



DATE OF MEETING: September 12, 2019
 TO: Gabriola Island Local Trust Committee
 FROM: David Marlor, Director,
 Local Planning Services
 SUBJECT: Climate Change Adaptation and Mitigation Strategies

PURPOSE

At its regular business meeting in June 2019, Trust Council passed the following resolution:

TC-2019-043

It was Moved by Trustee Fast and Seconded by Trustee Peterson,

That Trust Council direct staff to add agenda items 6.4 and 8.4 regarding climate emergency tools and strategies to all Local Trust Committee’s upcoming agendas and suggest to the Bowen Island Municipality.

NEXT STEPS

The two reports “Report on Climate Change Adaptation and Mitigation strategies by the Islands Trust” and “Climate Change Emergency Declaration – Local Planning Tools for Mitigation and Adaptation” are provided for information on the local trust committees, and to assist when determining local actions to take in response to Trust Council’s climate emergency declaration.

Submitted By:	David Marlor, MCIP, RPP Director, Local Planning Services	August 29, 2019
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ATTACHMENTS

1. Attachment 1: Items 6.4 and 8.4 from June 2019 Trust Council

1. **Anticipated climate changes within the Trust Area:** Given accessible climate change information for the region, it is anticipated that with an increase in global warming at or above 1.5 C the Trust Area would be impacted in the following ways.

- i. Wetter fall seasons
- ii. Drier, hotter summers, drought conditions
- iii. More inclement weather, extreme weather events
- iv. Warmer winters
- v. No frost
- vi. Rise in sea level
- vii. Species shift

2. The following table provides a timeline of key climate change actions by the Islands Trust and Islands Trust Conservancy over the last 15 years.

Table 1. Timeline of climate change actions

2005	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
passed resolution for advocacy on climate change	Signed BC Climate Action Charter	developed "Trust Area Climate Vulnerabilities" document	Bill 27 requirements, develop OCP amendments: Climate Smart Islands Program	over 2 year span, the majority of OCPs are amended to incorporate Bill 27			adoption of Carbon Neutral Operations Policy 7.4.v		Letter to Prime Minister Trudeau re Paris Climate Accord	State of the Islands Report	initiated groundwater workshops	delivered seal level rise workshops	declared climate emergency
		adopted Corporate Climate Action Plan					Corporate Sustainability Advisory Group Initiated					Adopted CDF toolkit	

3. BC Climate Action Charter

The Islands Trust is a signatory to the BC Climate Action Charter and has taken a number of steps to honor that commitment. Since 2007, we have reported on our website on our plan to achieve our climate action goals. We participate in the Climate Action Revenue Incentive Plan (CARIP) that requires we summarize our GHG emissions and energy consumption and detail our programming towards carbon neutrality. To summarize, the Islands Trust as an organization generates between 55 and 65 tCO₂e per year. We have traditionally then purchased carbon credits to achieve carbon neutrality from the Community Carbon Marketplace, which we been doing since 2012.

Using 2017 CARIP report as an example, key emissions measures are the following:

- a) Direct emissions
 - a. Vehicles fuel 14652 L
 - b. Stationary gigajoule 346
- b) Indirect Emissions
 - a. Purchased energy gigajoule 506
 - b. Purchased reported gigajoule 126
- c) Scope 3 emissions
 - a. Office paper packages 608

Please note that while the Province committed to providing Community Energy and Emission Inventory data for local governments, there is insufficient data for the Islands Trust specifically, requiring that we use a conversion factor to approximate some of our emissions measures.

4. **Bill 27 OCP Greenhouse Gas amendments**

Under separate cover a report will be provided to the June 2019 Trust Council meeting that will include the amendments to local trust committees OCPs required by Bill 27. Generally, each LTC/Bowen Island Municipality (except Piers Island) adopted target reductions for their area, either a 50% or 33% reduction by 2020 and a greater, 85% reduction by 2050. Land use bylaws have not been comprehensively updated to reflect OCP direction. There has been no sustained performance measurement of each local trust area/island municipality to determine how successful the OCP amendments have been in reducing emissions. Datasets are limited on an LTA/IM by LTA/IM basis for specific GHG reductions.

