

Energy Priorities for the Salt Spring OCP, local government, and other agencies

Prepared for the OCP Review
by the

Energy Strategy Task Force
and
Earth Festival Society

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FOREWORD

The climate crisis is arguably the most serious issue to ever face humanity. Cities around the world have, or are now preparing, energy and climate crisis plans. The public is demanding action, and the federal government appears to be taking the latest IPCC report seriously.

Salt Spring has a Community Energy Strategy, prepared in May 2005 and is available at www.saltspringenergystrategy.org.

With this strategy, there are targets.

Energy and greenhouse gas (GHG) emissions short-term targets for Salt Spring are to return to 2002 levels by 2012. Additionally, 2030 targets are required for Salt Spring.

Our overall objectives are to facilitate the Salt Spring Community Energy Strategy targets, and provincial, national, and international GHG emissions targets, through the OCP and associated LUB, and through initiatives to be undertaken by the CRD and other agencies such as MoT and BC Hydro that impact energy use and GHG emissions on Salt Spring.

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Demonstrate Leadership in Climate Crisis Action**PRIORITY AREA ONE****Demonstrate Leadership in Climate Crisis Action**

Local governments around the world are demonstrating leadership in developing and initiating policies and actions to reduce the effects of, and adapt to, Climate Crisis. Actions initiated by local governments are considered by many authorities to have more potential for effectively addressing Climate Crisis than those imposed by central governments, although initiatives from both are needed. Citizens are demanding action from local government. On Salt Spring there are many opportunities for the Local Trust Committee (LTC) and the Capital Regional District (CRD) to demonstrate Climate Crisis leadership and initiate innovative action.

1.1 Policy Idea: Include energy and Climate Crisis objectives and policies in the OCP, regulated through the LUB**1.1.1 What is the problem?**

The current OCP makes no reference to Climate Crisis and almost no reference to energy. Climate Crisis is the critical issue of our time. Communities throughout the province, and around the world, are beginning to include environmental sustainability, energy and Climate Crisis within their OCPs. The Salt Spring LTC is participating in the provincial Community Action on Energy Efficiency program and has made commitments to support provincial energy efficiency targets. The OCP review provides the opportunity to include progressive planning objectives and policies to support Climate Crisis mitigation and adaptation.

1.1.2 What are the long term implications of doing nothing?

Doing nothing is not an acceptable option.

1.1.3 What is the policy proposal?

- Include within the OCP a separate section on energy and Climate Crisis, and make reference to this topic in all sections for consistency.
- Include a long-term vision statement within the OCP.
- Include energy targets within the OCP.
- Include within the OCP an objective that states that Climate Crisis will be a central factor influencing all decision making by local government.

1.1.4 Are there alternative ideas to consider?

The other approach considered was to integrate energy and Climate Crisis recommendations into each section of the OCP without a separate energy and Climate Crisis section. There is some merit to this approach in that energy and Climate Crisis policies impact most of the OCP planning areas. However the drawback is that the energy and Climate Crisis policies will not be seen as a comprehensive plan but rather viewed as a series of unrelated measures, and perhaps be subject to misinterpretation or not considered.

1.1.5 Is this idea consistent with other policies?

It is consistent with the Preserve and Protect mandate. Policies to reduce GHG emissions are consistent with other OCP objectives such as protection of greenspace and clustered settlement patterns. In September 2006, Trust Council passed a resolution regarding Canada's ratification of the Kyoto Protocol including:

"3. That the Islands Trust Council request the Executive Committee, Local Trust

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Committees and the Bowen Island Municipality to take opportunities to encourage island residents and visitors to be aware of the significant impact of climate change on our communities and the natural environment and to take steps to reduce their emissions of greenhouse gases.”

1.1.6 How might the policy idea be implemented?

Through the OCP/LUB review process.

1.2 Policy Idea: Develop a joint Islands Trust and CRD Salt Spring Strategic Plan, to include energy and Climate Crisis strategies, and develop protocol agreements with other agencies.**1.2.1 What is the problem?**

Salt Spring does not have a Strategic Plan. A community strategic plan has a broader scope than the OCP. It complements the OCP and sets vision and targets, and implementation procedures. The OCP is a Trust document and can only encourage other agencies. A strategic plan formally commits all involved agencies. Although the community vision and targets can be included in an OCP, they may be better articulated within a strategic plan. Either way, vision and targets are needed as we move into a time of uncertainty with regard to Climate Crisis and increasing pressures on the island environment. Salt Spring already has an Energy Strategy, and is in the process of implementing actions to meet specific energy targets. These targets need to be included in a strategic plan or in the OCP, or both.

Many of the proposed energy and Climate Crisis initiatives involve land use planning through IT and implementation through CRD. Provincial ministries are also involved, including Ministry of Transportation (MOT), Ministry of Energy Mines and Petroleum Resources (MEMPR), and Community Services. Funding for implementation is available from a wide variety of sources, including federal, provincial, and regional. Without protocol agreements, good coordination and communication, opportunities may be lost and actions ineffective.

1.2.2 What are the long-term implications of doing nothing?

A strategic planning process provides the impetus to implement a broad range of policy proposals. Without protocol agreements with the involved agencies, there is no clear process for implementing the strategic plan.

1.2.3 What is the policy proposal?

- Enter into a formal agreement between IT and CRD to prepare a strategic plan.
- Establish a joint LTC-CRD strategic planning process, including setting vision, targets, implementation procedures, priorities for action, and timelines.
- Enter into protocol agreements with other agencies, or renegotiate and expand existing agreements. E.g. Negotiate with Ministry of Community Services to transfer subdivision authority from MOT to LTC (supports Energy settlement pattern recommendations). Enter into a formal agreement with MOT regarding roads maintenance (supports Energy pedestrian infrastructure recommendations). Renegotiate and expand existing agreements with CRD regarding provision of building permit and building inspection services and bylaw enforcement.
- Participate in and support the proposed CRD Transportation

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Commission.

- Create a new senior staff position, to be shared with CRD, to coordinate and provide liaison between CRD and IT planning, especially with respect to infrastructure planning, engineering, and implementation. Supports all Energy Priority Areas.

1.2.4 Are there alternative ideas to consider?

The OCP is insufficient. There is no alternative to a joint strategic plan, or some other formal agreement. At present there is no clear process for achieving community energy and climate crisis objectives.

1.2.5 Is this idea consistent with other policies?

It is consistent with the Trust-wide draft Strategic Plan, and with the CRD Strategic Plan. *The LTC will enter into agreements with other agencies*, OCP Vol 1, A.7.2.c, e; A.7.3.c

1.2.6 How might the policy idea be implemented?

Through passing LTC and CRD Board resolutions to develop a strategic plan and initiating a process similar to the OCP/LUB review. Implementation of protocol agreements might include discussions between elected representatives, preparation of staff reports, drafting and review of agreements by IT legal counsel, and approval of agreements by Trust Council.

