAPACITY**

A missing ingredient in promoting the SolarBC incentive program on Salt Spring was the lack of a certified installer living and working on the island. The EFS also had a goal to assist homeowners to establish a buyers group to source product, installers and negotiate group discounts. An arrangement was made with Don Skerik Electric from Duncan and Outer Limits Sheet Metal from Salt Spring who partnered to source a CAREarth evacuated tube product that was deemed suitable and was in stock for the time-limited installation process.

A special community meeting was called to introduce the team to the community, and provide them with an opportunity to outline their offer, describe the equipment and answer questions. During the next few weeks, people conducted their own site assessments and the installer gave several quotes to interested people. There was concern that the quotes were not equivalent to costs outlined in a SolarBC brochure, which was distributed widely around the community.

It was always the intention to set up a Buyers Group to obtain discounted prices for equipment. However, it turned out that people were interested in many different kinds of equipment and so bulk discounts were not possible. In fact, homeowners sourced several different installers from Victoria and Salt Spring.

The most successful aspect of community capacity building was the sharing of technical and other information on the TSS NING website by members of the Solar and Appropriate Technology Group. Assistance was offered and some additional installs were the result of the good old-fashioned “helping your neighbour” variety.

## **ENERGUIDE RATING AND SOLARBC**

A second news release was published in the Driftwood Newspaper describing an additional incentive for a \$200 rebate for an EnerGuide energy assessment for persons interested in installing SHW. This rebate was part of the CRD energy rebate program for Salt Spring and administered by CityGreen in Victoria. This, in turn, qualified the homeowner for a further SHW subsidy through LiveSmartBC.

This initiative was very successful in encouraging EnerGuide assessments and all the available rebates were used. At least one person determined that insulation was a better investment than solar hot water given their particular circumstance.

## **SURVEY TO IDENTIFY BARRIERS TO INSTALLATION**

EFS was concerned that the uptake on introducing SHW was going to be lower than anticipated because of factors such as the high cost of equipment and installation and the unsuitability of many sites located in mountainous and forested areas. EFS developed and distributed a survey tool to the solar hot water sign-up list to identify barriers to installation and to seek information about other solar installations around the island. Responses were received from fifteen households. In addition nine different individuals participated in discussions about solar hot water on the TSS NING website.

From the surveys, the following information was gathered:

- Two respondents had previously installed SHW- a SolarCrest and a flat panel model.
- Five persons are considering installing SHW during the next 5 years.
- Most respondents know about the SolarBC rebate program.
- People were informed about the Solar BC program by a variety of publicity sources including the SolarBC website, Driftwood newspaper ad, BCSEA website, Transition Salt Spring list serve, website and events and targeted e-mails.
- The motivating factors for people to install SHW in order of preference were: energy efficiency, climate change, the SolarBC subsidy, having a good service orientation, having trained/certified installers on the island.
- For those making the decision not to install SHW, the reasons in order of preference were: not cost effective, site not suitable, I am implementing other more effective

methods for reducing GHG emissions, not enough time and information to make an informed decision, wrong time of year to be installing.

**The following summaries of comments from the NING website and e-mails** are of interest and provide some analysis about current thinking and actions taken in the community:

*“We received two donated panels, pump and tank and are funding the installation.”*

*“Because of roof orientation and other considerations, my preferred solar equipment is not the product demonstrated at the meeting, but hope to take advantage of the SolarBC grant and use the on-island installation despite the tight timeframe for installations to be completed.”*

*“I purchased a solar water heater with twenty 58mm heat pipe evacuated tubes and integrated ceramic coated tank for \$2,310 in 2009. I subsequently bought a controller unit for \$200. I picked both up in Vancouver from Helios Solar.”*

*“I preferred the simplicity of ThermoDynamics solar boilers. Installing takes about half a day, even with non-solar-ready houses... With owner participation and very careful observation of all safety and technical considerations, we might be able to arrange quite an economical installation.”*

*“We have a super easy installation (all walls exposed, low roof and short distances). The costs are still beyond what it is worth for 2 people. Estimates were all over the map. We're considering installing our own by getting the material and instructions from freefuelforever.com...”*