5. **Corporate Actions**

- i. In 2007, the Islands Trust adopted a **Corporate Climate Action Plan**. From a corporate perspective, the three areas effecting our emissions levels are travel, paper and building heating and maintenance. The Climate Action Plan provides a reasonably rigorous analysis of these target emission sources as well as others and make recommendations for mitigations. The Action Plan has led to a number of business practices that are still in place including:
 - a. Reduction of printing
 - b. Reduction of color printing
 - c. Double siding of documents
 - d. Not producing paper agendas
 - e. Support for employees to commute by bike
 - f. Increased ride sharing to staff and Trust meetings
 - g. Replacement of the windows and shading of Victoria office
 - h. Revised purchasing policy to emphasize energy efficiency

The plan is now somewhat dated and could be refreshed to find new points of emphasis and education for staff and trustees.

Since 2007 the Trust has monitored its GHG generation and in support of the Action Plan.

- ii. Adoption of **Policy 7.4.5 Carbon Neutral Operations**. This policy formalized a number of Trust wide operations dedicated to GHG reduction, including a carbon reduction goal, identification of carbon emission sources, dedication to using offsets to achieve carbon neutrality (including purchasing criteria) and reporting requirements.
- iii. In January 2013, a Corporate Sustainability Advisory Group (Green Team) was identified consisting of one member of Trust Council and a department representative across the organization. The term was for 12 months and the terms of reference included develop innovating ways to address climate change impacts and GHG reductions and to implement the Corporate Action Plan.

From the available data on Islands Trust operations, it is reasonable to conclude that we are a low carbon producing organization.

6. **Regional and National Context**

It would be impractical to provide a comprehensive overview of regional climate change initiatives; however, it is worth noting that there have been 16 declarations of a climate emergency in BC. Prominent among them is the City of Vancouver who have recently unanimously approved a motion recognizing the climate emergency and passing an ambitious set of six “Big Moves” that will guide

the City's response to Climate Change. The goal is to meet the objective of limiting warming to 1.5C as per the Paris Agreement.

The initial wave of climate emergency declarations occurred in Quebec (2018-2019), with over 300 communities having taken this step.

7. Issues and Opportunities

The following items provide a list of issues, amongst many, that could form the basis for further discussion by Trust Council.

- We do not have accurate Community Energy and Emissions Inventory information which limits our ability to accurately measure how emissions programing is reducing carbon levels.
- Issue of built form density is central to lessening climate change impacts and GHG production within the Trust Area.
- The Islands Trust does not have climate change policy in the Policy Statement but does in Official Community Plans and a variable level of climate regulation in LUBs.
- Corporate opportunities: electronic meetings, carbon friendly foods, further policies on travel.
- We have not liaised with First Nations on climate change in any substantial manner and will need to include this issue in our Policy Statement discussions.

ATTACHMENT(S):

1. N/A

FOLLOW-UP: As directed by Trust Council

Prepared By: R Hotsenpiller

Reviewed By/Date: May 28, 2019

• Mudge	-	50%	50%	Below per Canadian per capita for 2020/2050
• DeCourcy	-	50%	50%	Below per Canadian per capita for 2020/2050
Galiano	-	33%	-	Reduction over 2007 emissions
Gambier	-	33%	85%	Reduction over 2007 emissions
• Associated	-	20%	85%	Reduction over 2007 emissions
• Keats	-	33%	85%	Reduction over 2007 emissions
Denman	-	33%	85%	Reduction over 2007 emissions
Hornby	-	25%	80%	Reduction over 2007 emissions
Lasqueti	-	50%	50%	Below per Canadian per capita for 2020/2050
Mayne	-	33%	-	Reduction over 2007 emissions
North Pender	-	33%	-	Reduction over 2007 emissions
• Associated	-	50%	50%	Below per Canadian per capita for 2020/2050
Saturna	-	33%	-	Reduction over 2007 emissions
SSI	15%	40%	85%	Reduction over 2007 emissions
• Piers	-	-	-	Bylaw is not compliant
South Pender	-	33%	-	Reduction over 2007 emissions
Thetis	-	33%	85%	Reduction over 2007 emissions
Associated	-	-	-	Bylaw contains no targets
Valdes	-	50%	50%	Below per Canadian per capita for 2020/2050