1.3 Policy Idea: Lead by example, and support a 'beacon project' to achieve demonstrated GHG emission reductions, to focus public awareness, and to build local skills.**1.3.1 What is the problem?**

It is difficult for local elected officials to provide leadership by taking a stand on difficult decisions such as those necessary to mitigate the climate crisis. At present, there appears to be no clear message from local government that climate crisis is a priority. Local government can influence the greater community through its actions and purchasing decisions. Several opportunities are available for introducing innovative initiatives to reduce GHG emissions and show the community that local government is serious and is consistent with policies that advocate emissions reductions. Inattention to consumption habits within local government sends a signal to the greater community that energy consumption and Climate Crisis are not of concern.

1.3.2 What are the long term implications of doing nothing?

Salt Spring is identified as a leader in Climate Crisis implementation and is in a position to receive priority funding. GHG reduction measures need to be consistently and rigorously applied by local government, and seen to be applied. Doing nothing is not an acceptable option.

1.3.3 What is the policy proposal?

Apply energy and Climate Crisis criteria to day-to-day and long term decision-making. Examples include the following:

- Make building energy efficiency part of the local government culture:
Pass a resolution that any new, or renovated, government building be built to LEED gold or better with energy performance 25% above Model National Model National Energy Code for Buildings (MNECB) or better.

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Appoint a staff person as energy coordinator, undertake energy audits for all local government buildings (owned or rented), implement upgrade measures, establish a regular reporting of energy consumption;

- Include GHG emissions in purchasing and transportation decisions: buy 100% recycled paper, buy local organic food when events are catered, buy or rent fuel efficient vehicles, consider teleconferencing instead of off-island travel, buy Energy Star rated equipment, provide secure bicycle parking for employees; and establish car pooling and transit options for all staff. Provide incentives so that all staff and politicians of IT and CRD are model energy users both at home and in the workplace.
- Any new, or renovated, government buildings to be built LEED gold or better with energy performance 25% above Model National Energy Code for Buildings (MNECB) or better.
- Support a beacon project to provide significant energy savings, GHG emission reductions, and other community benefits. There are a number of possibilities for a beacon project, e.g. IT / CRD LEED Platinum office building (utilize local Salt Spring expertise in rammed earth as a part of this demonstration project); Series of microhydro generators, or virtual PV system, operated by a Salt Spring energy utility; Tidal current demonstration project in Sansum Narrows; Hybrid shuttle bus and transit service; A competition sponsored by local government to promote energy conservation.

1.3.4 Are there alternative ideas to consider?

None considered.

1.3.5 Is this idea consistent with other policies?

It is consistent with the Preserve and Protect mandate and Trust Resolution on meeting Kyoto targets.

1.3.6 How might the policy idea be implemented?

Implementation includes advising all staff of the policy, discussing implications, delegating specific responsibilities, appointing a staff person as energy coordinator, and establishing an ongoing reporting back mechanism. The development of a beacon project would depend on the project selected.

Improve Transportation Efficiency**PRIORITY AREA TWO****Improve Transportation Efficiency**

Transportation efficiency is closely linked to land use planning and can dramatically reduce the need for automobiles for everyday activities. It is a priority that Salt Spring consider a variety of transportation alternatives to single occupancy vehicles to reduce energy consumption and GHG emissions, save money and improve air quality.

In addition, Salt Spring needs to plan industrial traffic patterns and delivery of goods and services particularly from off island.

The Salt Spring Energy Strategy Baseline Energy Report (2003, updated 2005 www.saltspringenergystrategy.org) indicates that the on-island use of gasoline and diesel transportation fuels accounted for approximately 58% of Salt Spring Island's total direct GHG emissions in 2002 and these are expected to increase by 23% between 2002 and 2012. While the 2005 update report indicates that there is an increase in the numbers of people purchasing fuel-efficient vehicles, as well as light/heavy trucks and industrial equipment.. We need to reduce transportation fuel use and encourage efficient affordable alternatives to single occupancy vehicles and address industrial/commercial sector traffic.

The transportation sector provides significant opportunities for energy savings, alternative fuels, and emissions reductions. A variety of measures are available such as public transit, increased pedestrian and cycling infrastructure, ridesharing programs, and planning industrial/commercial sector traffic patterns etc.

2.1. Policy Idea: Shift new development to densely settled areas and create complete communities to reduce transportation needs and to protect green space.

The purpose of this measure is to concentrate growth within already developed areas and to preserve the rural, agricultural and resource lands outside of that area for carbon sequestration, local food production, and other environmental services. This approach also decreases servicing costs and improves energy efficiencies for infrastructure development such as new road, sewer, water and storm drain services.

A complete community is always adapted to the particular situation but in general should include the following:

- A dense mix of businesses;
- A wide choice of housing types, which are also affordable;
- Readily available and well-distributed public services;
- Public open space;
- A mix of housing, employment, services, and recreation opportunities in close proximity to each other;
- it is walkable, transit focused, safe, socially diverse and cycling friendly;
- Additional 'green' industrial areas are appropriate to increase diversity and provide local employment.

2.1.1 What is the problem?

Clustered settlements with large open space and resource lands enable more efficient use of energy resources and transportation, and reduce GHG emissions and other negative effects of scattered development which is the current mode.

2.1.2 What are the long-term implications of doing nothing?

The projected residential build out Map 3 shows development throughout the island on the five-acre lot pattern. This scattered development has large associated public infrastructure costs, particularly road construction and

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maintenance, and large environmental costs since a scattered population is automobile dependent. Other concerns include sprawl around villages with no surrounding greenbelt, continued loss of agricultural land, unconnected greenbelt areas scattered throughout the island, increased traffic and GHG emissions as a result of people travelling by car for daily needs .

2.1.3 What is the policy proposal?

- Concentrate new development in Ganges and Fulford villages, and in other existing densely settled areas, through the use of containment boundaries, density transfer provisions, rezoning, and Development Permit Guidelines.
- To facilitate increased local food production and associated transportation energy savings and GHG reductions, make exceptions to the above policy to support the development of agricultural hamlets or eco-villages, which need to be located on, or adjacent to, agricultural land
- To further reduce food transportation energy requirements, expand local food production in high-density areas through urban gardening methods such as community gardens, and roof top gardens, and use permaculture edible landscaping design principles for public and private outdoor spaces.
- Use complete community guidelines when increasing village/hamlet densities. e.g. multi-family residential, increased numbers of three-storey buildings (while maintaining solar access), mixed-use development (retail, offices, and residential).
- Require all new commercial tourist accommodation, (excluding campgrounds), be developed within settlement containment boundaries.
- Remove OCP references to 'medium density residential' which results in a highly automobile dependent community, as shown in Map 3 'Projected residential build out.