*“We recently received estimates for a Solar Hot Water system at our home. Final costs have proven to be beyond our willingness to "do the right thing" and go solar. The potential energy savings for us are very modest - likely about \$100/year at most.”*

*“I couldn't help noticing that in Ontario, (where GlobeSolar is based), they also show an income tax benefit in their economic analysis, amounting to another \$415 incentive. Now if the BC government can be persuaded to allow a similar tax benefit AND exemption from the HST (or at least the PST component), the Revolution may really start.”*

## **EXISTING SALT SPRING SHW INSTALLATIONS**

As a part of the survey described above, we asked respondents to identify other solar hot water installations, which could be used as models. Although there was not a lot of new information contributed, EFS plans to include homes with SHW and PV installations as a part of its biennial Eco Homes Tour in 2011.

### **Murakami Gardens Affordable Housing Project**

Murakami Gardens is a 27 unit affordable housing complex located in Ganges. The SHW system includes 20 roof mounted flat plate collectors (59 square metres total). The system displaces 25 MWh of electricity annually and supplies 40% of the annual domestic hot water load.

## **INSTITUTIONAL SECTOR POTENTIAL**

There are several institutions on the island that have potential for installing solar hot water. We interviewed key contacts to determine the nature of the energy sources being used, establish the suitability of solar hot water and explore potential barriers to installing solar hot water.

### **School District No 64**

The schools we reviewed for solar potential included Gulf Island Secondary (GISS), Salt Spring Island Middle School (SIMS) and Salt Spring Elementary (SSE). All of these schools have an excellent orientation and low obstruction for solar hot water installation. Dave Henshell, Facilities Manager at School District 64, brings a practical and cost conscious approach to the question and is positively disposed to solar installation in the schools if it is cost effective and meets the needs of the school district. To date, investment in solar hasn't been seriously considered for the following reasons.

- There is a general sense that there is insufficient sunlight during the school year (September to June) to warrant the investment. In other words until it makes financial sense nothing will likely happen. Currently the schools use electric power from BC Hydro at various rates depending on usage and propane. Propane follows oil prices and is therefore vulnerable to volatility in that sector. BC Hydro rates are tending towards North American market averages to encourage greener options and consumption reduction. Both of these sources have been increasing in price in recent years. BC Hydro projected increases from 2010 to 2012 are close to 30%. Propane has jumped from 56.5 cents/litre in September 2010 to a current price of 62.6 cents/litre. Investment to date has been to make the systems using these energy sources more efficient. (e.g. high efficiency boilers at SIMS)
- Because the schools are publicly funded there is a disincentive to invest in an initiative that might not produce the promised results. So if verifiable results are available in our climatic region and there is Provincial Government support in some way then that could change the decision-making landscape.
- Government funding tends to go to high Green House Gas (GHG) emitters with a high probability of significant reductions. Because of our milder winters, funding for heating-related projects tends to migrate to colder regions of the province.
- On the positive side the Education Ministry is now allowing upgrades to Heating, Ventilation and Air Conditioning (HVAC) systems to be funded from the capital budget whereas these were previously funded from an annual capital grant. The Province also funds a public service energy conservation grant (PSECA).

### **Gulf Islands Secondary School**

The building orientation for solar is excellent. This facility has a geothermal horizontal closed loop system installed when the school was first built. This is also often referred to as a ground source heat pump (GSHP) system. This geothermal system is supplemented by heat generated from electrical resistance devices. There is a 1,000 US gallon storage tank incorporated in this system to serve the large hot water demand for the Cafeteria and gym showers. Annual power consumption is approximately \$60,000 with approximately 2/3 of that being for heating i.e. \$40,000.

BC hydro has a graduated method of billing commercial customers based on peak demand. This is to encourage load shedding from times of peak demand on the grid to lower demand times. However this option is not particularly practical with the schools as they have a relatively fixed rhythm that does not lend itself to this type of load manipulation. A consequence of this is that a significant demand premium of approximately 25% of the total hydro bill is currently being paid. Dealing with these peak loads in some other way could conceivably reduce overall cost and warrant some capital investment.