A. Local Planning Actions Since 2010

Since 2010, planning Staff regularly include consideration of climate change mitigation and adaptation in staff reports on planning applications and projects. As a result, all planning decisions by local trust committees over the past eight years have included a climate change lens. In addition to this, local trust committees adopted specific policies in their official community plans related to climate change mitigation and adaptation. Many of these policies have been implemented through land use bylaw amendments. A list of these implemented policies is included in Appendix 1.

Appendix 2 lists the official community plan policies that have not yet been implemented in the land use bylaws.

The remainder of this briefing provides information on land use planning actions that can be undertaken in relation to climate change. Section B addresses actions related to climate change mitigation and Section C addresses actions related to climate change adaptation.

B. Climate Change Mitigation Tools

Climate change mitigation involves actions that reduce greenhouse gas emissions (GHGs). In the local trust areas the main source of GHGs is combustion from transportation and combustion from heating and cooling buildings. Therefore, any policies and regulations that reduce the need for transportation, or reduce the need for heating or cooling of buildings will help in reducing GHGs.

The Province committed to providing the Community Energy and Emissions Inventory (CEEI) for local governments. For the Islands Trust area there is very little data available. The only metric is residential heating using wood, propane or oil (and this is withheld for Lasqueti and Gambier LTAs). There are no metrics available for transportation or any other source of GHG emissions. The last year CEEI reports were undertaken was 2012. As a result we currently do not have metrics to measure progress towards targets in OCPs. Bowen Island Municipality has Community Energy and Emission Inventories (starting on page 40 of this linked document <https://bowenisland.civicweb.net/document/118760>).

Local trust committees and Bowen Island Municipality have the following tools available to them to reduce GHGs:

- **GHG Reduction Targets** - Section 473 of the *Local Government Act* – required content for official community plans, inclusion of targets and policies with respect to reducing greenhouse gas emissions.
- **Zoning Authority** – Section 479 of the *Local Government Act*.
- **Development Permit Area to Promote Energy Conservation** – Section 488(1)(h) of the *Local Government Act*.
- **Development Permit Area to Promote the Reduction of Greenhouse Gas Emissions** - Section 488(1)(j) of the *Local Government Act*.

Local trust committees and Bowen Island Municipality could undertake the following to mitigate climate change.

1. **Enact existing Official Community Plan policies** for the mitigation of climate change that are already in the official community plans but have not yet been acted on (Appendix 2 contains a list of these policies).
2. **Update official community plans** to ensure the mandatory GHG reduction targets and policies are relevant and up to date; Galiano Island, Mayne Island, North Pender Island, South Pender Island and Saturna Island local trust committees have targets for GHG reduction set for 2020 with no targets for any future dates, and as such those targets will be out of date next year. The Salt Spring Island Local Trust Committee has not adopted any targets or policies for the Piers Island OCP. The Thetis Associated Islands OCP contains objectives and policies but no targets. While the Islands Trust has very limited metrics to measure progress, the requirement to have targets and policies in official community plans is mandatory under s. 473 of the *Local Government Act*. These official community plans should be updated within the next year to ensure they remain compliant with required content for an official community plan, and to address targets and polices for GHG reduction. Other local trust committees should review their targets and policies for relevance to current conditions.
3. **Use the zoning authority under s. 479 of the *Local Government Act* to cluster development** and move away from large lots to small compact "villages". This can be accomplished through OCP policies to require this kind of development, rezoning appropriately by increasing density in appropriate locations and reducing in other locations and density transfer to move density to appropriate areas. Some local trust committees already have some form of this in their OCPs. Salt Spring and Gabriola have density transfer that has seen some significant land use changes. While these were not specifically created to address climate change mitigation, they can be

effective in changing the land use pattern to one that is more sustainable and reduces the need for transportation.