2.1.4 Are there alternative ideas to consider?

Although the current OCP already supports many of the village development objectives described here, these have been undermined in the past by the contradictory objective, and associated zoning, to maintain medium density residential throughout the island.

2.1.5 Is this idea consistent with other policies?

This recommendation is a reinforcement and expansion of OCP and Trust Policies already in place.

2.1.6 How might the policy idea be implemented?

- Map expanded containment boundaries for Ganges and Fulford villages.
- Map containment boundaries for emerging villages and hamlets such as Channel Ridge, Vesuvius and Maliview-Fernwood.
- Map current and desired future greenspace, including greenbelt areas which are connected outside containment boundaries.
- Create walking and wildlife corridors between villages and hamlets.
- Redefine current density transfer sending and receiving areas such that densities may only be transferred to parcels within village containment boundaries.

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- Allow densification within containment boundaries only, and rezone to reduce development potential outside containment boundaries. Specifically, determine a percentage of density reduction appropriate for each of the following: areas without road access, areas in drinking watersheds, remote areas within the South and West Conservation Partnership area, and other areas designated as current or future greenspace.
- Make exceptions to support the development of agricultural hamlets or eco-villages, which need to be located on or adjacent to agricultural land to facilitate food production.
- Include permaculture design and edible landscaping provisions in Development Permit Guidelines and as part of rezoning conditions.
- Use complete community guidelines to rezone areas within containment boundaries to increase the opportunity for multifamily residential, and for three storey and mixed-use development, and pedestrian facilities.
- Rezone to allow new commercial tourist accommodation, (excluding campgrounds), within, but not outside, settlement containment boundaries.
- Remove OCP references to 'medium density residential' which results in a highly automobile dependent community, as shown in Map 3 'Projected residential build out.

2.2 Policy Idea: Require pedestrian and cycling infrastructure in and around villages and hamlets as a part of rezoning and development permit applications.

The objective is to replace automobile trips with trips made on foot, bicycle, or bus. Pedestrian and cycling infrastructure includes sidewalks, footpaths, bicycle trails, bicycle lanes on roadways, and secure, covered bicycle storage. Narrow 'Linear parks' can be dedicated to provide a footpath or bicycle trail. A wide variety of innovative measures to support shuttle buses, car-share coop vehicles, etc. encourage pedestrian modes and should be considered as pedestrian facilities for rezoning purposes

Energy strategy and GHG reduction targets are to reduce automobile use and increase pedestrian modes, including cycling and public transit, by 11% below 2002 levels.

2.2.1 What is the concern?

A number of concerns were raised in a 1999 study of the Fulford-Ganges-Vesuvius corridors, and/or through public comments to the Ministry of Transportation, RCMP, Islands Trust and CRD that include requests for the provision of safe and user friendly pedestrian facilities for an aging population, potential changes in land use policies with emphasis on increased residential build-out in villages and hamlets, concerns about future traffic growth, and conflicts between vehicles and pedestrians particularly pertaining to vehicle speeds that may not be consistent with the roadway.

2.2.2 What are the long-term implications of doing nothing?

Increased car and truck traffic, more roads, increased parking problems, frustrated drivers who will avoid the villages resulting in decreased business for commercial operators.

2.2.3 Does the Trust Policy Statement provide any guidance?

There is a Directive Policy in the Islands Trust Policy Statement that addresses the development of land use patterns that encourage the establishment of bicycle

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paths and other local and inter-community transportation systems that reduce dependency on private automobile use.

2.2.4 What is the policy proposal?

The objective is to facilitate public transit and the ability to walk to work, services, recreation, and surrounding green space. Policy and regulation is proposed to provide pedestrian and bicycle infrastructure and facilities as part of rezoning and development permit requirements and to revise amenity-zoning provisions to include such infrastructure and facilities as an eligible community amenity. While provision of pedestrian facilities should be required for all rezoning in our opinion, provision of additional pedestrian amenities could be used to grant additional development rights.

- Prioritize funding and support for the development of pedestrian and bicycle infrastructure as a first priority in and around villages and hamlets as a part of the CRD Regional Trail bikeway and to link ferry terminals, villages and densely settled areas.
- Remove existing development potential from less developed areas to avoid medium density development (suburban sprawl) through down zoning and density transfer to parcels within containment boundaries.
- Prioritize funding and maintenance to construct Tier 1 (really good roads) connecting villages as and Tier 2 as enzyme stabilized dirt roads in all other areas of the island.
- Require new subdivisions to cluster dwellings close to existing roads and to maximize green space through a covenanted remainder parcel with public trails.
- Encourage CRD to implement DCCs to support pedestrian infrastructure.
- Reduce automobile use by tourists by encouraging tourism operators and others to provide private shuttle bus systems or other transportation so that visitors can arrive without private automobiles and to encourage non-motorized outdoor recreation opportunities for visitors. \
- Encourage the development of a green tourist map so visitors can concentrate activities in certain areas of the island efficiently.
- Support the provision of new 'green' treescaping/landscaping around parking lots to filter runoff and also permeable surfaces for storm water parking areas on the outskirts of Ganges and Fulford villages.
- Establish pick-up and delivery bus transportation, contract with taxi companies to provide door to door transport, and fund Handidart transport van.

2.2.5 Are there alternative ideas to consider?

Construct off road walkways and connected Greenways across the entire island.

2.2.6 Is this idea consistent with other policies?

This is consistent with existing OCP policy.

2.2.7 How might the policy idea be implemented?

- Require the development of pedestrian facilities as part of rezoning and development permit applications.

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- Revise amenity-zoning regulations to include pedestrian and bicycling infrastructure as an eligible community amenity.
- Change existing rural zoning provisions to require creation of a remainder lot and trails when subdividing larger rural parcels.
- Request CRD implement Development Cost Charges for pedestrian infrastructure.
- Introduce pedestrian and cyclist lanes into the planning process for all new road construction and maintenance.

2.3 Policy Idea: Support and participate in a CRD Transportation Commission to address and coordinate transportation issues and reduce reliance on the automobile on Salt Spring.

There are a number of urgent transportation initiatives that currently cannot be done. e.g. there is no existing entity permitted to build sidewalks on MoT right of way. The CRD Transportation Commission is being designed to fill this gap in areas of transportation. Specific activities of the Commission would include public transit; ride share and car co-operatives; parking facilities, regulation and demand management initiatives; sidewalks, bike lanes / paths; walking trails (Transportation Commission focus on MoT right of way and PARC focus on off-road trails).