### **Salt Spring Island Middle School**

SIMS consists of a main building and a South wing. The energy source is primarily propane. Propane supply for the South Wing is shared with SSE. Annual cost for the main building is approximately \$16,000. Again the building orientation for a solar installation is excellent and particularly the South Wing.

### **Salt Spring Elementary School**

SSE also has a GSHP system that was installed in the 1990's. This is supplemented by propane. The annual propane cost for SSE and the South Wing is approximately \$17,000

### **Recommendations for School District 64**

- Provide funds to hire a technical expert to assess the financial viability for a solar/PV installation.
- Determine as a first step which school would benefit most and use that as a prototype for further possible installations. This process could be accelerated by gathering data from a school that has been converted to solar through PSECA funding.
- Provide sufficient incentives ( ie grants) to ensure, in an era of tight budgets, that financial risk is not an issue.

### **CRD Pool at 262 Rainbow Road**

The physical orientation of the pool is well suited to solar energy generation.

Kees Ruurs, Parks and Recreation Manager, provided the information for this summary and some of the detail was confirmed Mark Burroughs, mechanical engineer for the project. The primary energy source for heating water for the Rainbow Road pool is electricity. This powers an air source heat pump system that is supplemented with electric boilers.

### **Water Consumption (litres) for Rainbow Road Indoor Pool**

<b>Period</b>	<b>2009</b>	<b>2010</b>
Dec 31 - Feb 28	140,400	47,700
Feb 28 - Apr 30	174,600	138,000
Apr 30 - Jun 30	133,380	111,700
Jun 30 - Aug 31	173,000	127,200
Aug 31 - Oct 31	206,300	119,410
Oct 31 - Dec 31	200,000	121,700
to adjust for Dec/09 estimate	-70,000	70,000
	<u>959,689</u>	<u>737,720</u>



The pool is managed by Recreation Excellence. It runs year round with a maintenance shutdown for approximately 3 weeks in September. There is a leisure pool being contemplated but probably will not be built for at least another 2 years. Kees Ruurs predecessor had made some attempts to conduct a feasibility study on a solar hot water installation and Kees had contacted a Victoria company several times with no response. The most recent contact was about one year ago.

The cost of hydro for the period April 7, 2009 to November 22, 2010, is \$145,701.06.

### Hydro Usage for Rainbow Road Pool

RefDocNo	Item	Funds Ctr	Funds center name	Cmnt Item	CI text	Prd	Posting Date	Payment budget	Prd.doc.no	Vendor	Vendor Name	Text
1900165892	2	101878	SSI Pool Admin Exp	535090	Electricity	11	22.11.2010	10,615.60		311384	BC Hydro and Power Authority	*ACCT#6509010 (262 RAINBOW RD)
1900164418	2	101878	SSI Pool Admin Exp	535090	Electricity	9	28.09.2010	9,601.47		311384	BC Hydro and Power Authority	262 RAINBOW RD
1900162790	2	101878	SSI Pool Admin Exp	535090	Electricity	7	28.07.2010	10,264.50		311384	BC Hydro and Power Authority	*ACCT#6509010 (262 RAINBOW RD)
1900160605	2	101878	SSI Pool Admin Exp	535090	Electricity	5	26.05.2010	11,111.26		311384	BC Hydro and Power Authority	*ACCT#6509010 (262 RAINBOW RD)
1900156738	2	101878	SSI Pool Admin Exp	535090	Electricity	3	24.03.2010	12,151.42		311384	BC Hydro and Power Authority	*ACCT#6509010 (262 RAINBOW RD)
1900154347	2	101878	SSI Pool Admin Exp	535090	Electricity	1	20.01.2010	12,954.58		311384	BC Hydro and Power Authority	*ACCT# 6509010 (262 RAINBOW RD)
101101212	1	101878	SSI Pool Admin Exp	535090	Electricity	12	31.12.2009	10,363.00				48 days hydro '09 accrual re SSI Pool
1900152127	2	101878	SSI Pool Admin Exp	535090	Electricity	11	30.11.2009	9,915.60		311384	BC Hydro and Power Authority	*ACCT# 6509010 - 262 RAINBOW RD.
1900149024	2	101878	SSI Pool Admin Exp	535090	Electricity	9	24.09.2009	6,216.47		311384	BC Hydro and Power Authority	*ACCT# 6509010 - 262 RAINBOW RD.
1900139906	2	101878	SSI Pool Admin Exp	535090	Electricity	6	18.06.2009	12,090.16		311384	BC Hydro and Power Authority	262 RAINBOW RD
1900139185	2	101878	SSI Pool Admin Exp	535090	Electricity	6	09.06.2009	12,449.67		311384	BC Hydro and Power Authority	SSI
1900136287	2	101878	SSI Pool Admin Exp	535090	Electricity	4	07.04.2009	23,967.33		311384	BC Hydro and Power Authority	
								<b>141,701.06</b>				

