



Buildings

Buildings generate greenhouse gas emissions from burning fossil fuels, (primarily natural gas), for space and water heating. The region’s greenhouse gas emissions from buildings are second only to transportation, accounting for approximately one quarter of all regional greenhouse gas emissions.

Improving energy efficiency and switching to low carbon energy systems (e.g., district energy, electric heat pumps, solar, renewable natural gas) can reduce greenhouse gases from buildings. Trees can be used to reduce the energy required to heat and cool buildings. Local governments can influence building energy efficiency and the use of low carbon energy systems by adopting the BC Energy Step Code. They can also deliver programs that encourage building and home owners to improve energy efficiency and switch to low carbon energy sources. Buildings are long-lived assets (50 years or more) so energy efficiency requirements and programs to reduce emissions from buildings will have a long-term impact on greenhouse gas emissions.

Climate change will increase the incidence of extreme heat events, average summer temperatures and the need to cool buildings. Governments, utilities, and building owners need to consider how this will impact building design and energy use, and in response, modify policy and planning for energy demand, and building management. Increased risk of flooding due to climate change needs to be considered in the design and siting of new buildings and the retrofit of existing buildings. Also see the Land-Use and Growth Management Issue Area for further discussion of land-use planning for climate impacts.