2.3.1 What is the problem?

The transportation sector primarily falls under the jurisdiction of CRD, while the Memorandum of Agreement with MOT for road construction and maintenance is within the purview of Islands Trust Land Use Planning. Meanwhile, there is a growing list of demands for coordinated services

2.3.2 What are the long term implications of doing nothing?

We are already lagging behind other jurisdictions in terms of providing alternative transportation to residents and visitors. Without prompt measures to coordinate transportation infrastructure and services, we will see more vehicles being purchased, more demands for tax funds to be spent on roads and by-passes, and little emphasis on creating safe pedestrian and bicycle friendly villages and hamlets.

Long-term implications of doing nothing would be increases in inefficient vehicles being purchased, greenhouse gas emissions increases, air pollution, traffic congestion, unsafe roads for cyclists and pedestrians, need for additional parking facilities and consumer cost

2.3.3 What is the policy proposal?

CRD create a SSI Transportation Commission, with IT participation and support, with responsibility for implementing alternative transportation measures including the following:

- Revise MoT Memorandum of Agreement to include bicycle and pedestrian trails on MoT right of way.
- Provide bus service to connect the main villages and ferry terminals and a shuttle bus service in and around Ganges Village. Support the use of public transit by public and private schools, including use for extra-curricular activities such as sports and art events.
- Support the provision of traffic calming measures such as traffic circles at

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busy intersections.

- Petition the MoT to set lower maximum speed limits, such as 40 km/h within villages and densely settled areas and 60 km/h for the remainder of the island;
- Support transportation demand management initiatives such as informal ride share programs, carpooling programs, bicycle lending networks, car-share co-ops, electric scooters and neighbourhood electric vehicles and other innovative programs to decrease automobile use.
- Install plug-ins for electric bicycles and cars in village centres.

**2.3.4 Are there alternative ideas to consider?
Everything is being considered.**

2.3.5 How might the policy be implemented?

- Salt Spring Transportation Commission would be an agency of CRD. LTC participation and support would be defined in a formal agreement between LTC and CRD. This would include a requisition for the required resources to develop and implement priority plans as well as ongoing maintenance.
- The Commission should have a modest requisition, approved by referendum or alternative approval process, sufficient to hire a coordinator and undertake public education / information programs.
- Local portion of transit funding would need to be approved by referendum.
- Gas tax funding would be available to fund priority infrastructure and other needs particularly those that have the potential to reduce GHG emissions.
- Funding for the purchase of land or construction of parking facilities, public transit, bike lanes /paths, and sidewalks and the hiring of parking commissionaires will require separate taxpayer approval.
- Commission to be governed by CRD procedural bylaws.

2.4 Policy Idea: Reduce parking requirements in densely settled areas where alternative transportation is available.

2.4.1 What is the problem?

Current OCP-LUB parking requirements significantly reduce opportunities for densification within the villages, and are a disincentive for transit and increased pedestrian traffic. Free parking in the villages is essentially a subsidy for GHG emissions, local air pollution, and traffic congestion.

Zoning requirements for on-site parking in Ganges village effectively limit the number of residential units that can be built on any given site, and also restrict options for commercial development. Off-site satellite public parking could provide a solution, but at present both Ganges Village and Fulford Village have limited public parking.

2.4.2 What are the long-term implications of doing nothing?

Less multi-family residential development in the villages, and increased parking problems and traffic congestion.

Improve Transportation Efficiency**2.4.3 What is the policy proposal?**

- Revise parking regulations to reduce on-site parking requirements for developments in densely settled areas, where alternative transportation options are provided.
- Provide preferential parking for car-share and energy efficient vehicles
- Provide satellite public parking in Ganges and Fulford villages.
- Revise the OCP to permit two and three storey parking facilities

2.4.4 Are there alternative ideas to consider?

None considered.

2.4.5 Is this idea consistent with other policies?

Consistent with current OCP pedestrian-oriented village policies.

2.4.6 How might the policy be implemented?

- By revising zoning provisions for parking requirements particularly for affordable housing.
- By changing the OCP to permit multi-storey parking facilities.
- By encouraging the CRD to provide satellite parking lots.
By designating the Transportation Commission as the entity in SSI's Land Use Bylaw (sections 7.7.2 and 7.7.3) that can purchase and operate parking facilities and can receive cash in lieu of parking facilities required by the LUB for new developments. Cash in lieu contributions could also be directed, at the recommendation of the Commission and the CRD Director to the CRD Board, to parking regulation, demand management and other services offered by the Commission (e.g., car co-ops and rideshare programs and

Increase energy-efficient and net zero energy construction**PRIORITY AREA THREE****Increase energy-efficient and net zero energy construction**

ENERGY STRATEGY TARGETS: 10% of total energy and GHG reductions to be met through 50% of new homes built between 2002 and 2012 (i.e. 100% of new homes built between 2007 and 2012) to meet EGNH 80 standards. And 14% of total energy and GHG reductions to be met through retrofit of 20% of all existing buildings (homes and ICI buildings).

Long-term targets to be considered for adoption include the 2030 Challenge criteria for buildings (zero carbon by 2030) and Cradle to Cradle (C2C) criteria for building materials.

OUR OCP-LUB OBJECTIVES FOR PRIORITY AREA THREE

- a. Increase deployment of energy efficient design, technology, and renewable energy use in new and existing buildings to reduce energy consumption, embodied energy, and GHG emissions.
- b. Improve the performance and utilization of existing dwellings through energy upgrades and through the regulation of secondary suites and cottages.
- c. Reduce building envelope losses through increasing the number of attached, multi-family dwelling units and by decreasing the allowable size of conventionally built dwellings.
- d. Use continual performance improvement in OCP and LUB documents so that enhanced environmental standards are adopted as they become available.
- e. Encourage developers and builders to include measures beyond requirements, e.g. C2C, through the use of environmental checklists as part of the application process.

RECOMMENDED OCP-LUB POLICY DIRECTIONS TO SUPPORT PRIORITY AREA THREE**3.1 Require improved energy efficiency standards for larger dwellings****3.1.1 Redefine all zoning areas on Salt Spring to require new dwellings that exceed 1,500 sq feet in area to meet EGNH 80 plus Built Green Gold or better [and a written description of C2C elements in the dwelling].**

Most of the energy used by a building is used during operation. Larger homes tend to use more total energy on both an absolute and on a square foot basis. If we are to meet the Salt Spring Community Energy strategy target for new homes, all new houses built between 2007 and 2012 must be EGNH 80 or better.

Any local government is very limited in terms of what it can do to require building standards greater than the BC Building Code. The province is seeking to introduce standards of EGNH 80 for all new homes by 2010.