### Recommendations for CRD Pool:

- Provide funds to hire a technical expert to assess the financial viability for a solar/PV installation based on current available grants/technology. Clearly the hydro cost is considerable and likely to increase with rate increases so displacement by solar warrants further investigation.
- While there is receptivity to this, Kees Ruurs would need some assistance to implement a solar installation.

### Lady Minto Hospital

Lady Minto Hospital is one of three hospitals run by the Vancouver Island Health Authority (VIHA) to be funded for solar heating panels for the hospitals hot water systems as a part of a Public Sector Energy Conservation Agreement (PSECA) between the provincial govt, BCHydro and Terasen Gas to make all government operations carbon-neutral.

The VIHA has issued a request for proposals to build three solar heating systems at an expected total cost of \$600,000 to \$700,000. Government will report on its success in becoming carbon neutral sometime next year. See link to the news release announcing the program:  
<http://www.timescolonist.com/health/Solar+panels+heat+Island+hospitals+water/3891836/story.html>.

Information below is a summary of an interview with Joe Ciarniello, P.Eng., Energy Manager for VIHA.

The primary driver for installing solar hot water at Lady Minto Hospital was the availability of PSECA funding because the payback period is still quite long for the project (20 years). Without this funding, other energy projects would have taken priority from the limited Lady Minto Hospital funding base. Several other solar thermal projects have been identified in future plans as funding becomes available. VIHA expects that the payback period will decline as utility costs continue to rise.

The Lady Minto solar hot water system is being designed to displace 270 GJ annually of fossil fuel (propane). There will be a small amount of electrical energy required to run the system (pumps mainly). All the water used as domestic hot water will enter the building cold and be diverted to the solar system for pre-heating.

Despite the long payback period, hospitals are probably ideal candidates for solar hot water technology, given their significant hot water use as well as their long term and year round operation. This application is very positive in that it demonstrates that VIHA is showing leadership in supporting low/no carbon solutions.

#### **Recommendations for Lady Minto Hospital:**

- The payback period (> 20 years) based on current energy costs is a challenge to encourage investment when cost is the primary driver. Government can play a role to both add carbon taxes on GHG emitting fuels and provide grants to those motivated to install solar devices. This would serve to reduce the payback period to a more attractive duration say <10 years.
- Given the long payback period, solar installations are best suited to buildings with a long lifespan i.e. hospitals, schools, libraries etc.
- This is an opportunity for government and financial institutions to show leadership by providing grants and low interest loans to those willing to invest in and be part of the low carbon future.

#### **Salt Spring Island Public Library:**

The new library on Salt Spring is now fully funded and will be built to a LEED Gold Standard with attention paid to environmental stewardship and sustainable design. Along with environmental features such as geothermal in-floor radiant heating, waterless urinals, and light sensors to control the lighting, the building will include solar collectors for hot water supply. Library construction will begin in 2011.

#### **CONCLUSION**

Being a Solar Community has many advantages for Salt Spring. For a significant time period, solar was in the news and people were thinking about how to practically make it work in their own individual circumstances.

