

Salt Spring Island Climate Actions

Progress Report to the Salt Spring Island Local Trust Committee
March 12, 2012

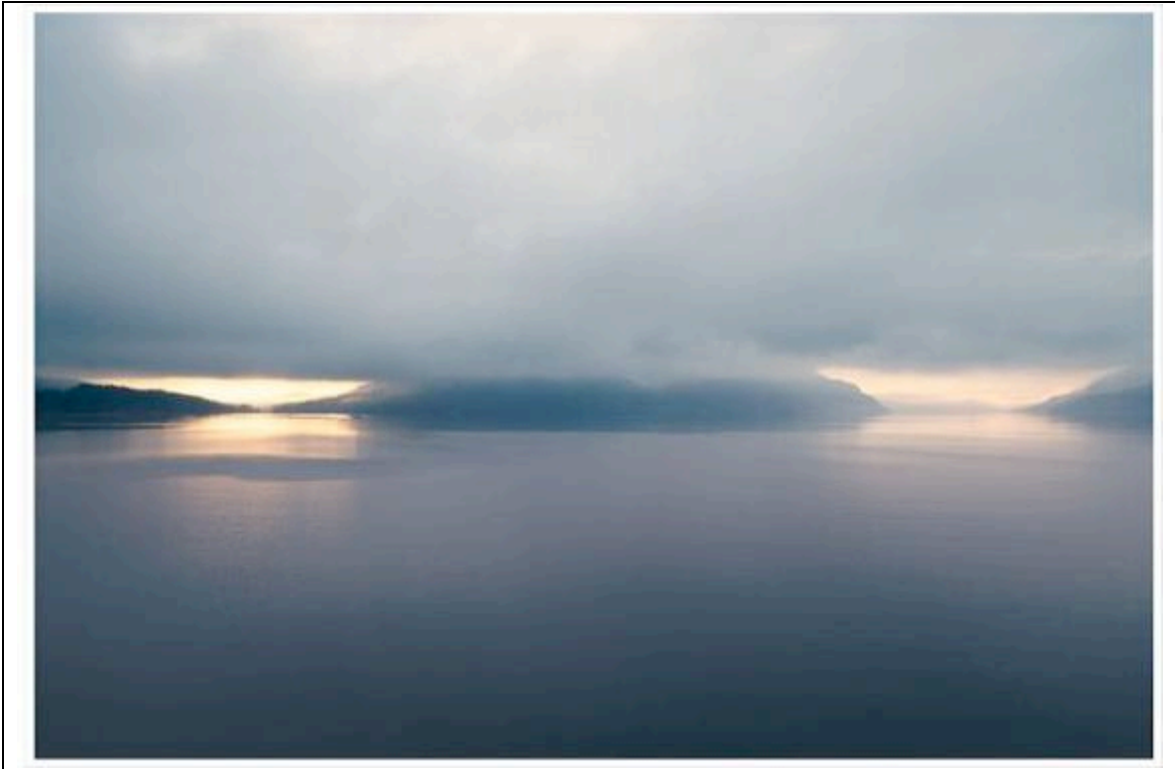


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Executive summary

This progress report reviews the 2005—2012 Salt Spring Island Community Energy Strategy and its successor, the 2011 Salt Spring Island Climate Action Plan (CAP 1.0) which provides direction for meeting Salt Spring's 2015 and 2020 greenhouse gas (GHG) reduction targets.

Planning for climate change, both in terms of mitigation and adaptation, is part of the role of local government. The Salt Spring Island Official Community Plan (OCP) recognizes this and includes a new section A6 on Climate Change and Energy Efficiency. Beginning in 2005, residents and local businesses have undertaken a wide range of activities that reduce GHG emissions and increase the community's resilience to future climate change, supported by policies, programs, infrastructure, incentives and information.

The number of significant GHG reducing activities identified is surprisingly large. The Climate Action Tracking Table lists over 80 actions that have been undertaken since 2005. Of these, over half led directly to reductions in energy use or GHG emissions and are providing ongoing savings. An additional sixteen actions provided education and community engagement. Sixteen actions were new in 2012 or in the planning stages. Of the two priority areas, the transportation sector had four new projects coming on line and ten ongoing actions. The food and agriculture sector had six new projects coming on line and eighteen ongoing actions. The local renewable energy sector was the most active of the other sectors with four new projects in the planning stages and six ongoing actions. An estimate of resulting savings is beyond the scope of this report but is part of the tracking function of the Salt Spring Island Climate Action Council Society (CAC).

The primary motivations for change may not be climate-related, for example most of the food actions are led by garden clubs and agricultural organizations. Planning policies such as the densification of Ganges achieve a number of land use and other objectives, of which GHG mitigation is but one. Infrastructure such as the island bus, essential for GHG reduction goals in the transportation sector, was developed largely for other reasons. Projects that meet multiple needs are likely to be robust. Good communication between the various stakeholders helps ensure that climate objectives are supported along with the other goals.

Local non-profit organizations have played a key role in providing information and generally engaging the community in climate action. Eleven non-profit Salt Spring groups were actively contributing to the implementation of CAP 1.0 as of March 2012. Contributions made by local advisory bodies and commissions were also important, particularly the CRD SSI Transportation Commission. Including government agencies, eighteen organizations were engaged in climate actions. Given the number and the diversity of the organizations involved, a key role for the CAC is to function effectively as a climate action roundtable with ongoing participation by the many involved island organizations and agencies.

CAP 1.0 relies on broad-based and entirely voluntary community adoption of a number of actions, largely in the priority areas of on-island transportation and food and agriculture. Gaps were identified in these sectors. Gaps in the transportation sector are of particular concern in meeting 2015 and 2020 GHG reduction targets. Coordination and promotion is needed for vehicle performance improvement actions such as a Green Fleet program for commercial vehicles, Transportation Tune Up and anti-idling campaign. Planning for charging infrastructure for electric vehicles is also needed. Locally grown food represents under 10% of total food consumed on island. Significant emissions reductions in the food sector must necessarily involve changes to the type of imported food purchases made by islanders. Educational campaigns geared for grocery store shoppers are lacking. Other gaps included the lack of climate adaptation measures, and the impact of population growth on targets.

1.0 Introduction

The purpose of this progress report is to summarize active climate initiatives identified in the 2005 Salt Spring Island Community Energy Strategy and the 2011 Salt Spring Island Climate Action Plan. The report also includes other initiatives underway that may contribute to Greenhouse Gas (GHG) reduction targets. Actions are listed and gaps identified. Information and direction for on-going climate action work on Salt Spring Island related to meeting 2015 and 2020 GHG targets is included, along with background and context for the 2012 target year conclusion of the Community Energy Strategy. Appendix B, also available as an Excel spreadsheet, tabulates Salt Spring's initiatives contributing to climate change mitigation and adaptation. This spreadsheet will be used to track ongoing climate action and will be updated on a regular basis.

Climate change is already evident in BC, including the CRD region¹ and on Salt Spring². The need to adapt is unavoidable. The severity of future impacts may be reduced by rapid reduction of fossil fuel use. While international and national protocols are necessary for global GHG reductions, local communities are where the shift takes place, and where adaptation occurs. These challenges come at a time of increasing environmental degradation and economic uncertainty. Addressing them is a task for local government in collaboration with other agencies and local organizations. Salt Spring was one of the first communities in BC to recognize the need for climate action. Other BC communities have since adopted targets and strategies to meet them, and have implemented various measures.³

This progress report reviews the 2005—2012 SSI Community Energy Strategy and its successor, the 2011 SSI Climate Action Plan (CAP 1.0) which provides direction for meeting Salt Spring's 2015 and 2020 GHG reduction targets. Both the Energy Strategy and CAP 1.0 contain a number of suggested measures, many of which are voluntary actions to be undertaken by individual islanders. These actions may be encouraged and supported by information and education, by policy, by infrastructure, by financial incentives and, in some cases such as energy performance of new buildings, by provincial and regional regulation.