One option currently available to the Trust to enable higher energy (and other environmental building standards such as rainwater catchment) to be applied to new homes on Salt Spring would be to limit the size of all new dwellings, unless they met certain energy/environmental standards. The Island Trust Discussion Paper (March, 2006, by John Gauld) has suggested an island-wide maximum allowable house size of 1,884 sq. ft, with an as-of-right allowable area increase on proof of design meeting these standards. This would be easy to administer, and would provide clarity for builders regarding the required environmental standards. If the minimum size was set low enough, most new homes would need to comply with the enhanced standards.

Increase energy-efficient and net zero energy construction

1,500 sq. feet is the suggested cut off point because it allows a modest three-bedroom family home to be constructed without having to meet the enhanced standards. A larger maximum allowable area would be less effective in capturing the smaller dwelling units targeted at the retiree market.

Compliance could be effected through a performance bond, which would be forfeited if the home failed to receive the required third-party certification on completion. The labelling and certification procedures for EGNH and BuiltGreen are established in BC and are administered through CHBA BC.

3.1.2 Redefine all zoning areas on Salt Spring to require new dwellings that exceed 3,500 sq feet in area to meet EGNH 83 plus Built Green Gold plus include one or more renewable energy components to provide a minimum of 20 GJ (5500 kWh) per year.

The intent is to introduce a sliding scale such that larger homes would offset the larger quantity of energy they consume by generating it on site from non-GHG producing renewable sources. Allowable renewable sources include solar thermal systems, photovoltaic systems, micro hydro systems, and wind generators. Wood boilers or furnaces should not be eligible because of local air pollution issues. The LTC may wish to include non-energy related requirements such as rainwater catchment.

3.1.3 Redefine all zoning areas on Salt Spring to require existing dwellings to which an addition is being added such that the total floor area exceeds 1,500 sq feet to meet EGH or to increase their EGH rating by points.

Salt Spring's older housing stock consumes more energy than new homes, partly because of numbers, and partly because older homes are generally poorly insulated. The Salt Spring Community Energy strategy target is 20% of all existing homes on Salt Spring retrofitted for energy conservation by 2012. The same mechanism described in 3.1.1 can be used to require, at the building permit stage, a demonstrated improvement in performance. An EGH 'A' rating would be submitted with the permit application. An EGH 'B' rating would be supplied on completion of the work. The required target of 72 represents average BC new construction. In other words, the homeowner is required to bring the house up to the equivalent performance of standard new construction.

Because some houses on Salt Spring have very poor thermal performance, to bring them up to EGH 72 could present a hardship. Therefore an alternative method of compliance would be to raise the EGH rating by a specified number of points. Ten points is suggested as a minimum. Ten points represents an average under the EGH rating system for Vancouver Island. (To be confirmed)

Compliance could be effected through a performance bond, which would be forfeited if the home failed to receive the required third-party certification on completion. The labelling and certification procedures for EGH are well established in BC and are administered through City Green Solutions Society and various private delivery agents. Modest financial incentives for homeowners and landlords are available through federal and provincial governments.

3.2 Require improved energy efficiency standards for residential rezonings**3.2.1 Require new dwellings that result from a residential rezoning to meet the same requirements as 3.1.1 and 3.1.2, i.e. EGNH 80 plus BuiltGreen Gold or better.**

Bowen Island is requiring all dwellings built as a result of rezoning to be EGNH

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80 and Built Green Gold. Salt Spring should adopt the Bowen model.

3.2.2 Include energy performance as part of regulation of secondary suites and seasonal cottages

Secondary suites and seasonal cottages are illegal for year round occupancy. Regulation is currently under consideration to supply affordable housing. If regulation proceeds, part of the application process should be the requirement to supply an EGH rating for the dwelling. Houses with an EGH rating of 60 or better should be eligible for affordable housing. Owners of houses with low EGH ratings would have the option to upgrade their homes in order to qualify. Small grants are available under the federal ecoEnergy initiative. Grants for secondary suite conversions are available under the CMHC RAP program.

EGH 60 is the average rating prior to upgrades for homes on Vancouver Island and the Gulf Islands (to be confirmed). However for some older homes, bringing the whole house up to EGH 60 could present a hardship. In these cases, an alternative option would be to raise the EGH rating by 5 points.

3.3 Reduce heat loss from buildings by decreasing exterior surface areas**3.3.1 Revise zoning within villages and hamlets to provide more opportunity for attached and multi-family dwellings**

Attached dwellings—duplexes, triplexes, townhouses, and apartment buildings—i.e. multi-unit residential developments are inherently more energy efficient than single family residential because of the reduced exterior surface area to floor area ratio. There are currently few zones where these types of dwellings are permitted. The zoning within villages and hamlets needs to be revised to permit more multi-family development. Set backs and parking requirements may also need to be adjusted to make this type of development feasible.

Densification within containment boundaries is the subject of Priority Area Two. Any density increase within a zone should result from density transfer, or from the creation of affordable housing units.

3.3.2 Revise zoning within villages and hamlets to provide more opportunity for three storey residential and mixed occupancy buildings

Three storey multi-unit residential and mixed occupancy buildings are inherently more energy efficient than two storey buildings because of the reduced exterior surface area to floor area ratio. As densities increase, the economic feasibility of energy efficient district heating, and renewable energy systems increase.

Zones permitting three storey buildings are currently limited. The zoning within villages should be reviewed with the intent of providing more opportunity for three-storey development. Set backs and parking requirements may also need to be adjusted to make this type of development feasible.

Densification within containment boundaries is the subject of Priority Area One. Any density increase within a zone should result from density transfer, or from the creation of affordable housing units.

3.4 Require completion of a sustainability checklist for Development Permit and Rezoning applications

Several BC municipalities, including Port Coquitlam, have developed or are developing sustainability checklists. These checklists ensure that developers consider sustainability options before submitting an application. They can also be part of the process for determining the terms and conditions of a rezoning. Adoption of a sustainability checklist

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is recommended.

3.5 Revise Development Permit Area guidelines to include sustainability

DPA guidelines regulate form and character, including exterior building finishes and building size. Salt Spring DPA1 covers form and character only. Solar orientation and access, and simple building form (which reduces thermal loss) should be included. Statements encouraging sustainability should also be included. Environmental DP guidelines to protect local environment should also be included in DPA1. Saanich is revising its DPA guidelines and could be used as a model.

3.6 Revise LUB to remove height restrictions for wind generators and solar installations

Revise LUB 3.8.4 so that the height restrictions for buildings and structures set out in Section 3.8 do not apply to structures used for renewable energy collection. At present, towers for wind generators, etc. require a variance.

3.7 Require publicly funded buildings to meet LEED Gold or higher standards

Make development approvals for publicly funded buildings contingent upon compliance with enhanced energy standards such as LEED, including modelled performance 25% better than the National Energy Code. Local government can mandate that any public building it funds meets environmental standards. The new Parks Canada facility in Sidney is LEED Platinum, the highest LEED standard. Other standards incorporating net zero energy and C2C principles should be included as they become available.