Collecting names of interested people at major events, keeping them informed and involved was an important communications and community engagement vehicle.

The awareness of solar hot water as an option is much greater now than before the solar hot water program was launched on Salt Spring Island. This is due in large part to support provided by Transition Salt Spring (TSS). Partnering with a TSS potluck dinner by providing a solar hot water speaker was a key community engagement vehicle. Of even greater importance are the encouragement, information and support from experienced solar hot water advocates from the Solar and Appropriate Technology Group on the Transition Salt Spring NING web site. As TSS places further emphasis on re-skilling, there is potential for further training and engagement in the area of solar technology. The Eco Homes tour scheduled for August 7, 2011, could be used as a potential follow-up opportunity.

Homeowners used a wide variety of SHW makes and installers from Salt Spring and Victoria and were resourceful in locating units that were affordable and easy to install. There was evidence of considerable resiliency and a cooperative spirit in the way the solar advocates worked together to build capacity on the island.

The solar hot water rebate was a motivator to bring interested people together in the community. We sincerely hope that a new rebate program can be established with a longer time frame.

Finally, the community engagement approach used on Salt Spring is an effective one that can be used for other projects such as working on actions designed to meet Salt Spring's GHG reduction targets. When people are engaged they also become motivated to do more than just the solar hot water work. The solutions to our climate crisis will be found in diverse actions of an engaged community.

## APPENDIX 1

## SolarBC Estimated Energy Savings for Salt Spring Island \*

								Unknown	BC 0.038	Canada 0.1		
Installer	SHW Make	Installation Date	Roof Orientation	No of People	Square Meters*	Avg Annual Energy Savings GJ	Avg Lifetime Energy Savings GJ	Annual GHG Savings (BC) *	Life Time GHG Savings (BC)	Annual GHG Savings (Canada)	Life Time GHG Savings (Canada)	
1	Ark Homeworks	Thermo Dynamics Ltd.	14-Jan-08	S	0	2.98	6.86	205.80	0.069	2.058	1.029	30.870
2	Ark Homeworks	Thermo Dynamics Ltd.	18-May-09	S	2	2.98	6.86	205.80	0.069	2.058	1.029	30.870
3	SolarCrest Energy	Apricus	7-Jul-08	S	0	2.89	11.58	347.52	0.116	3.475	1.738	52.128
4	JB Solar	Globe Solar IP195	3-May-10	SW	3	2.55	3.82	114.60	0.038	1.146	0.573	17.190
5	Don Skerik Electric	CAREarth	28-Jun-10	S	5	4.90	7.14	214.20	0.071	2.142	1.071	32.130
6	JB Solar	Globe Solar IP195	21-Jul-10	SE	4	2.55	3.82	114.60	0.038	1.146	0.573	17.190
7	Ambient Source Energy Systems	CAREarth	18-Nov-10	S	2	4.10	6.08	182.40	0.061	1.824	0.912	27.360
8	Don Skerik Electric	CAREarth	31-Dec-10	S	0	4.10	6.08	182.40	0.061	1.824	0.912	27.360
9	Pacific Solar Smart Homes	Veissmann		S	4	5.06	9.73	291.90	0.097	2.919	1.460	43.785
10	JB Solar	Globe Solar IP195		S	2	2.55	3.82	114.60	0.038	1.146	0.573	17.190
					34.66	65.79	1973.82	0.658	19.738	9.869	296.073	
					Average per System	3.47	6.58	197.38	0.066	1.974	0.987	29.607

\* All have good solar potential, are single-family dwellings owned by the installer, and are currently using electric as a fuel type

## **APPENDIX 2**

### **NEWS RELEASE**

## **Salt Spring, a Solar Community Launched at October Transition Salt Spring Potluck**

What does being a solar community mean? Solar hot water systems gather the sun's heat directly, instead of burning the ancient fossil fuels that are creating the GHG emissions we are desperate to reduce if current civilization on this planet is going to survive. A solar community, in this case, is local government working together with not-for profit organizations and local citizens to build the capacity of the community to facilitate the installation of solar hot water as cheaply and efficiently as possible.

