

2.5 Climate Change and Energy

INTRODUCTION

The climate worldwide is changing, and observations in this region over the past 100 years show that average annual temperature, average annual precipitation, and the surface temperature of the Strait of Georgia have all increased. There are many impacts of these changes that will affect the sensitive ecosystems, species at risk, natural hazards, groundwater, and the people and businesses that rely on them. Some of the most significant impacts to be expected include hotter, drier summers causing drought and increased risk of wildfire, and increasing frequency and severity of storms coupled with sea level rise causing more significant and frequent flooding events. Decisions and plans made today should look to anticipate the future effects of climate change and adapt to, or mitigate them.

Climate change mitigation refers to the ongoing attempts to prevent significant climate change through the reduction of greenhouse gasses (GHG) in the atmosphere. Mitigation locally can also provide direct community benefits including reduced energy costs, reduced vulnerability to energy markets, economic development, and more resilient communities. The greatest contributors to greenhouse gasses in the Regional District are transportation and buildings.

Adaptation refers to actions taken to respond to the impacts of climate change by reducing the associated risks. Examples of adaptation actions include modifications of coastal development to account for sea level rise, changes to agricultural crops better suited to hotter and drier summers, or reduction of water use.

In 2007, the Province of BC set province-wide greenhouse gas emission reduction targets of 33% below 2007 levels by 2020 and 80% by 2080. In addition, the Province amended the *Local Government Act* to require that an official community plan include targets for the reduction of greenhouse gas emissions in the area covered by the plan, and policies and actions of the local government with respect to achieving those targets.

Throughout this Plan, there are objectives and policies in relevant sections to address climate change adaptation and mitigation. The Implementation section of this Plan includes specific actions the Regional District can take to effect changes.

CLIMATE CHANGE POLICIES

1. This Plan encourages increased density and a mix of uses in Village Centres to reduce the reliance of residents on the private automobile and to increase viability of public transit. Rezoning proposals within Village Centres should contribute to neighbourhood form that facilitates energy efficient modes of transportation such as walking, cycling, or public transit and contributes to implementation of the Active Transportation Plan, 2017 where applicable.

OBJECTIVES

1. *Reduce* greenhouse gas emissions to 33% below 2007 levels by 2020 and 80% by 2050, as identified in the Community Energy and Emission Plan.
2. *Support* energy conservation and greenhouse gas emission reduction at the community and at the site-specific scale.
3. *Identify* anticipated local climate changes, associated impacts, and potential adaptation actions.
4. *Encourage* energy efficiency in buildings and site design.
5. *Recognize* the importance of natural areas for carbon sequestration.
6. *Support* efforts to maintain sustainable, locally produced sources of food.
7. *Promote* private and public infrastructure that uses energy more efficiently.

2. Outside Village Centres, alternative forms of rural development that contribute to a reduction in greenhouse gas emissions through design and in some cases also through conservation of natural areas that sequester carbon, are encouraged through policies in Section 5.10 of this Plan.
3. The Regional District should develop tools and incentives to facilitate the encouragement of the redirection of development from greenfield sites to Village Centres.
4. In all parts of the Plan Area, rezoning proposals should contribute to implementation of the Active Transportation Plan, 2017 where the location of the property to be rezoned permits.
5. Greater energy efficiency, water conservation and greenhouse gas emission reductions in the development and redevelopment of sites and buildings shall be encouraged through development permit area guidelines, community amenity contribution policies, and the continued use of a sustainability checklist in conjunction with the BC Energy Step Code during rezoning and development permit application processes.
6. The Regional District will provide education and resources to the building industry and consumers about energy efficiency in renovations and new construction, and pursue partnerships with the private sector for green building demonstration projects such as net zero homes.
7. This Plan supports recovery of energy and materials from both public and private sector waste streams that may be used to service communities or facilities.
8. This Plan supports proposals for renewable energy generation as an economic opportunity for residents and businesses that show compatibility with surrounding land uses and the environment by mitigating noise, vibration, visual impacts by distance separations, screening and buffering. The Regional District should develop criteria in order to enable evaluation of these and any other relevant community impacts of such proposals.
9. Agricultural land and aquaculture are recognized for current and future food production to lessen the need to transport food over long distances. Proposals to increase production and availability of local food are encouraged, and proposals that would reduce the future potential for local food production are discouraged.
10. The Regional District should work with the First Nations, the public and stakeholders to develop a climate change adaptation plan including an assessment of vulnerability and risk of climate change impacts such as sea level rise, hotter and drier summers, changes to agriculture, and increased frequency and severity of storms.
11. The marine coast is designated a development permit area to allow for evaluation of the resiliency of coastal development to climate change, and the impacts on natural coastal processes and ecosystems.

ADVOCACY POLICIES

12. The Provincial government is encouraged to undertake new floodplain mapping for use by local governments in planning for sea level rise and other impacts of climate change.
13. The Regional District encourages installation of electric vehicle charging stations in commercial and community areas.