¹ Pacific Climate Impacts Consortium, Dr. Francis Zwiers, webcast March 6, 2012

<http://www.pics.uvic.ca/events.php>

² St. Mary Lake water temperature records

³ see <http://www.toolkit.bc.ca/success-stories> for examples

2.0 SSI Community Energy Strategy 2005 to 2012

Background

The Salt Spring Island Community Energy Strategy was prepared by the Earth Festival Society for the community of Salt Spring Island, the Islands Trust Local Trust Committee, and the Capital Regional District. The Energy Strategy process began in 2003 with the formation of a multi-stakeholder steering committee and the preparation of a baseline energy report⁴. In May, 2004, fifty community activists and thinkers from different sectors attended a one day workshop, reviewed the Baseline Report and identified a large range of possible measures to reduce energy use and GHG emissions. The results of that meeting and a subsequent Energy Fair and consultation in October 2004 formed the basis of the Energy Strategy, which was published in March 2005. The primary objective was to reduce energy and emissions to 2002 levels by 2012. Oversight and tracking was undertaken primarily by the Earth Festival Society with funding provided by federal, provincial, and local government sources. Implementation was very much dependent on community volunteers and involved numerous public information events—speakers, films, workshops, and demonstrations, including “critical mass” bicycle rides, nut tree planting, gardening events, and electric vehicle displays.

Status of Energy Strategy recommendations and actions undertaken

The original 2005 Energy Strategy Recommendations are reproduced in entirety below in *italics*. Beneath each recommendation is its status, as of March 2012. The Energy Strategy also provided examples of potential actions to reduce energy use and emissions for each sector. Actions undertaken are summarized in a table below each sector’s recommendations, referenced to the relevant Energy Strategy section. The actions listed do not include all community engagement actions such as Earth Day events, films and speakers, but are intended to capture items directly resulting in energy savings and GHG emission reductions.

1. *General*

1.1 *Communicate information about the Energy Strategy, promote energy initiatives, and assist island interest groups to develop and deliver relevant actions.*

Status: Complete. The release of the SSI Climate Action Plan (CAP 1.0) in April 2011 shifted community engagement activities toward meeting the 2015 and 2020 targets.

1.2 *Continue the One Tonne Challenge initiative to motivate more people to make a personal commitment to GHG reduction; and in particular take the One Tonne Challenge into the schools to involve island youth and their families.*

Status: The One Tonne Challenge program was terminated in 2006 by the federal government and local organizations prohibited from using the “One Tonne Challenge” brand. The federal action killed the local program just as it was preparing to expand after an initial pilot.

1.3 *Compile energy and emissions performance data, from the sources used for the baseline report plus project-specific indicators to measure progress at three to five year intervals, and review and adjust the Energy Strategy accordingly.*

Status: Ongoing. Baseline update reports were completed in 2007 and 2010. Provincial Community Energy and Emissions Inventory (CEEI) 2007 data for Salt Spring Island was made available in 2010 and has been included with the locally compiled data. 2010 CEEI data will be available this year, 2012. A final assessment report will be prepared, subject to funding, when 2012 CEEI data

⁴ Earth Festival Society, *Salt Spring Island Community Energy Strategy Baseline Report*, May 2004

are available in 2014.

1.4 *Seek federal and provincial funding to implement the Energy Strategy actions.*

Status: Planning and community engagement funding received through the federal EcoAction program, from the provincial Community Action on Energy and Emissions program, and various smaller provincial awards and grants. Provincial and federal infrastructure funding were received by the relevant organizations, e.g. for SSI Transit system.

2. Local Government

2.1 *Seek official endorsement of the Salt Spring Island (SSI) Community Energy Strategy from CRD and Islands Trust.*

Status: Complete.

2.2 *Coordinate energy-related planning functions between Islands Trust, CRD and non- governmental organizations to maximize capability by making the group a formal committee of Islands Trust and CRD.*

Status: Ongoing. The Energy Strategy Task Force was reconstituted in 2010 as the SSI Climate Action Council. It included full participation by Islands Trust and CRD elected representatives. In 2011 the Climate Action Council incorporated as a non-profit society in response to changes in CRD Directors' Grant-In-Aid requirements. Elected officials no longer participate as full members, although they are encouraged to attend meetings. Status as a committee or commission of local government would provide more certainty and better access to staff expertise and resources.

2.3 *Include energy planning goals and policies and recommendations as part of the five year review of the Official Community Plan (OCP). The five-year review of the OCP provides an opportunity to reference the SSI Community Energy Strategy and to consider the inclusion of energy goals and policies in Parts A, B, C, D, E, and G. Specific additions include:*

2.3.1 *Support and strengthen the existing OCP references to energy conserving measures.*

2.3.2 *Include energy performance criteria as a requirement for all rezoning applications, and for all applications requiring a Housing Agreement.*

2.3.3 *Include energy conservation provisions such as pedestrian and bicycle infrastructure as required amenities for rezoning applications.*

Status: Complete, except for the rezoning requirements. The 2008 OCP includes a new section, A.6 - Climate Change and Energy Efficiency.

2.4 *Establish energy performance standards for new and existing CRD buildings.*

Status: The majority of CRD corporate facilities and buildings are under the CRD carbon neutral portfolio which targets carbon neutrality for operations by March 2013. LEED Gold standard or better is the minimum for new buildings and capital projects under the 2008 Corporate Climate Action Plan. Other requirements are funding-specific and involve demonstrating a given % performance above the Model National Energy Code.

3. Transportation

3.1 *Support the establishment of a SSI Transportation Commission to act as a coordinating body to facilitate projects, programs and services to reduce reliance on the automobile on SSI with particular reference to reducing automobile congestion in Fulford, Ganges and Vesuvius.*

Status: Complete. SSI Transportation Commission established 2007.

3.2 *Facilitate the development of an SSI pedestrian and bicycle network, including the SSI portion of the CRD Regional Trail Network in the following ways:*

3.2.1 *Initiate a planning and development process for the Regional Trail Network with CRD*

Parks Committee

3.2.2 *Support the development and completion of the Ganges, Fulford and Vesuvius urban pedestrian and bicycle trail network in coordination with the Regional Trails Network and the proposed SS Transportation Commission.*

3.2.3 *Include provisions for pedestrian and bicycle infrastructure as required amenities for rezoning applications.*

Status: Underway. 2007 CRD North Ganges Village Transportation Management Plan to be implemented. Partners Creating Pathways in the process of completing the Ganges pathways network. Fulford-Vesuvius bicycle and pedestrian routes are under discussion.

3.3 *Encourage increased automobile efficiency, reduced fossil fuel use and trip reduction measures for SSI through the following:*

3.3.1 *Promote the replacement of 10% of island high-consumption automobiles with energy-efficient models.*

3.3.2 *Undertake a vehicle maintenance and eco-driver fuel saver awareness program.*

3.3.3 *Support the use of bio-fuels, including an SSI vehicle fuelling station.*

Status: Actions undertaken in all the above.

3.4 *Introduce a ‘Car-free Day in Ganges’ to demonstrate automobile alternatives, and investigate the implications of reduced automobile access in the village core.*

Status: Not undertaken due to lack of support from Ganges businesses.

3.5 *Encourage BC Ferries to establish possible energy saving and emission reduction activities for their SSI fleet and revise the Energy Strategy accordingly.*

Status: Not undertaken due to lack of resources.

3.6 *Support the establishment of Salt Spring bus and shuttle services.*

Status: Salt Spring Transit established in 2008 and expanded in 2011 in response to high ridership.