5. **Use the climate change development permit areas to reduce the heating and cooling requirements for buildings.** To improve building energy efficiency, land use planning can require landscaping and orientation of buildings in a way to maximize sun in winter and shade in summer. This would be done through a development permit area (DPA), with the justification and objectives in the Official Community Plan and the guidelines in the Land Use Bylaw. Local trust committees and Bowen Island Municipality may use DPAs to reduce GHG emissions and for energy conservation under s. 488 of the *Local Government Act*. Using these DPAs, local trust committees and Bowen Island Municipality may establish guidelines around landscaping, siting of buildings and structures, form and exterior design of buildings and structures, machinery, equipment and systems external to buildings or structures. The DPA may also place restrictions on type and placement of trees and other vegetation in proximity to buildings and structures to provide for energy conservation and reduction of GHGs.

C. Climate Change Adaptation Tools:

Climate change adaptation involves adapting communities to the anticipated effects of climate change. In the Islands Trust area, these effects include sea-level rise, longer periods of drought, more intense storm events, wildfires, warmer summers and warmer winters, and ecosystem changes which may impact plant and animal species.

Local trust committees and Bowen Island Municipality have the following tools available to them to adapt to climate change:

- **Zoning Authority** - Section 479 of the *Local Government Act*.
- **Runoff Control Bylaw** - Section 523 of the *Local Government Act*.
- **Development Permit Area to Protect Development from Hazardous Conditions** – Section 488(1)(b) of the *Local Government Act*.
- **Development Permit Area to Promote Energy Conservation** - Section 488(1)(h) of the *Local Government Act*.
- **Development Permit Area to Promote Water Conservation** – Section 488(1)(i) of the *Local Government Act*.

Local trust committees and Bowen Island Municipality could undertake the following to adapt their communities to the effects of climate change:

1. **Sea Level Rise Adaptation Tools**

The Provincial government has established an expected sea-level rise in the Victoria area of 3.1 cm/50 years.

The Provincial (Subdivision) Approving Officer is currently requiring at time of subdivision a covenant for a 15 metres setback and 1.5 metres above the current high high water mark for any buildings or structures. This approach by the Provincial Approving Officer is a broad-brush approach to adapting to climate change and does not consider site specific conditions. Before initiating adaptation measures local trust committees and Bowen Island Municipality should have an understanding of the local situation.

- a) **Undertake mapping of sea-level rise** on the islands to provide information to assist with developing policies and regulations to adapt to sea-level rise.
- b) **Enact zoning regulations under s.479 of the *Local Government Act* and flood level regulations under s. 524 of the *Local Government Act*.** Using these provisions, local trust committees and Bowen Island Municipality may enact regulations to require setbacks for

buildings and structures from the future anticipated natural boundary of the sea, as well as establish a minimum elevation for buildings and structures above the anticipated future elevation of the sea. Local trust committees and Bowen Island Municipality could make exceptions for structures that are designed to be moved (not on permanent foundation). Notwithstanding, the Provincial Approving Officer will continue to have independent authority to establish different requirements.

2. **Longer Periods of Drought Adaptation Tools**

Islands Trust Staff currently has little information on groundwater such as the effects of climate change on recharge and capacity of the aquifers to provide water. Research and mapping of aquifers would allow local trust committees to develop policies and regulations that reflect the capacity of the aquifers including anticipated climate change effects. Water storage and alternative water supplies could be considered. Means to reduce water consumption includes using development permit areas for water conservation, requiring drought tolerant planting, and requiring features to reduce water use.