3.8 Require publicly funded affordable housing projects to meet EGNH 80

Make EGNH 80 a rezoning requirement for publicly funded affordable housing projects. BC housing currently requires EGNH 80. MURB buildings shall be designed to use 25% less energy than required by the Model National Model National Energy Code for Buildings (MNECB) of Canada for Buildings, 1997 (MNECB4), or in accordance with the Commercial Building Incentive Program (CBIP5).

3.9 Facilitate rezoning for innovative energy-efficient housing with shared facilities

Strengthen the provisions for innovative housing in the current OCP. Facilitate through rezoning approvals compact, innovative energy-efficient housing with shared amenities, such as co-housing and ecovillage developments. Consider adopting a new zoning designation for such developments. A comprehensive development bylaw has been developed for the ecovillage at Shawnigan Lake. In this case, a maximum area for residential buildings was established with no specified density.

3.10 Adopt proposed provincial model energy efficiency bylaw when it becomes available

Dawson Creek is developing a local building bylaw which would require EGNH 81 and is using the 'Concurrent Authority' clause of the Municipal Charter to request ministerial approval to implement it. The UBCM is expected to be presented with a resolution at its next meeting calling for such a model energy bylaw that could be adopted by local governments throughout the province. Adoption of a model energy efficiency bylaw would enable Salt Spring to require higher energy performance standards for all new buildings.

3.11 Adopt a solar access bylaw

The rights of an individual property owner to receive sun on the southern faces—vertical walls and roofs—of an existing building are currently unprotected. A solar access bylaw would restrict the rights of a property owner to the south to construct a new building, or to allow trees to grow, that would shade more than a certain percentage, perhaps 15%, of

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the southern faces of a building on an adjacent lot.

The intent of such a bylaw is to protect solar access for existing buildings that have south-facing windows (passive solar gains) and/ or have solar installations. It is not intended to force neighbours to top or fell trees because someone wants to build a solar home. The bylaw therefore should not protect the solar access rights of property owners who have not yet developed their property.

Compliance for new buildings would require the building permit department to check adjacent lots before issuing a permit. A simple sun path tool could be used to screen applications, followed by more sophisticated modelling when compliance is in question. Compliance for tree shading would be complaint-driven.

RECOMMENDED CRD POLICY DIRECTIONS TO SUPPORT PRIORITY AREA THREE

3.12 Implement the CRD Community Energy Plan

CRD has developed a draft Community Energy Plan (CEP) for the CRD region. This plan should be implemented and will support the initiatives included in this report and the Salt Spring Energy Strategy.

3.13 Introduce permit fee rebate for houses meeting EGNH 80 and Built Green Gold

CRD has the ability to reward homeowners who build to higher standards by rebating a portion of the building permit fees. The rebate would be issued after completion upon production of the EGNH and Built Green certificates. Rebates could also be offered to renovators who increased the EGH rating by a specified number of points. A flat rate rebate of, for example \$500 not to exceed 50% of the original permit cost, would provide greatest benefit to modest dwellings.

A pilot project with funds available on a first-come-first-served basis, and with eligibility restricted to modest (say under 2,000 sq ft) new homes and retrofits would test this approach. Consideration could also be given to providing 'express' service for green building applications.

3.14 Encourage green building through building permit sustainability checklists**3.14.1 Require a sustainability checklist for residential building permit applicants**

The CRD permit process provides a powerful opportunity to educate builders, for both new and retrofit construction. An energy efficiency, water conservation checklist for single family residential projects may encourage all new dwellings to meet EGNH 80 standards and 2030 Challenge criteria. Renewable energy options should be included in the checklist. Many of the required features are included in the 'What to look for in an eco-home' checklist at www.saltspringenergystrategy.org

3.14.2 Require a sustainability checklist for MURB and ICI building permit applicants

The CRD permit process provides a powerful opportunity to educate builders, for both new and retrofit construction. The checklist would encourage builders to meet EGNH or LEED standards and 2030 Challenge criteria and would encourage district-heating systems that utilize renewable energy and/or heat pump technologies. The same, or similar, checklist to be used by the Trust for DP and rezoning applications (see 3.6 above) could be used by the permit office to ensure that a checklist is completed for all buildings.

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RECOMMENDATIONS TO OTHER AGENCIES TO SUPPORT PRIORITY AREA THREE

3.15 Encourage BC Hydro to further implement smart meters, net metering, and off-peak metering

Smart meters provide the homeowner with instantaneous and cumulative data on energy consumption and are a powerful tool for reducing energy use. Off-peak metering provides electricity at a reduced rate during off-peak hours, and increased rates during peak hours. Off-peak metering can reduce peak demand and associated GHG emissions. Net metering enables building owners with renewable energy systems to 'run the meter backwards' and feed power to the grid when the building demand is less than the energy produced.

3.16 Encourage BC Hydro to partner with the private sector and local government to implement a solar domestic hot water rental program

Solar hot water systems have a high capital cost (around \$5,000 to \$6,000 for a typical home) and require periodic maintenance. BC Hydro could facilitate the adoption of SDHW by partnering with the private sector and local government to assist with capital cost and sales and service infrastructure. Options include a utility supported privately financed rental service, equivalent to the gas water heater rental service, in conjunction with private sector financing and delivery. Purchase subsidies, lease to own, and rental options would provide access to solar DHW to a large number of homeowners and businesses. Utility support would build capacity and could assist with trades training.

3.17 Encourage the Chamber of Commerce to extend energy efficiency and green labelling for all businesses

All Salt Spring businesses should undertake energy audits and green labelling. All tourist accommodations should participate in energy efficiency and green tourism labelling programs. Consideration should be given to adoption of the 2% hotel tax with funds earmarked for tourist services such as transit and pathways.

3.18 Encourage the Province to revise codes and standards to increase uptake of sustainable technologies and materials

Local Materials: Help create a prescriptive standard equivalent to Part IX of the BCBC for 'green' construction assemblies so that the current 'penalty' is removed.

Insulation: Require that the insulation level under a slab be raised from R-12 to a minimum of R20.

Electrical codes: Eliminate the requirement for 110V wiring in houses where DC is provided.

Plumbing and water treatment: Permit non-potable water to be used for toilet flushing. Remove requirement for septic tank and field for homes served exclusively with composting toilets. Create a standard for greywater treatment. Discourage the design of single-family DHW systems which require recirculating pumps. Incent the use of solar DHW preheating by requiring solar DHW rough in on the building of new homes.