TRANSPORTATION ACTIONS UNDERTAKEN 2005—2012
<p><i>Improve the Efficiency of Existing Vehicles (6.1 p 17)</i></p>
<p>“Transportation Tune Up” train-the-trainers workshop delivered, material distributed. No resulting workshops given due to lack of resources. Limited anti-idling campaign. “Electric Vehicle Factory” club established for DIY conversion of gasoline vehicles to electric.</p>
<p><i>Energy Efficient New Vehicle Promotion (6.2 p 17)</i></p>
<p>Promotion of hybrid vehicles, electric vehicles, at various events, articles</p>
<p><i>Increase Pedestrian Transportation (6.3 p 18)</i></p>
<p>SSI Transportation Commission established in 2007 Ganges pathways network partly complete Children’s bicycle safety courses given annually Bicycle lanes and road shoulder improvements begun</p>
<p><i>Introduce Island Transit System (6.4 p 18)</i></p>
<p>In place since 2008, usage in 2009 approximately double Energy Strategy assumption. System expanded in 2011. Ridership grew from 63,000 in 2010 to 79,000 in 2011.</p>
<p><i>Increase the Use of Bio-Fuels to 10% of Existing Vehicles (6.6 p 19)</i></p>
<p>Recycled bio-diesel produced by Cowichan bio-diesel coop is available in limited quantities from Pretzel Motors. Coop membership is required.</p>

Short-term Transportation Actions (6.7 p 20)

Car share coop for residents, part of Murakami Gardens affordable housing project, provides residents with access to a car, per development approvals requirements. Many residents do not drive and the vehicle is underutilized.

Car Stops, a version of Ride Share, in process.

Produce delivery system—Growing Up Organic, now Farm-Food Link— in place

4. Housing

4.1 *Establish and promote a voluntary EnerGuide for Houses 80 standard for new housing.*

Status: Not undertaken due to anticipated changes to BC Building Code.

4.2 *Promote the EnerGuide for Houses incentive program for existing houses to island homeowners, the renovation industry, and the real estate industry.*

Status: Ongoing.

4.3 *Promote energy-efficient wood stoves and launch a wood stove change-out program.*

Status: “Burn it Smart” workshops held but change-out program not implemented due to lack of access to funding.

4.4 *Create a set of tools and a communications process for islanders and potential islanders to encourage energy and water conservation, and clean wood-burning practices.*

Status: Complete. “SSI Sustainability Checklist” produced and available from CRD and Islands Trust.

HOUSING ACTIONS UNDERTAKEN 2005—2012**NEW RESIDENTIAL CONSTRUCTION***Voluntary Energy Efficiency Standard for New Residential Construction (7.1 p 23)*

Energy efficiency upgrades at Murakami Gardens affordable housing project.

“Sustainability Checklist” for new construction and renovations.

Annual or biannual Eco-living and home tours.

Various speakers and workshops.

RESIDENTIAL RETROFIT OPTIONS*Home Energy Efficiency Improvement Campaign (8.1 p 26)*

Promotion of federal and provincial energy assessments and retrofit incentives.

By April 2009, 93 homes had received a preliminary EGH assessment and 23 had qualified for grants.

Time of Sale labeling project

Marketing of LiveSmart BC and ductless air source heat pumps by island contractors

Various speakers and workshops.

5. Food & Agriculture

5.1 *Support the development and implementation of a Salt Spring Food Strategy, including an assessment of current and potential capacity.*

Status: Underway. “Plan to Farm” Salt Spring Island Area Farm Plan was produced in 2008. Implementation is ongoing, coordinated by the SSI Agricultural Alliance.

5.2 *Support and / or initiate “Grow your own”, “Buy Local” and “Buy BC Organic” public awareness campaigns.*

Status: Underway, initiatives by several groups, such as Tuesday Farmers’ Market promotion, “Organic

Week” and “Sip and Savor” events, and local food promotions by various restaurants.

- 5.3 *Support the increased production and consumption of local organic food by working with existing organizations such as Island Natural Growers, the Farmers’ Institute and the Salt Spring Garden Club on initiatives such as community gardens and gardening, composting and seed saving workshops.*

Status: Underway, initiatives by several groups include new allotment gardens in Ganges and in the Fulford Valley, and regular backyard composting and seed saving workshops.

FOOD AND AGRICULTURE ACTIONS UNDERTAKEN 2005—2012

Improve the capacity of the Salt Spring Fruit and Vegetable Industry (11.1 p 34)

Growing Up Organic, now Food-Farm Link provides marketing, pick up, and delivery to commercial buyers for SSI organic produce. Planning is underway for a produce storage and distribution centre. Ongoing education for commercial growers provided through periodic workshops, e.g. Food Safe, farm tours, speakers.

Simply Saltspring Organic Campaign (11.2 p 35)

“Grow your Own” and “ABCs of Gardening” workshops.
 “Incredible Edibles” food group of the Garden Club, garden tours and speakers.
 Annual “Seedy Saturday”
 Fall Fair increasing focus on local food production.
 Local organic fundraising dinners feature local organic food.
 Island abattoir to open summer 2012 will increase amount of local poultry and red meat available.
 Island chefs feature Salt Spring and organic items on their menus.
 Produce production increased 45% between 2004 and 2009

Buy BC Organic Campaign (11.3 p 35)

“Sip and Savour” event features regional food and wine.
 Country Grocer has expanded its bulk foods section, providing more choice of minimally processed vegetarian staples, including organic grains and pulses.

6. Business

- 6.1 *Encourage commercial sector building retrofits for energy efficiency. The NRCAN Energy Innovators Initiative is available for building energy audits and retrofits.*

Status: Underway. Some audits and retrofits undertaken using BC Hydro incentive programs.

- 6.2 *Develop an Energy Reduction toolkit for small business to provide guidance for cost- effective energy conservation projects.*

Status: Not undertaken due to lack of resources.

7. Institutions

- 7.1 *Encourage institutions to prepare or update and implement energy management plans for buildings and operations. Funding from BC Hydro and the NRCAN Energy Innovators Initiative is available for building energy audits and retrofits.*

Status: Not undertaken due to provincial requirement for all institutions to become carbon neutral.

- 7.2 *Establish communications between the SSI institutions (i.e., water districts, liquid and solid waste management, hospital, school district, Art Spring, BC Ferries, local government) to share information about energy management activities.*

Status: Not yet undertaken.

- 7.3 *Seek a resolution from CRD and Islands Trust that all new and reconstructed institutional buildings on SSI will demonstrate energy performance at least 25% better than Model National Energy Code. Ensure that the new indoor pool facility meets this standard, and / or the LEED standard. Federal CBIP funds may be available.*

Status: Incomplete. LEED Gold standard or better is the minimum for new buildings and capital projects under the CRD 2008 Corporate Climate Action Plan. Other requirements are funding-specific and involve demonstrating a given % performance above the Model National Energy Code. The indoor pool does not meet these standards.

COMMERCIAL AND INSTITUTIONAL SECTOR ACTIONS UNDERTAKEN 2005—2012

Commercial, Institutional and Agricultural Energy Efficiency Campaign (9.1 p 30)

BC Hydro audit initiative of commercial properties
 Provincial requirement for institutions to become carbon neutral
 School District 64 measures include school bus fuel efficiency upgrades
 Heat recovery strategy at indoor pool
 Lighting efficiency upgrades at Harbour House Hotel
 Lighting efficiency and other energy upgrades at Country Grocer
 LEED Gold equivalent planned for new library
 “Green Accommodations Guide” listings for the accommodations sector.

8. **Energy Supply**

- 8.1 *Promote independent power generation on SSI.*

Status: Ongoing.

- 8.2 *Research micro-hydro generating potential.*

Status: Microhydro Feasibility Study for Salt Spring Island completed 2009.

- 8.3 *Promote net metering by hosting a BC Hydro net metering seminar on island.*

Status: Seminar delivered by a renewable energy consultant November 18, 2007

- 8.4 *Promote use of solar domestic hot water systems.*

Status: SSI is a solar community, participating in the Solar BC program since 2010. Twelve solar hot water systems were installed during the tracking period, 2010 — 2011.