- a) **Undertake research and mapping of aquifers, develop water consumption budgets, and identify salt water intrusion risks**, based on expected climate change effects. This work would then inform the land use planning for future development on the islands. This work is already underway for some islands, and staff is working with the Ministry of Forest, Lands, Natural Resource Operations and Rural Development to undertake a robust salt water intrusion risk assessment and mapping for the Islands Trust area.
- b) **Update policies and regulations to align their development potential** – through land use and density provisions – with the anticipated capacity of the aquifers.
- c) **Use the climate change development permit areas under s. 488 of the *Local Government Act* to promote water conservation.** Local trust committees and Bowen Island Municipality could establish goals, objectives and guidelines related to landscaping; siting of buildings and structures; form of exterior design of buildings and structures; specific features in the development; and machinery, equipment and systems external to buildings and structures to promote water conservation. The guidelines may restrict the type and placement of trees and other vegetation in proximity to buildings and structures in order to provide for water conservation.

4. **More Intense Storms Adaptation Tools**

Climate change is expected to result in more intense storm events, with higher winds and heavier rain than in the past.

- a) **Develop runoff control bylaws** under s. 523 to deal with anticipated flood and runoff from storm events.
- b) **Establish development permit areas for the protection of development from hazard conditions** under s. 488 of the *Local Government Act*. Under this development permit area, local trust committees and Bowen Island Municipality could establish areas subject to flooding and require they remain free from development except development may be permitted in accordance with the guidelines. These requirements may vary use and density but only as it relates to health, safety or protection of property from damage. The legislation also allows the local trust committee and Bowen Island Municipality to require a professional report at the applicant's expense to help with determining appropriate development permit conditions.

5. **Wildfire Adaptation Tools**

As climate change results in hotter and longer dryer periods during the summer months, the risk of wildfires on the islands increases. Most islands have a wildfire plan prepared by the fire district or regional district.

- a) **Establish development permit areas for the protection of development from hazard conditions** under s. 488 of the *Local Government Act*. Under this development permit area, local trust committees and Bowen Island Municipality could establish areas at risk to wildfires and include requirements respecting the character of development, including landscaping, and the siting, form, exterior design and finish of buildings and other structures, and establish restrictions on the type and placement of trees and other vegetation in proximity to the development. These requirements may vary use and density but only as it relates to health, safety or protection of property from damage. The legislation also allows the local trust committee and Bowen Island Municipality to require a professional report at the applicant's expense to help with determining appropriate development permit conditions.

6. **Warmer Summers and Warmer Winters Adaptation Tools**

Climate change is expected to lead to our summers and winters becoming warmer.

- a) **Establish development permit areas for energy conservation** under s. 488 of the *Local Government Act* to require that the exterior form and design of buildings, and other specific features of the development, reduce the need for energy in summer and winter. Local trust committees and Bowen Island Municipality could establish goals, objective and guidelines related to landscaping; siting of buildings and structures; form of exterior design of buildings and structures; specific features in the development; and machinery, equipment and systems external to buildings and structures to promote energy conservation. The guidelines may restrict the type and placement of trees and other vegetation in proximity to buildings and structures in order to provide for energy conservation.

ATTACHMENTS:

1. Summary of Local Trust Committee OCP climate change policies already implemented
2. Summary of Local Trust Committee OCP climate change policies not yet implemented

FOLLOW-UP:

Further work in specified areas as indicated in the briefing, or as requested by the Trust Council, Executive Committee, Local Planning Committee or local trust committees.

Prepared By: David Marlor, Director, Local Planning Services

Reviewed By/Date: Russ Hotsenpiller, Chief Administrative Officer/

APPENDIX 1 – May 30, 2019

Summary of Official Community Plan policies, listed by local trust area, that have been implemented in the land use bylaws.

Ballenas-Winchelsea Local Trust Area

- Shoreline Development Permit Area (applicable to 30 m upland of the natural boundary of the sea).
- Regulations in the land use bylaw exempts solar collectors, wind generators and water storage tanks from height restrictions.

Denman Island Local Trust Area

- Climate change impacts are considered in staff.
- Providing the dedication of conservation area, consistent with OCP policies for density transfer.