Increase energy-efficient and net zero energy construction*Resources:*

The EnerGuide for Houses (EGH) rating system is a Federal initiative to encourage enhanced performance in new and existing Part 9 housing. The rating system uses Hot 2000 modelling software. An average new home generally rates EGH 72-75.

The Model National Energy Code for Buildings (MNECB) is a model energy code developed by the National Research Council of Canada. It addresses building envelope, heating, ventilation and air conditioning systems, service water heating, lighting, and electrical systems.

The LEED Canada rating system is administered by the Canada Green Building Council
www.cagbc.org

2030 Challenge targets are that the fossil fuel reduction standard for all new buildings be increased to: 60% in 2010; 70% in 2015; 80% in 2020; 90% in 2025; and Carbon-neutral by 2030 (using no fossil fuel GHG emitting energy to operate).

BC Housing requires energy performance compliance for MURBs through one of the following:

- CBIP Screening Tool6 Summary printout
- EE4 software model print-out7
- CBIP Wizard printout8
- DOE 2.1 or equivalent energy performance modeling summary

Prepare for Climate Crisis Adaptation**PRIORITY AREA FOUR****Prepare for Climate Crisis Adaptation**

Effects of climate crisis are already being felt on Salt Spring with an increase in severe weather events, including windstorms and summer droughts. Specific vulnerabilities include our water supplies, food supplies, wild fire risk, disease and pest outbreaks, and loss of ecosystems. Such changes will inevitably have socio-economic impacts. As an island community, Salt Spring Island is especially vulnerable to rising sea levels. A precautionary approach to land-use planning requires that local government take appropriate measures to address the causes and their potential impacts in advance. The current OCP makes no reference to Climate crisis. The way to address this crisis is to focus on sustainability and self-sufficiency.

4.1 Policy Idea: Encourage new, distributed, zero carbon renewable energy generation**4.1.1 What is the problem?**

Windstorms and other weather events are already causing interruptions to power supply on Salt Spring. Increasing frequency and severity of storms are projected impacts of climate crisis. Power supply will be less reliable in the future. Local distributed renewable energy generation can provide protection against grid failure, and can also play a part in decreasing the demand for fossil fuel generated electricity and associated GHG emissions. The Salt Spring Energy Strategy target for 2012 is to generate 5% of power consumption locally. Although electricity and energy security are essential to a functioning community, the current OCP makes few references to energy generation or supply. The LUB effectively prohibits wind generators through height restrictions.

4.1.2 What are the long term implications of doing nothing?

Salt Spring will increasingly be subject to power outages, will have little energy security, and will not meet its energy strategy targets. In addition, there will be a lost opportunity to initiate our own island energy policy and to engage people on the island in energy self-sufficiency measures.

4.1.3 What is the policy proposal?

Policy proposals regarding wind towers, solar access and building integrated renewable energy systems have been included in Priority Area 3. Conservation and energy efficiency, sometimes referred to as 'negawatts', are usually the cheapest form of energy supply and are also addressed in Priority Area 3. Additional policy proposals are as follows:

- Investigate the feasibility of a local public energy utility.
- Require all new development to bury utility cables (revise C.5.1.2.6) and burying of utilities when opportunities arise, including public works projects and re-development projects. This would reduce risk of power outages from windstorms.
- Assess the island's renewable energy potential, including micro hydro, wind, solar, and tidal current. Include a review of the micro hydro potential of island streams and seasonal creeks, and encourage new and existing development to use renewable energy for some or all of its power needs.
- Require the purchase of locally generated renewable energy for all publicly funded buildings. I.e. publicly funded buildings must buy energy that is produced on island, and/or generate renewable energy

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themselves.

- Require public works projects to include infrastructure provisions for future renewable energy installations, if such installations are not to be implemented immediately.
- Support district-heating schemes, especially those using ground source heat pump and seasonal solar thermal technologies.
- Explore opportunities to capture biofuels, e.g. methane, ethanol, and heat-recovery from public infrastructure, such as sewer lines.
- Support other agencies in the development of tidal current generation for Samsun Narrows.

4.1.4 Are there alternative ideas to consider?

Biomass is used around the world for cogeneration and district heating. In our view it is difficult to burn any solid fuel cleanly. Products of wood combustion generally include CO₂, methane, particulate matter, and dioxins and furans.

4.1.5 Is this idea consistent with other policies?

Densification policies support district heating. Buried utility cables support character and form guidelines, and make provision of pedestrian facilities easier. Renewable energy installations support Energy Strategy objectives and targets.

4.1.6 How might the policy idea be implemented?

Implementation options include the establishment of a local public utility company to take the lead on renewable energy projects, adding to DPA Guidelines, including recommendations in a required Development Permit checklist and in a required Building Permit checklist.

4.2 Policy Idea: Remove development potential from areas prone to flooding due to sea level rise, and plan for flood protection for Ganges village

4.2.1 What is the problem?

Current IPCC climate crisis predictions for sea level rise this century are approximately 60 cms. This estimate is double the estimate of five years ago and will likely soon be replaced by a higher estimate. Increased storm surges are also predicted. The Precautionary Principle suggests that it would be prudent to assume a sea level rise of at least double current predictions, i.e. >1.2 meters this century. Most of Salt Spring's coastline is 'high bank', which limits flooding. However some geological formations are subject to erosion and new undercuts could cause formerly stable banks to collapse.

4.2.2 What are the long term implications of doing nothing?

If nothing is done, lower-lying parts of Ganges will be subject to regular flooding by the end of this century. Some development and roads close to the ocean elsewhere on the island will also be at risk. While the OCP cannot be expected to solve the problem of sea level rise, it should in our view at least identify the issue and include adaptation policies.

4.2.3 What is the policy proposal?

- Low-lying marine shorelines and shorelines subject to erosion should be mapped and labelled as at risk from storm surges and sea level rise.

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- Development in these areas should be limited.
- Flood control assessment and feasibility analysis will be required for Ganges and possibly for other developed areas.
- Agencies such as BC Ferries and MOT should be encouraged to take into account future sea level rise and enhanced flood protection when reviewing existing and future infrastructure needs.

4.2.4 Are there alternative ideas to consider?

Build a sea wall around Ganges or move sea-level amenities to higher ground

4.2.5 Is this idea consistent with other policies?

Some areas prone to hazard are already identified in the OCP. E.g. DPA 6- Unstable slopes and soil erosion hazards.

4.2.6 How might the policy idea be implemented?

Implementation options include creation of a marine flooding and storm surge DPA with Guidelines, increased setbacks for waterfront lots, and down zoning with density transfer provisions for affected landowners.

A flood protection fund, financed partly through property tax levies, may be needed to assist with costs of flood protection.