- 8.5 *Support the development of a 1 megawatt renewable energy project.*

Status: Incomplete. A single one megawatt project has not been identified. One megawatt generating capacity represents the equivalent of about 4,000 solar domestic water heaters, each producing about 8 GJ per yr, or about 4,400 solar electric roofs each producing about 2,000 kWh per yr. Tidal current is a potentially large energy source for local new generating capacity but has not yet been investigated.

ENERGY SUPPLY ACTIONS UNDERTAKEN 2005—2012

Generate 5% of Salt Spring Island's Power Supply (10.1 p 33)

Microhydro Feasibility Study for Salt Spring Island completed 2009 estimated potential for at least 800 MWh / yr
 Murakami Gardens solar hot water system installed 2008 displaces 25 MWh / yr
 Salt Spring Island became a Solar Community in 2010. Twelve residential solar hot water systems installed 2010-2011

- *Solar hot water system at Harbour House Hotel
- *Solar hot water system installed at Salt Spring Inn.
- *Solar hot water system planned for Lady Minto Hospital

Estimate about ten residential PV installations, and a similar number of microhydro installations

- *Although solar hot water meets thermal loads rather than electrical loads, it is included here because it is a renewable resource that displaces electricity, normally used to heat water on SSI.

Preliminary results from 2010 Baseline Update

The 2010 Baseline Update report found that Salt Spring's GHG emissions were beginning to decline and projections suggested that the 2012 target would be met, largely due to a significant decrease in emissions from light vehicles. These emission reductions resulted from vehicle replacement and reduced vehicle kilometers travelled (VKT).

Salt Spring's total energy use on the other hand was increasing and projections suggested that energy targets may not be met. Electricity consumption was projected to be higher than the business-as-usual base case by 2012. However this increase would have only a small impact on GHG emissions because over 85% of electricity in BC is hydropower and BC Hydro therefore has a very low GHG emission factor. Annual residential electricity consumption per connection climbed from an average of about 17,000 kWh in 2002 to over 18,000 kWh in 2008. Fuel switching from heating oil, propane and firewood may have been partly responsible for the increased electricity use. This would have GHG emission reduction benefits.

The 2010 Baseline Update reported declines in local meat production of about 44% and a 52% decrease in poultry raised for meat between 2004 and 2008. This decline is now reversing with the opening of the local abattoir scheduled for early summer of 2012. After the 2010 Baseline Update was completed, the 2010 Produce Study was released. This report found that commercial produce production had increased overall by 38% on Salt Spring farms between 2004 and 2009. Farming practices were found to be well-suited to controlling and limiting the carbon footprint associated with production. A further 45% increase over 2009 levels would be needed to provide 10% of total produce consumption on island, assuming no population growth.

Work remaining

When 2012 data are available, and subject to funding, analysis will be undertaken to determine which targets have been achieved. A final report will be published. Most data for 2012 should be available in 2013. The CEEI report for Salt Spring, which uses provincial and regional VKT information to provide sophisticated vehicle emissions analysis not otherwise available, is not expected until early 2014.

3.0 SSI Climate Action Plan to meet 2015 and 2020 OCP targets

Salt Spring's Official Community Plan (OCP) includes section A.6 on climate change and energy efficiency. Objectives are reproduced in entirety below.

A.6 CLIMATE CHANGE AND ENERGY EFFICIENCY

A.6.1 OBJECTIVES

- A.6.1.1 *To consider the impacts of climate change as a central factor in land use decision-making.*
- A.6.1.2 *To establish the importance of energy efficiency, energy security, greenhouse gas emissions reduction, and carbon cycling in land use, site planning, building design and transportation.*
- A.6.1.3 *To promote the use of renewable energy and the development of renewable energy sources.*
- A.6.1.4 *To work with other agencies, stakeholders and the community to achieve energy conservation and emissions reduction goals.*
- A.6.1.5 *To support actions to minimize greenhouse gas emissions and to adapt to the impacts of climate change in land use decision-making.*
- A.6.1.6 *To recognize the importance of our forested lands in removing carbon dioxide from the atmosphere.*
- A.6.1.7 *To support a reduction of at least 15% in Greenhouse Gas emissions by 2015; at least 40% by 2020 and at least 85% by 2050 based upon 2007 data. Within the local trust area this reduction will be achieved by actions resulting from individual and community initiatives, the actions of other levels of government, technological changes, and changes to land use policies and regulations.*

Overview of the CAP process

The CAC was established in 2010 to develop and oversee a climate action plan to meet the provincially mandated local GHG reduction targets and to function as a climate action roundtable. It evolved from and replaced the Energy Strategy Task Force, which provided input to the OCP review process and to the implementation of the Community Energy Strategy. The CAC incorporated as a non-profit society in 2011 to comply with new CRD funding regulations. The new structure proved problematic in terms of participation by locally elected representatives and has now been corrected.

Active Climate Initiatives, 2012

The following list of current initiatives is organized under the CAP 1.0 section 3 headings. The Climate Actions Tracking Table (Appendix B) provides more information.

ON-ISLAND TRANSPORTATION

Reduce Vehicle Kilometres travelled (VKT)

- Salt Spring Island Transit System expanded in 2011 and served a ridership of 79,000 paying fares, up from 63,000 in 2010.
- Bicycle lanes, sidewalks, and road shoulder improvements in 2012 include the North Ganges Village Transportation Plan. Future bike lanes are planned for Ganges Hill.
- The Ganges pathways network, undertaken by Partners Creating Pathways, will expand in 2012 with the extension to Booth Canal of the Lower Ganges Road pathway. This work is part of an ongoing project to complete an off-road pathways network in the Ganges area.

- Children's bicycle safety courses are given each year by Island Pathways to teach safe cycling habits and provide helmets.
- The "Velo Village" event, June 21 to 23 2012, will bring an estimated 400 tourists without automobiles to Salt Spring and will promote cycling and the need for bicycle infrastructure on island.
- Several new housing projects for Ganges are in early planning stages. This housing will reduce VKT for new village residents.

Increase vehicle occupancy

- A Car Stop pilot project will launch in spring 2012 on two routes: Ganges to Fort Street and Beddis Road. This project is based on existing Car Stop programs on Pender and Mayne islands and will support casual carpooling on routes not served by the island bus.
- Ride-share electronic lists are maintained by the Salt Spring Exchange and Transition Salt Spring to connect islanders travelling to on-island events and to off-island destinations.
- Many island clubs and groups encourage members to carpool to their events.

Increase vehicle efficiency

- Car share coop for residents, part of Murakami Gardens affordable housing project.
- "Electric Vehicle Factory" club, established as a Transition Salt Spring group, provides a space and mentoring for DIY conversion of gasoline vehicles to electric.
- Recycled bio-diesel produced by Cowichan bio-diesel coop is available in limited quantities at cost from Pretzel Motors. Coop membership is required.

FOOD AND AGRICULTURE

Dietary shift to more local and regional organic food

- Island Natural Growers (ING) Food-Farm Link provides marketing, pick up, and delivery to commercial buyers for SSI organic produce.
- Planning is underway for a produce storage and distribution centre.
- Ongoing education for commercial growers provided through monthly farm tours organized by ING, and periodic workshops with guest speakers (e.g. Food Safe, crop planning).
- Fall Fair brings annual focus on local food production.
- Local organic fundraising dinners feature local organic food.
- Island abattoir scheduled to open this summer will increase amount of local poultry and red meat available and reduce off-island vehicle travel.
- Island chefs feature Salt Spring and organic items on their menus.
- Harbour House Hotel features attached organic market garden supplying produce to the restaurant.
- Chamber of Commerce "Sip and Savour" event features regional food and wine.
- Community Services is planning to grow food for the Food Bank.