Gabriola Island Local Trust Area

Gabriola Island

- Climate change impacts are considered in staff reports.
- Providing for rainwater collection and storage, trail/path connections and dedication of 300+ acres of parkland.
- Development Approval Information (DAI) Bylaw amended (2013) to include option to address GHG emissions, anticipated energy usage, carbon emissions and groundwater resources in conjunction with bylaw amendment or TUP applications [Criteria for assessing OCP/LUB applications developed.
- Land Use Bylaw (parking regulations and Village DPA guidelines) amended to encourage public transit, smaller vehicles, non-polluting vehicles, and permeable parking surfaces and increase walkability.
- Land Use Bylaw amended to measure the footprint of buildings and structures from the interior walls instead of the outer perimeter of the foundation of the building, so increased insulation is encouraged, and to exclude cisterns from floor area calculation.
- Official Community Plan and Land Use Bylaw amended to encourage local food production.

Mudge Island

- Climate change impacts considered in staff reports.
- Land Use Bylaw amended to exclude from the calculation of lot coverage in the RR zone: cisterns and similar structures for rainwater collection and storage; fire-fighting towers; pervious paths, driveways and parking spaces; and garden beds.

DeCoursey Island

- Climate change impacts considered in staff reports.

Galiano Island Local Trust Area

- Climate change impacts considered in staff reports, and inclusion of a policy in the Land Use Policies section of the Official Community Plan applicable to consideration of all applications.
- Amendments to shoreline development permit area to include guidelines to consider and address sea level rise impacts.
- Changes to zoning regulations to permit small-scale renewable energy, specifically height regulations amended.

Gambier Island Local Trust Area

- Climate change impacts considered in staff reports.

Hornby Island Local Trust Area

- Climate change impacts considered in staff reports.
- Official Community Plan Water Supply Protection and Water Resource Protection Development Permit Area includes guidelines to protect water resources.
- Official Community Plan Community Service Use Development Permit Area includes guidelines to provide rainwater catchment and storage; and hydrology study.
- Official Community Plan Commercial Development Permit Area includes guidelines to maintain natural vegetation and reduce light pollution.
- Water storage tanks and wind turbines exempt from Land Use Bylaw height regulations.

Lasqueti Island Local Trust Area

- Climate change impacts considered in staff reports.

Mayne Island Local Trust Area

- Climate change impacts considered in staff reports.
- Zoning amended to exclude solar collectors, wind generators and water tanks from maximum height regulations.
- Geothermal heating systems permitted.
- Amendments to Land Use Bylaw to permit mixed use (second storey residential) in commercial zones.
- Zoning for employee accommodation in commercial resorts.
- Secondary suites permitted.

North Pender Island Local Trust Area

North Pender Island

- Climate change impacts considered in staff reports.
- Secondary suites permitted.
- Temporary use permit guidelines amended to include climate change impacts.

North Pender Associated Islands

- Climate change impacts considered in staff reports.
- Shoreline DPAs include erosion provisions.

Salt Spring Island Local Trust Area

Salt Spring Island

- Climate change impacts considered in staff reports.
- Secondary suites permitted in select areas.
- Amenity Zoning includes implementation of energy efficient building design criteria that exceeds that required by the B.C. Building Code or other regulations.
- Climate change considered when evaluating suitability of density transfer.
- Rezoning application supporting local food production and storage as a community amenity
- Coordination with local and provincial agencies regarding fresh water demand and supply in relation to climate change.
- Land use regulations require 15m setbacks from natural bodies of water; 1.5 m elevation above natural body of water.
- Pathways and bikeways dedication at time of subdivision as per OCP Cycle Route map.

- DAI Bylaw including development permit checklist (both are drafted but not yet implemented).

Piers Island

- Climate change impacts considered in staff reports.
- 3.0 m elevation of buildings required if within 30m of water body.

Prevost Island

- Climate change impacts considered in staff reports.