4.3 Policy Idea: Reduce development potential in remote wildfire hazard areas.**4.3.1 What is the problem?**

Wildfire hazard during the summer is already a reality of Salt Spring life. Climate crisis predictions indicate increased frequency and duration of summer droughts and higher temperature regimes this century. These changes will increase the risk of wildfires. The current OCP calls for medium overall density, and Build out Map 3 shows development in all areas of the island. Fire protection for development in difficult-to-access areas of the island may be hard to achieve. Development itself may increase the risk of wildfires, through human error or carelessness.

4.3.2 What are the long term implications of doing nothing?

Destruction of ecologically sensitive areas and wildlife, loss of property, and possibly loss of human life.

4.3.3 What is the policy proposal?

Remote areas, and/or difficult-to-service areas, and/or difficult to evacuate areas should be mapped and labelled as wildfire hazard areas. Consideration should be given to down zoning these areas to reduce future development. Any permitted development should be required to follow guidelines to reduce fire hazard. Guidelines might include the following requirements:

- Exterior finishes to be of non-combustible material;
- Provide for summer moisture retention, and fire-resistant plantings and landscaping around all buildings, e.g. by using permaculture design, to minimize the impact of fire;
- One or more rainwater catchment ponds of x million litres capacity for firefighting be constructed;
- Implement an outdoor burning ban bylaw for land clearing and construction waste;

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- Driveways be kept short with buildings located close to access roads;
- Wildfire areas to be designated for down zoning and/or as density transfer sending areas.

4.3.4 Are there alternative ideas to consider?

Permanent residents can provide a fire watching function as part of emergency planning services and are on hand to tackle fires immediately. Therefore reducing development in wildfire areas may not reduce wildfire hazard.

4.3.5 Is this idea consistent with other policies?

The South and West Salt Spring Conservation Partnership (including the Islands Trust) has identified the remote areas of south and west Salt Spring for protection from development. See also Energy and Settlement Patterns focus group recommendations for down zoning and density transfer from remote areas.

4.3.6 How might the policy idea be implemented?

Implementation options include creation of a wildfire DPA with Guidelines, and down zoning with density transfer provisions for affected landowners.

4.4 Policy Idea: Increase the amount of organic food grown and processed on island

Note: We include this topic here because food security needs to be addressed as a part of Climate Crisis Adaptation. We defer to the individual policy recommendations of the Area Farm Plan group. It is a given that we must move to higher levels of food production.

4.4.1 What is the problem?

Access to sustainably produced, nutritious food is a human necessity. The Salt Spring Energy Strategy found that conventional imported food was responsible for approximately one third of individual GHG emissions. A switch to eating more locally grown organic food is essential if Salt Spring is to meet its GHG reduction targets. Specifically, the target is to meet islanders' food needs with 10% local production, up from the current estimate of <4%.

4.4.2 What are the long term implications of doing nothing?

Climate crisis predictions suggest uncertainties regarding future food supplies from areas such as California. There are questions about the future cost and availability of cheap transportation fuels. Temporary disruptions to future food supply chains seem probable. As a small island, Salt Spring is vulnerable to temporary and long-term supply problems and has few food reserves.

4.4.3 What is the policy proposal?

We defer to the individual policy recommendations of the Area Farm Plan group, but request inclusion of the following:

- Develop urban agriculture in the villages, including edible landscaping of public areas;
- Promote food self-sufficiency for island families;
- Develop greater food storage capacity, for both locally grown and imported food, including grains.

4.4.4 Are there alternative ideas to consider?

Not considered

Prepare for Climate Crisis Adaptation**4.4.5 Is this idea consistent with other policies?**

Not considered

4.4.6 How might the policy idea be implemented?

Not considered

4.5 Policy Idea: Water conservation and rainwater catchment for potable and non-potable uses

Note: We include this topic here because it needs to be addressed as part of Climate crisis adaptation. We defer to the individual policy recommendations of the Potable Water, Environment, and Area Farm Plan groups.

4.5.1 What is the problem?

There are current problems with water quantity and quality, especially with ground water supplies. The island receives enough rainfall to supply residential and agricultural needs, but the rainfall is not being harvested. Opportunities for conservation are not being taken. Use of potable water for non-potable applications such as toilet flushing and irrigation is standard practice. The current OCP encourages water conservation and rainwater catchment, and disallows upzoning that would restrict access to water. However, there are overlapping jurisdictions (provincial codes and standards, VIHA, CRD, local water districts, IT) and a limited number of mechanisms for the Local Trust Committee to implement policy in this area.

4.5.2 What are the long term implications of doing nothing?

Long-term climate projections for Salt Spring suggest no great change in the amount of annual precipitation, but an increase in frequency of summer droughts and heavy winter rains. Unless water conservation measures are implemented and rainwater is harvested using both landscaping measures (swales, ponds, reservoirs) and enclosed containers for storage, the outcomes will be dry wells, and insufficient water for irrigation of food crops.

4.5.3 What is the policy proposal?

We defer to the individual policy recommendations of the Potable Water, Environment, and Area Farm Plan groups. However, our Priority Area 3 policy proposals for increased energy efficiency of residential buildings are also suitable for residential water catchment and conservation. The Built Green labelling program includes water conservation measures, as does the LEED standard.

4.5.4 Are there alternative ideas to consider?

Establish an island wide water conservation and quality program.

4.5.5 Is this idea consistent with other policies?

Not considered

4.5.6 How might the policy idea be implemented?

See our Priority Area 3 recommendations.

4.6 Policy Idea: Strengthen Emergency Planning Measures**4.6.1 What is the problem?**

Climate crisis adaptation includes building community resilience to both long-term shortages and a variety of emergency conditions. There is a need to integrate climate crisis adaptation into the emergency planning process. For example, the neighbourhood emergency pods now being established could be a

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very effective way to reach islanders and help us all to prepare for future climate crisis events.

4.6.2 What are the long term implications of doing nothing?

Lack of coordinated response to climate crisis events.

4.6.3 What is the policy proposal?

Strengthen emergency planning measures with regard to the following areas:

- Re-work the Salt Spring Energy Strategy to include emergency measures situations including conserving energy in crisis situations
- Reexamine emergency fuel and food storage and drinking water supply measures;
- Assess alternative transportation planning including fuel options in the event of unavailability of fossil fuels;
- Reexamine and strengthen home self-sufficiency measures, including water, food, energy conservation and energy efficiency measures;
- Consider emergency response implications of future insect-borne and other disease and pest outbreaks such as West Nile virus, malaria.
- Strengthen neighbourhood-planning pods.
- Research and integrate methods used in Victory Gardens in Britain during the war

4.6.4 Are there alternative ideas to consider?

Not considered

4.6.5 Is this idea consistent with other policies?

Consistent with current emergency planning policies.

4.6.6 How might the policy idea be implemented?

Through enhancement of the existing emergency planning function.