Dietary shift to less processed, more vegetarian food

- "Grow your Own" radio show and "ABCs of Gardening" workshops with Linda Gilkeson encourage backyard fruit and vegetable production.
- "Incredible Edibles" food group of the Garden Club, organizes garden tours and speakers.
- ING's annual "Seedy Saturday" provides local source of vegetable seeds and gardening workshops.
- "Salt Spring Seed Sanctuary" maintains local seed bank.
- Dan Jason of Salt Spring Seeds promotes production of backyard organic grains and dried beans, and provides vegetarian recipes.
- A few farms beginning to grow organic wheat and other grains for human consumption; the island has a functioning combine harvester.

- Community allotment gardens being established in Ganges (CRD property) and Fulford Valley (SSI Community Farmland Trust property) to encourage more production for personal use.
- Country Grocer has expanded its bulk foods and fresh produce sections, providing more choice in less processed vegetarian food.

BC FERRIES

- continual upgrade of BCF vehicles and equipment used onsite
- standardization of vessel operations to minimize fuel burned
- use of shore power while berthed overnight.
- BCF is a PowerSmart partner and is currently involved in an employee engagement program to reduce energy use fleet wide.

Some things that are under review are:

- potential use of LNG as a fuel source
- creation of a Shipboard Energy Efficiency Management Plan for all vessels

HOMES

- SSI Sustainability Checklist available online and at CRD and Islands Trust offices.
- Information and referrals to LiveSmart BC incentives provided by various island groups and individuals.
- Marketing of LiveSmart BC and ductless air source heat pumps by island contractors.
- Earth Festival Society's biannual Eco-Living and Home Tour encourages participants to adopt at least one idea from the tour.
- Periodic seminars for builders e.g. Homeowner Protection Office "Design and Details for New Seismic and Envelope Requirements" provide information on materials, products and techniques for improved building performance.

BUSINESSES AND INSTITUTIONS

- All provincially-funded institutions in BC are required to become carbon neutral and to track GHG emissions. Salt Spring institutions therefore have valuable experience to share.
- The majority of CRD corporate facilities and buildings are under the CRD carbon neutral portfolio which targets carbon neutrality for operations by March 2013. There is an annual business planning process to provide funding for retrofit projects in electoral areas, and CRD is establishing a corporate fund to assist with "top ups".
- LEED Gold standard or better is the minimum for new CRD buildings and capital projects under the 2008 Corporate Climate Action Plan. Other requirements are funding-specific and involve demonstrating a given % performance above the Model National Energy Code. Climate adaptation is also playing an increasing role in CRD design, systems and operations.
- In 2012 the CRD is planning a feasibility study for the Ganges wastewater treatment plant effluent waste heat recovery. This will help determine if the waste heat can be recovered to supply heating and hot water to Salt Spring Island Community Swimming Pool, Salt Spring Island Elementary Middle Schools and School District #64 (Gulf Islands) Board Office.
- Solar hot water system planned for Lady Minto Hospital.
- "Green Accommodations Guide" listings for the accommodations sector.

SOLID WASTE

- "Bring Your Branches" yard waste collection pilot, part of the SSI Agricultural Alliance central composting initiative, in partnership with CRD PARC.

LOCAL RENEWABLE ENERGY

- Solar hot water system for Lady Minto Hospital in planning phase.
- Library solar hot water system in process.
- Preliminary investigation of local utility options by TSSEC.

OTHER INITIATIVES

- Transition Salt Spring Enterprise Cooperative (TSSEC) has been established to financially assist projects, social enterprises and for-profit endeavors that reduce fossil fuel use and otherwise achieve climate action goals.
- The Nut Tree Project provides nut trees for planting on public and private lands. A partnership project between Transition Salt Spring, Seven Ravens Tree Farm and Salt Spring Air.
- Fruit Tree Project harvests fruit and shares one third with the homeowner, one third with the food bank and one third with the pickers. Organized by Molly Murphy.

Delivery organizations and agencies

The following agencies and organizations have climate action planning and oversight functions:

Islands Trust—land use planning for mitigation and adaptation, GHG reduction targets.

CRD—infrastructure and services for mitigation and adaptation.

SSI Climate Action Council Society —SSI Climate Action Plan.

The following agencies are responsible for administering facilities and transportation services that directly impact SSI energy consumption and GHG emissions:

BC Ferries

BC Hydro

BC Transit

CRD

School District 64

VIHA

The following non-exhaustive list represents some of the many local agencies and non-profit organizations that actively contribute to implementing the SSI Climate Action Plan by providing information, programs or services that support climate change mitigation and adaptation:

SSI Climate Action Council Society	Coordination, information exchange, tracking.
SSI Agricultural Alliance	SSI Area Farm Plan, agricultural infrastructure.
Community Services Society	Food security projects, Recycling Centre.
SSI Conservancy	Protects forested land and its carbon sequestration and storage capacity.
Earth Festival Society	Information and education on appropriate technologies, Eco-Living and Home Tour, Community Energy Strategy, Community Allotment Gardens.
Institute for Sustainability, Education and Action	Sponsors public events.
Island Natural Growers	Education and information for commercial organic growers, Seedy Saturday, Tuesday market.
Island Pathways	Partners Creating Pathways and bicycle advocacy and education.
Salt Spring Forum	Speaker series regularly includes climate change topics.
SSI Transportation Commission	Advocacy and advice for expanded pedestrian and bicycle infrastructure.

Transition Salt Spring	Network of various groups and projects building community resilience and reduced dependence on fossil fuels.
SSI Water Council Society	Information, education and programs on water quality and quantity including climate change impacts.

Gaps

GENERAL

Climate adaptation

Climate adaptation issues were deliberately omitted from the first version of the Climate Action Plan, CAP 1.0, with the intent to deal with adaptation in future versions. A comprehensive analysis of risks and a strategy to address them would be helpful. The need to adapt is already evident. For example, warmer lake water temperatures are already negatively impacting potable water quality. Coordination and information sharing between the various affected agencies may provide synergies, help identify funding, and engage the community.

Community engagement strategy

The development of a community engagement strategy has not yet been undertaken due to lack of resources. Climate action on SSI is largely dependent on voluntary lifestyle changes by island residents. Effective and ongoing community engagement is therefore essential. A baseline of current attitudes and motivating factors would be very helpful.

Population growth

While the impact of population growth on GHG reduction targets was included in CAP 1.0, growth projections were not included in the sample actions impact calculations. The sample actions are illustrative only, but they imply that the targets, particularly the 2020 targets, are easier to reach than is the case when growth is taken into account.

DATA

Some data sets are readily available and provide considerable confidence. But even within the sectors where confidence exists, there remain uncertainties. For example, local data are not available for purchased quantities of gasoline and diesel, fuel oil and propane. The impact of food purchases remains a very complex topic and local data are scarce. Other areas have not yet been researched, such as marine traffic (except BC Ferries), and float planes. The impact of purchases of construction materials and household goods and appliances has not been assessed. Lack of data may result in good opportunities for emissions reduction being overlooked. On the other hand, given very limited resources, it may be necessary to accept significant data gaps.

ON-ISLAND TRANSPORTATION

On-island private automobile use is the largest direct source of GHG emissions and on-island transportation is one of two priority areas in CAP 1.0. Gaps in this sector are therefore of particular concern in meeting 2015 and 2020 GHG reduction targets. There is no local organization focused on improving the efficiency and utilization of vehicles, and therefore no-one to coordinate and promote transportation actions such as a comprehensive information campaign, including promotion of under-utilized bus routes, a Green Fleet program for commercial vehicles, an anti-idling campaign (CRD Bylaw in place) and Transportation Tune Up services. Lack of education and information about electric vehicles is of particular concern, as is the current lack of planning for electric vehicle charging infrastructure.

FOOD AND AGRICULTURE

Food and agriculture is the other priority area in CAP 1.0. Many initiatives are driving the expansion of local food production. However locally grown food represents under 10% of total food consumed on island. Significant emissions reductions in this sector must necessarily involve changes to the type of

imported food purchases made by islanders. No local island group has yet identified itself as willing to undertake an educational campaign geared for grocery store shoppers.