The Salt Spring Local Trust Committee applied for and was awarded a \$5,000 Solar Community grant from the Solar BC Program administered by the BC Sustainable Energy Association. The Earth Festival Society has been contracted to coordinate and promote this solar hot water project on Salt Spring. The Earth Festival Society will work with groups such as the new Solar Working Group of Transition Salt Spring, the Institute for Sustainability, Education and Action, and the Salt Spring Climate Action Council to implement this program.

Guy Dauncey of the BC Sustainable Energy Association describes options for solar hot water in BC thus: *"...we can choose between two technologies, using either flat, black plates or evacuated vacuum tubes to collect the Sun's energy. We can also choose to direct the heat into our homes through a heat exchange fluid, storing the heat in a tank inside our home, or go with a tank on the roof that stores the hot water directly..."*

As a part of the SolarBC project, the Earth Festival Society along with the Salt Spring Climate Action Council will develop realistic targets, identify existing solar installations from those who have expressed interest, including potential demo sites to provide first hand information about advantages and pitfalls to installing solar. We will also work with School District 64, Parks and Recreation Commission, particularly the pool, and the library board to determine if there is solar potential.

We plan to set up a users group of those who are interested in solar hot water to collectively build local capacity and provide support including technical installation and maintenance expertise. This educational component will include developing a pre-screening process so people will have a rough idea about the potential for success if they install solar. The users group can also develop a joint Expression of Interest that would assist in negotiating discounts from suppliers.

The biggest obstacle to installing this technology is often the price. Guy Dauncey gives us the economic argument for solar hot water.

*"In summer, a system will generate up to 100 percent of the hot water you need; in winter, it will generate up to 40 percent, depending on the weather. The cost will range between \$5,000 and \$8,000, depending on your choice of system, averaging around \$6,900."*

Towards this, there are two incentives to help reduce the price: a SolarBC incentive of \$1,000, doubled to \$2,000 for the next 200 systems in BC; and a federal EcoEnergy incentive of \$1,200 for larger systems that generate more solar energy, if you complete an energy assessment. Alternatively, you can use the incentive to create a zero interest loan through TD Canada Trust, allowing you to go ahead with monthly payments of around \$110 for five years. Solar hot water is a great investment, providing up to 50% of your hot water with free, reliable energy for up to 30 years.

Much of the work on this Solar Community project will be education and outreach. The first event will be held at the Transition Salt Spring potluck at 7 pm, October 16 at Lions Hall. Nitya Harris, Executive Director of SolarBC, will be our featured speaker.

We are very fortunate that the Local Trust Committee has taken this initiative. As a Solar Community, Salt Spring is once again leading the way. With funding from SolarBC, Salt Spring Islanders will reduce their carbon footprint, save money and have peace of mind through working together as a community.

Contact: Marion Pape 537-4567

Published: **October 27, 2010 10:00 AM**

A \$200 rebate towards the cost of an ecoENERGY assessment is now available to assist Salt Spring Island residents access LiveSmart BC grants for solar domestic hot water systems and other energy-efficiency upgrades.

The rebate is available on a first-come first-served basis to homeowners who sign up for an energy assessment with City Green.

“This \$200 energy assessment rebate is in addition to the \$150 energy assessment rebate and \$125 solar hot water system incentive available from LiveSmart BC, \$2,000 solar hot water system incentive from Solar BC, or the zero interest loan through TD Canada Trust to help make solar more affordable,” Marion Pape of the Earth Festival Society explains.

The full cost of a two-stage home energy assessment is \$450, but the \$200 rebate from the Earth Festival Society and a \$150 subsidy from the provincial government means the assessment costs only \$100, and provides access to several thousand dollars in LiveSmart BC incentives, including \$125 for solar hot water, \$1,420 for high-efficiency heat pumps, up to \$400 for basement insulation and up to \$250 for draft proofing.

To book a home energy assessment, contact City Green at 1-866-381-9995 or sign up online at [www.citygreen.ca](http://www.citygreen.ca).