Saturna Island Local Trust Area

- Climate change impacts considered in staff reports.
- Geothermal heating permitted.
- Secondary dwelling units (secondary suites amendment in process).
- Sustainability checklist.
- TUP guidelines amended to include consideration of climate change impacts.

South Pender Island Local Trust Area

- Climate change impacts considered in staff reports.
- Although not a Bill 27 requirement, LUB was amended to limit dwelling floor area and overall floor area on residential lots.

South Pender Island Local Trust Area

- Climate change impacts considered in staff reports.

Thetis Island Local Trust Area

Thetis Island and Valdes Island

- Climate change impacts considered in staff reports.

Thetis Associated Islands

- Climate change impacts considered in staff reports.
- Land Use Bylaw definition of floor area excludes any floor area occupied by a cistern used for the collection of rainwater for domestic use or fire protection.
- Land Use Bylaw permits the following uses in all zones: conservation; water supply facilities for the purposes of supplying potable or grey water on an individual island, including cisterns, reservoirs, pipes, treatment facilities, catchment and storage facilities and pumping and intake structures; solar collectors; wind turbines; and ocean geothermal loop exchange systems.
- Solar collectors are exempt from Land Use Bylaw height regulations.

Summary of Local Trust Committee Official Community Plan Policies that have yet to be implemented.

The following is a summary of Official Community Plan policies on climate change that have not yet been enacted in the land use bylaw regulations or through development permit areas. For actual wording of the policies, please consult that relevant official community plan bylaw.

Ballenas-Winchelsea Local Trust Area

- Identify significant un-fragmented forest and non-forest ecosystems and ensure these are noted on mapping for environmental and carbon sequestration value.

Denman Island Local Trust Area

- Review zoning to ensure provisions encourage energy efficiency and the greenhouse gas emissions reduction in new construction.
- Review development permit area guidelines and incorporate provisions to promote energy conservation, water conservation and greenhouse gas emissions reduction.
- Encourage renewable energy, limit fossil fuel consumption, encourage energy-efficient and carbon-efficient building construction.

Gabriola Island Local Trust Area

Gabriola Island

- Consider new development permit area guidelines that promote low impact land uses, alternative transportation, energy conservation, water conservation, and the reduction of GHGs.
- Identify significant un-fragmented forest ecosystems within the planning area and ensure that these areas are noted on mapping both for their environmental values as well as carbon sequestration areas.
- Amend LUB to consider setbacks from the ocean in relation to sea level rise.

Mudge Island

- Establish climate change as a fundamental factor in land use decision making.
- Encourage on-island agriculture and sharing of local food production.
- Encourage all new construction be built at the highest possible energy-efficiency standards.
- Further policies and actions to be considered as part of a future review of the OCP.

DeCoursey Island

- Encourage on-island agriculture and the sharing of local food production.
- Encourage new construction built at highest possible standards to reduce energy needs.
- Specific policies and actions to be included in a future OCP review.

Galiano Island Local Trust Area

- Amendments to parking requirements to require alternatives to parking spaces.
- Requiring new development to utilize building technology that minimizes energy use.

Gambier Island Local Trust Area

Gambier Island

- Develop new criteria for assessing OCP or zoning amendment applications from the perspective of climate change adaptation and mitigation.
- Support protection of forest resources.
- Require water storage with every dwelling unit.

Gambier Associated Islands

- Support actions to minimize GHG emissions.
- Recognize importance of forested lands in removing carbon dioxide from the atmosphere.
- Consider potential impacts on global climate change and GHG reduction targets when considering applications.
- Identify significant un-fragmented forest ecosystems within the planning area and ensure that these areas are noted on mapping for both their environmental value and as carbon sequestration areas.
- Reduce extent of infrastructure (e.g. development of common docks).
- Zoning regulations should support small scale residential solar and wind power generation on residential lots.