LOCAL RENEWABLE ENERGY

Increases in distributed generation and local generating capacity have been identified as long-term goals that will take time to develop. Ongoing information and promotion of solar and micro-hydro options is needed. Tidal currents around Salt Spring are a potentially large energy source that should be investigated. A preliminary feasibility study, possibly undertaken by graduate students, is a necessary first step.

Summary of the Climate Action Tracking Table

The Climate Action Tracking Table (Appendix B) is also available as an electronic spreadsheet, which will be used by the CAC to track climate actions and will be regularly updated. The table is organized using the headings of Section 4 of CAP 1.0, with some modifications. The intent of the table is not to capture every event on Salt Spring that encourages climate action, but to focus on actions likely to have an appreciable effect. For example, home retrofits are grouped together as one action, whereas institutions and large businesses are listed individually because the impact of their actions is larger. In a few instances, an action that involves more than one sector is included twice. The decision to include or group a particular action is somewhat arbitrary at this point. A few actions have been included simply to record that they have been tried.

The table lists over 80 actions. Of these, sixteen provided education and community engagement. Over half were providing direct energy savings and/or GHG reductions. Sixteen were new in 2012 or in the planning stages. Of the two priority areas, the transportation sector had four new projects coming on line and ten ongoing actions. The food and agriculture sector had six new projects coming on line and eighteen ongoing actions. The local renewable energy sector was the most active of the other sectors with four new projects in the planning stages and six ongoing actions.

APPENDIX A

Salt Spring Island energy and climate action reports and publications

- BC Ministry of Environment, *Salt Spring Island Trust Area: updated 2007 Community Energy and Emissions Inventory*, June 2010
- BC Ministry of Environment, *Technical Methods and Guidance Document for 2007 CEEI Reports*, Draft May 2010
- CRD and Islands Trust *Salt Spring Island Sustainability Checklist*, Ver 1.0 June 2009
- Deborah Curran & Company, Pembina Institute, *Policy Options to Reduce Energy Consumption and Greenhouse Gas Emissions in New Residential Buildings*, Oct 2008.
- Energy Strategy Task Force and Earth Festival Society, *Energy Priorities for the Salt Spring OCP, local government, and other agencies*, March 2007
- Earth Festival Society, *Salt Spring Island Community Energy Strategy*, March 2005
- Earth Festival Society, *Salt Spring Island Community Energy Strategy Baseline Report*, May 2004
- Islands Trust, *Reducing Greenhouse Gas Emissions in the Islands Trust Area*, Sept 2009
- Islands Trust, *Salt Spring Island Official Community Plan Bylaw No. 434, 2008*, Oct 2008
- Masselink Environmental Design, *Salt Spring Island Area Farm Plan detailed report*, Jan 2008
- M. Pape *Salt Spring Island Solar Community Project: Report to Solar BC*, Earth Festival Society, March 2011
- POLIS Project on Ecological Governance *A Soft Path Strategy for SSI-A soft path for water case study* C.Maas, S.Porter-Bopp, February 2010
- P. Reichert *Salt Spring Island Climate Action Food Research Report* Salt Spring Island Climate Action Council Society, Nov 2011
- P. Reichert *Salt Spring Island Produce Study* Salt Spring Island Agricultural Alliance, March 2010
- Salt Spring Island Climate Action Council *Salt Spring Island Climate Action Plan version 1.0*, April 2011
- Sustainability Solutions Group, Holland Barrs Planning Group *The GHG Implications of Different Settlement Patterns on Saltspring Island*, (undated)
- E. White, *Salt Spring Island Community Energy Strategy Baseline Report Second Update*, Earth Festival Society, March 2010
- E. White, *Potential Climate Actions for Salt Spring Island*, Earth Festival Society, March 2010
- E. White, S. Davis, P. Grange, J. Booth, *Microhydro Feasibility Study for Salt Spring Island*, May 2009

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OBJECTIVES AND STRATEGIES BY SECTOR	ACTIONS IN PROGRESS OR COMPLETED	COMMENTS	PRIORITY H=high M=medium L=low U=unassigned	PROGRESS INDICATORS	ECONOMIC PROGRESS INDICATORS	DATA SOURCE	PRIMARY AGENCY	PARTNERS
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1.0	On-Island Transportation	PRIORITY AREA ONE	direct GHG, energy and \$ savings					
1.1	Reduce vehicle kilometres travelled (VKT)							
	Expand Salt Spring bus ridership and availability.	SSI Transit Service started 2008	System expanded in 2011	H	ridership		SSI Transit	SSI Transit TC
	Expand pedestrian infrastructure.	Ganges pathways network	Pathways constructed every one or two years, partially complete	H	total length of pathways		IP	PCP IP
	Expand bicycle infrastructure	Bicycle lanes and road shoulder improvements	North Ganges and Ganges Hill improvements scheduled	H	total length of bicycle lanes		TC	MOTI TC
		Bicycle rack program	Provided by Island Pathways	M	total # racks installed		IP	IP
	Educate cyclists and motorists	"Share the Road" brochure and annual children's safety courses	Provided by Island Pathways	U			IP	IP
	Promote cycling and the need for infrastructure for cyclists	"Velo Village" June 2012 event	Promotes cycling and the need for cycling infrastructure	U			IP	IP multiple
	Reduce car ownership through car share coops	Murakami Gardens Car Share Coop	Operated by Community Services for Murakami residents only	L			CS	CS
	Design parking to encourage energy-efficient transportation.	Murakami Gardens	Reduced parking requirements	U	number avoided parking spaces		IT	IT
	Plan for densification of villages	Ganges new housing projects in early planning stages will reduce VKT for new village residents.	Supported by OCP	H	# new DUs in Ganges, # attached DUs in Ganges		IT	various IT
1.2	Increase vehicle occupancy							
	Expand carpooling	Car Stop pilot project 2012	Will operate in areas not covered by regular bus service.	H	to be developed		survey?	TSS/EFS CRD TC, IP, Lions
		Ride Share online lists	Various online lists for SSI, need promotion	M				Salt Spring Exchange
1.3	Improve Light Vehicle Performance.							
	Promote good maintenance and driving habits.	CRD Transportation Tune-up workshop	One workshop delivered before program terminated.	U	# people taking workshops			?
		Limited anti-idling campaign.	CRD Bylaw in place, could expand campaign	U				? CRD
	Replace older vehicles with electric vehicles.	Electric vehicle conversion "factory"	Small workshop has capacity to convert up to 24 vehicles/year	L	# vehicles converted	Value of fuel saved	TSS	TSS EFS
	Replace older vehicles with hybrids / small fuel efficient vehicles	Promotion of hybrid vehicles, electric vehicles, at various events, articles		H	# registered hybrid & fuel efficient vehicles	Value of fuel saved	ICBC, CEEI	? TSS, EFS, CAC

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1.0 On-Island Transportation (continued)									
	Provide & promote electric vehicle charging stations		Partial switch to electric vehicles needed to meet 2020 target	H	# registered electric vehicles	Value of fuel saved	ICBC/CEEI (?)	TC	CRD, IT, BC Hydro
	Increase use of recycled bio-diesel	Pretzel Motors	distributes Cowichan Bio-diesel Coop's recycled biodiesel	L	litres of fuel sold, # of customers		Pretzel Motors	Pretzel Motors	Cowichan BD coop
1.4	Improve Commercial Vehicle Performance.								
	Promote transition to green fleets.	School District 64 green fleet initiative	Ongoing	H	litres of fuel used, GHG emissions	Value of fuel saved	SD 64	SD 64	
2.0 Food and Agriculture									
2.1 Reduce consumption of highly processed foods									
	Encourage consumption of minimally processed foods	Country Grocer produce and bulk foods sections	expanded sections give more choice of minimally processed vegetarian staples, including organic grains and pulses.	H	qty bulk organic grains & pulses sold		grocers	grocers	ING, CAC
		Salt Spring Seeds organic grains	Dan Jason supplies seed, promotes production of backyard organic grains and pulses and provides vegetarian recipes.	U				Dan Jason	
2.2 Increase consumption of organic and vegetarian food									
	Encourage switch to more vegetarian diet	"ABCs of Gardening" workshops	Very popular vegetable gardening workshops by Linda Gilkeson	M	# people taking workshops		Linda Gilkeson, TSS	TSS	Linda Gilkeson, EFS
		"Incredible Edibles" garden tours	food group of the Garden Club, garden tours and speakers.	M	# members		Garden Club	Garden Club	
	Encourage consumption of organic foods	"Grow you Own" radio show	Weekly radio show supports home food production	M			Dennis Lucarelli	CFSI Radio	ING
		Annual "Seedy Saturday"	Access to seeds and food production workshops	H	# attendees		ING	ING	
		Salt Spring Seed Sanctuary	maintains local seed bank	H	# cultivars, # growers, qty seed		SSSS	SSSS	
		Local Organic community dinners	Fundraising events showcase local organic food	M	# events, # attendees			ING	various
		Local restaurant promotions	Island chefs feature Salt Spring and organic items on their menus.	M	# restaurants with local food	Value of local food bought	ING	ING	SSIAA

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2.0 Food and Agriculture (continued)								
	Harbour House Hotel organic garden	Attached market garden supplies hotel restaurant	U				Harbour House Hotel	
	Community Services food growing program	Planning to grow organic food to supply the food bank	H	Qty of food supplied	Value of food supplied	CS	CS	
	Rainbow Road allotment gardens	CRD-Transition Salt Spring, 40 plots available 2012	H	# plots rented		EFS	EFS	CRD, TSS, ING, CS
	Fulford Valley allotment gardens	Community Farmland Trust, in planning stage	M	# plots rented		CFT	CFT	SSIAA, ING, FI
2.3	Increase consumption of local and regional food							
	Fall Fair	Promotes local food and agriculture	H	# attendees, # entries by category		FI	FI	multiple
	"Sip and Savour" event	features regional food and wine.	M	# attendees		Chamber	Chamber	ING, various
2.4	Increase availability of local & local organic food							
	Improve infrastructure for commercial growers.	Island abattoir	H	# animals slaughtered	Value of meat	SSIAA	SSIAA	SSI Meat Producers
		Island produce distribution centre	H	Qty produce handled	Value produce handled	SSIAA	SSIAA	ING
		Composting facility	M	Qty organics diverted from landfill, qty compost sold	Value compost sold	CRD	CRD	SWC, SSIAA
		Tuesday farmers' market	H	# farmer vendors, # food vendors	Value produce and food sold	ING	ING	CRD
		Saturday farmers' market	H	# farmer vendors, # food vendors	Value produce and food sold	Saturday Market	Saturday Market	CRD
		Fruit Tree project	M	# properties, # trees, qty fruit	Value fruit	Molly Murphy		
		Nut Tree project	L	# trees planted by year	Value carbon offset	TSS	TSS	Salt Spring Air, Seven Ravens Tree Farm, EFS

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2.0 Food and Agriculture (continued)								
	Increase local commercial organic food production.	Underway	Produce production increased 45% between 2004 and 2009	H	Qty of food grown	Value food grown	Pat Reichert	ING SSIAA
		Growing Up Organic, now Food-Farm Link	provides marketing, pick up, and delivery to commercial buyers for SSI organic produce.	H	# farmers, # buyers, qty food	Value food	ING	ING
		Workshops, farm tours for commercial growers	Increase capacity through education	M	# workshops, # attendees		ING	ING
		Local grain production, combine harvester	A few farms beginning to grow wheat and other grains for human consumption on a commercial scale.	L	Qty grain harvested, # acres under grain	Value grain		
4.0 Homes			primarily electrical energy savings, avoid need for new generating capacity					
3.1	Reduce energy cost and GHG emissions from existing homes.		Electricity savings in BC provide few GHG emission reductions.					
	Low cost conservation through lifestyle changes.	Eco-living and home tour	Held biannually, challenges people to adopt ideas.	M	# attendees		EFS	EFS TSS, various
	Replace baseboard heaters with ductless ASHPs	Marketing of ductless air source heat pumps by island contractors	High potential for energy savings.	M	# heat pumps installed	Value of upgrades		
	Reduce emissions from wood burning appliances.	"Burn it Smart" workshops given	Needs wood stove change out program	L	# wood stoves replaced	Value of upgrades		
	Increase efficiency through home retrofits.	Promotion of federal and provincial energy assessments and retrofit incentives by NGOs and island contractors.	By April 2009, 93 homes had received a preliminary EGH assessment and 23 had qualified for grants.	L	GJ saved, GHG saved	Value of upgrades	NRCan, LivesSmart BC	CAC CityGreen
		Time of Sale labeling project	Poor market response at time of low sales (2010)	L				
	Retrofit low-income seniors' and supported living housing.	Dean Road retrofit project	Other projects?	M	GJ saved, GHG saved	Value of upgrades	NRCan, LivesSmart BC	CAC CityGreen
3.2	Reduce energy cons & GHG from new homes.							
	Encourage appropriate site development and greenbuilding practises	"Sustainability Checklist" for new construction and renovations.	Available online and from CRD and IT offices.	M				IT, CRD CAC, SSIC, EFS
	Build EE attached housing in villages and on bus routes.	Murakami Gardens affordable housing project.	Included energy efficiency upgrades	H	# attached DUs built		CRD	IT, CRD various

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3.0	Homes (continued)							
	Encourage smaller and net zero (or near net zero) homes.	Eco-living and home tour	Held biannually, challenges people to adopt ideas.	M	# house identified		EFS	EFS, TSS, various
3.3	Reduce embodied energy & GHG in construction materials.							
	Promote use of carbon LCA in construction projects							
4.0	Businesses and Institutions		some potential for direct GHG, energy and \$ savings					
4.1	Reduce energy cost and GHG emissions from businesses.		Electricity savings in BC provide few GHG emission reductions.					
	Encourage a culture of environmental awareness.							
	Provide role models and information.	Harbour House Hotel	lighting and other upgrades, organic farm supplies restaurant	M	GJ saved, GHG saved		Owner	
		Gecko Green Living	retails green products only	M	# products carried		Owner	
		Country Grocer	lighting and other energy upgrades	M	GJ saved, GHG saved		Owner	
		Many other local businesses	showcase aspects of low-carbon business practices	M	GJ saved, GHG saved		Owner	
		"Green Accommodations Guide"	listings for the accommodations sector, needs resources	M	# businesses listed		Accommodations Group	Accommodations Group
	Provide access to technical support and funding/financing.	BC Hydro pilot audit of commercial properties	completed	L	GJ saved, GHG saved	Value of savings	BC Hydro	BC Hydro, EFS, IT
		LiveSmart BC Small Business Program	Free energy assessments, access to grants	M	GJ saved, GHG saved	Value of savings	CityGreen	CityGreen, CRD, LiveSmart BC
4.2	Support Carbon-neutral Salt Spring businesses.							
	Provide role models, information & technical support.							
	Provide access to funding/financing.	Transition Salt Spring Enterprise Coop	Assists projects, social enterprises and for-profit endeavors that reduce fossil fuel use and achieve climate action goals.	H	# projects supported	Value of support	TSSEC	TSSEC