Keats Island

- Promote use and development of renewable energy sources.
- Develop new criteria for assessing OCP or zoning amendment applications from the perspective of climate change adaptation and mitigation.
- Support cluster development appropriate for Keats Island.
- Encourage energy efficient buildings.
- Encourage use of alternative energy.
- Encourage water storage for every dwelling unit

Hornby Island Local Trust Area

- Develop criteria for assessing OCP or LUB amendment applications from the perspective of climate change adaptation and mitigation.
- Encourage retention of forest cover except for the clearing of land for farming in the ALR.
- Limit size of buildings and opportunities for attached dwelling units and visitor accommodation units.
- Encourage green building techniques and alternative energy systems (solar, wind, geothermal, or water based) into residential housing.
- Encourage safe multi-use trails and bike lanes to facilitate non-motorized forms of travel.
- Encourage “climate wise” actions, including water conservation, storm water retention, the use of alternative energy sources for home use, and the use of alternative transportation methods.
- Support the local provision of services that residents presently travel off-island to access.
- Review LUB to provide for community gardens and community food processing and storage.
- Encourage local food production.

Lasqueti Island Local Trust Area

- Develop criteria for assessing OCP or zoning applications from the perspective of climate change adaptation and mitigation.
- Encourage energy conserving buildings.
- Encourage cycling and walking trails to permit non-automobile based forms of travel.
- Encourage water conservation and rainwater catchment.

Mayne Island Local Trust Area

- Permitting attached dwellings.
- DPA to manage lot layout.
- DPA for energy conservation.
- Amendments to amenity zoning and density transfer policies.

North Pender Island Local Trust Area

North Pender Island

- A review of overall development potential to consider amendments to zoning where changes could limit or reduce emissions.
- Permitting attached dwellings.
- Amending parking requirements.
- DPA to manage subdivision layout (conservation subdivision design project started but later abandoned by LTC).
- Second storey residential over commercial.
- Requiring cisterns or other water conservation measures in new development.
- Permitting community wood chipping or composting.
- Amend existing DPA to include energy conservation provisions.

North Pender Associated Islands

- Specific policies and actions to be included in a future review of the plan.

Salt Spring Island Local Trust Area

Salt Spring Island

- Calculation of carbon budget at time of rezoning or demonstrated conformity with LEED or similar.
- GHG or energy efficiency specific DPA.
- Amend fees bylaw to support energy efficient building design.
- Mapping and analysis to anticipate potential impacts of climate change on land use.
- Height relaxation for solar and wind power generation on residential lots.

Piers Island

- In progress of updating OCP for Climate Change.

Prevost Island

- No policies on climate change – bylaw requires updating

Saturna Island Local Trust Area

- Amending zoning to allow mixed use, including second storey residential in commercial designation.
- Amending parking requirements.
- Include energy conservation measures in DPA.
- Implement DPA for lot layout and tree removal.
- Permitting attached dwellings.
- Limit floor area of dwellings.

South Pender Island Local Trust Area

- Permit community gardens.

Thetis Island Local Trust Area

Thetis Island

- Develop new criteria for assessing OCP or LUB amendment applications from the perspective of climate change adaptation and mitigation.

- Promote land use that supports local food production to reduce food transportation costs and GHGs.
- Support new forms of housing that include clustering and zero emission housing.
- Encourage local, small-scale generation of alternative non-polluting energy sources.
- Regulate the size, siting and height of wind turbines to minimize environmental impacts and safety risks.

Thetis Associated Islands

- Consider the potential impacts on climate change GHG emissions in bylaw provisions and review of development applications.
- Identify significant un-fragmented forest and wetland ecosystems within the planning area and ensure that these areas are noted on mapping for both their environmental value and as carbon sequestration areas.
- Through bylaw provisions, support residential renewable energy (e.g. micro hydro, solar, wind, waste heat, etc.) use.
- Promote the conservation of forested lands and wetlands as a cost effective and important climate change mitigation strategy.

Valdes Island

- Establish climate change as a fundamental factor in land use decision-making.
- Policies and actions with respect to climate change mitigation will be considered as part of a future review of the Rural Land Use Bylaw.