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4.0 Businesses and Institutions (continued)								
4.3	Support Carbon-neutral Salt Spring institutions.	CRD objective for carbon neutral operations by 2013		M	GJ saved, GHG saved	Value of savings	CRD	CRD
	Library	LEED Gold equivalent planned for new library	LEED Gold standard or better is the minimum for new CRD buildings and capital projects under the 2008 Corporate Climate Action Plan.	U	GJ saved, GHG saved	Value of savings	CRD	CRD SSI Public Library Association
	Rainbow Road pool	Heat recovery strategy	potential for solar hot water and other upgrades	M	GJ saved, GHG saved	Value of savings	CRD	CRD
	School District 64	Heat recovery, heat pumps, lighting, etc.	ongoing improvements	M	GJ saved, GHG saved	Value of savings	SD 64	SD 64
	Lady Minto Hospital	no information		U	GJ saved, GHG saved	Value of savings	VIHA	VIHA
4.4	Net zero new commercial and institutional buildings.							
4.5	Inform island contractors	Periodic seminars	e.g. Homeowner Protection Office "Design and Details for New Seismic and Envelope Requirements" provide information on materials, products and techniques for improved building performance.	U	# seminars, # attendees			
5.0 Solid Waste								
5.1	Divert organic materials from solid waste stream		primarily GHG savings from avoided methane					
	Promote organics collection services for homes and businesses			M	Qty organics diverted from landfill			
	Promote backyard composting	Regular workshops		M	# workshops, # attendees		EFS	EFS Greater Victoria Compost Education
	Provide central composting facility, or several small facilities	"Bring Your Banches"	Yard waste collection pilot, part of the SSI Agricultural Alliance central composting initiative, in partnership with CRD PARC.	M	Qty organics diverted from landfill, qty compost sold	Value compost sold	CRD	CRD SWC, SSIAA

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6.0	BC Ferries		direct GHG, energy and \$ savings					
	Reduce energy use and GHG emissions	Upgrade of BCF vehicles and equipment used onsite	ongoing	U			BC Ferries	BC Ferries
		Standardization of vessel operations to minimize fuel burned		U			BC Ferries	BC Ferries
		Use of shorepower while berthed overnight.		U			BC Ferries	BC Ferries
		BCF is a PowerSmart partner with employee engagement program to reduce energy use fleet wide.		U			BC Ferries	BC Ferries
		Potential use of LNG as a fuel source	under consideration	U			BC Ferries	BC Ferries
		Creation of a Shipboard Energy Efficiency Management Plan for all vessels	under consideration	U			BC Ferries	BC Ferries
		Replace Queen of Nanaimo with more efficient vessel	scheduled	H	New vessel, lower fuel consumption	Value of fuel saved	BC Ferries	BC Ferries
								BC Ferries Advisory Committee
7.0	Local Renewable Energy		primarily energy security					
7.1	Increase the use of solar hot water systems.	Salt Spring Island became a Solar Community in 2010.	Twelve residential solar hot water systems installed 2010-2011	U	GJ saved, GHG saved	Value of savings		
		Murakami Gardens	Solar hot water system installed 2008 displaces 25 MWh / yr	U	GJ saved, GHG saved	Value of savings	CS	CS
		Harbour House Hotel	Solar hot water system installed	U	GJ saved, GHG saved	Value of savings	Owner	Owner
		Salt Spring Inn	Solar hot water system installed	U	GJ saved, GHG saved	Value of savings	Owner	Owner
		Lady Minto Hospital	Solar hot water system planned	U	GJ saved, GHG saved	Value of savings	VIHA	VIHA
		Library	Solar hot water system planned	U	GJ saved, GHG saved	Value of savings	CRD	CRD
		Transition Salt Spring Solar and Appropriate Technology Interest Group	Appears dormant	U				TSS
7.2	Increase the use of solar electric (PV) systems, microhydro and wind.							
		Microhydro Feasibility Study for Salt Spring Island completed 2009	Estimated potential for at least 800 MWh / yr	U				
		Residential PV systems installed	Estimate about 10 systems as of 2012 (TBC)	U			Owners	BC Hydro
		Microhydro systems installed	Estimate < 10 systems as of 2012 (TBC)	U			Owners	
		Wind systems installed	Estimate < 5 systems as of 2012 (TBC)	U			Owners	

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CFT Community Farmland Trust	FI SSI Farmers Institute	NRCan Natural Resources Canada	SWAC CRD Solid Waste Advisory Committee
CRD Capital Regional District	ING Island Natural Growers	PCP Partners Creating Pathways	TC CRD Transportation Commission
CS Community Services	IP Island Pathways	SSI Salt Spring Island	TSS Transition Salt Spring
DU Dwelling Unit	IT Islands Trust	SSIAA SSI Agricultural Alliance	SD 64 School District 64

OBJECTIVES AND STRATEGIES BY SECTOR	ACTIONS IN PROGRESS OR COMPLETED	COMMENTS	PRIORITY H=high M=medium L=low U=unassigned	PROGRESS INDICATORS	ECONOMIC PROGRESS INDICATORS	DATA SOURCE	PRIMARY AGENCY	PARTNERS
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7.0	Local Renewable Energy (continued)							
7.3	Install District Heating Systems utilizing heat recovery and renewable energy sources	Ganges wastewater treatment plant effluent waste heat recovery feasibility study	CRD study 2012. To supply heating and hot water to the pool, SIMS, and SD #64 Board Office.	U			CRD	SD 64
7.4	Create local utility to supply local renewable energy to the grid	Transition Salt Spring Enterprise Coop	Preliminary investigation of local utility options	U			TSSEC	BC Hydro
7.3	Harness tidal currents for power generation.	Sansum Narrows feasibility study	Needed	U				
8.0	Carbon Sequestration and Storage		removal of carbon from atmosphere					
8.1	Protect/enhance ecosystem carbon sequestration & storage							
	Educate landowners regarding ecosystem carbon sequestration.	Sustainability Checklist	Available online and from CRD and IT offices.	U			IT, CRD	CAC, SSIC, EFS
	Use regulatory tools to manage tree-cutting and land-clearing.		Tree cutting bylaw or Development Permit Area provisions	U			IT, CRD	
	Provide tax exemption conservation incentives.	Islands Trust NAPTEP property tax exemption program	Encourages landowners to protect the natural features of their land. Provides a 65% exemption on property taxes for the protected portion of a property (land value only).	M	# acres protected	Value of savings	IT	IT
	Increase targets for protected areas.			M			IT	IT
	Develop a monitoring/management plan for climate-stressed forests.			U				SSIC
9.0	Liquid waste		energy and GHG savings + heat recovery					
9.1	Ganges wastewater treatment plant	Ganges wastewater treatment plant effluent waste heat recovery feasibility study	CRD study 2012. To supply heating and hot water to the pool, SIMS, and SD #64 Board Office.	U			CRD	SD 64
9.2	Burgoyne septage facility	no information						
10.0	Other							
10.1	Float planes	no information						
10.2	Marine traffic (other than BC Ferries)	no information						

APPENDIX B

Climate Action Tracking Table

revised: 12-Mar-12

SSI Climate Action Council Society

COLOUR CODE

- action contributing ongoing energy / GHG savings
- information, community engagement actions new in 2012, under construction, or proposed
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ABBREVIATIONS

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|--|----------------------------|---------------------------------|---|
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OBJECTIVES AND STRATEGIES BY SECTOR	ACTIONS IN PROGRESS OR COMPLETED	COMMENTS	PRIORITY H=high M=medium L=low U=unassigned	PROGRESS INDICATORS	ECONOMIC PROGRESS INDICATORS	DATA SOURCE	PRIMARY AGENCY	PARTNERS
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11.0	Community Outreach (general)							
11.1	One Tonne Challenge	One Tonne Challenge	Comprehensive approach to family GHG reductions. Terminated by Federal government	U			EFS	Environment Canada
11.2	Energy circles	Energy circles	Neighbourhood support groups for reducing energy consumption. Dormant.	U			EFS	TSS
12.0	Plan to Adapt to unavoidable climate change		to come, adaptation measures to be included in CAP 2.0					
12.1	Water management							
	Increase water storage for agricultural use							
	Increase water storage for residential use							
	Maintain potable water quality through enhanced treatment							
	Reduce water demand							
12.2	Plan for sea level rise							