

2007 Greenhouse Gas Emissions Inventory for Bellingham

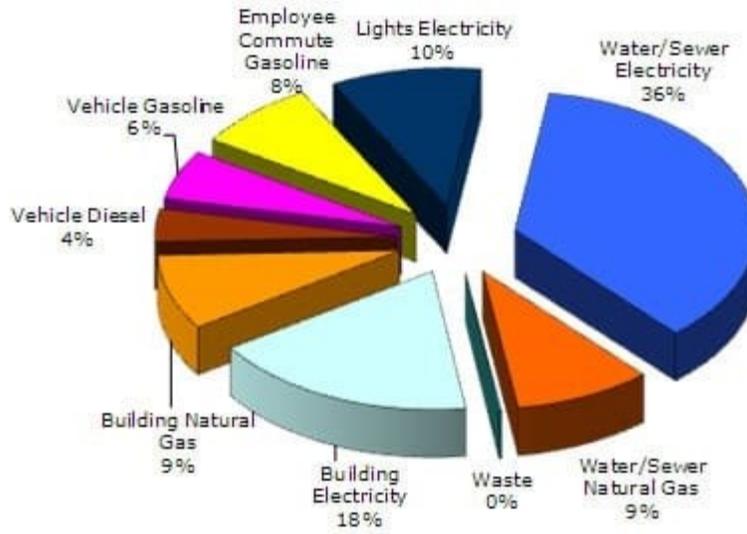
The inventories were conducted between August 2005 and August of 2006. ICLEI's Cities for Climate Protection methodology allows local governments to systematically estimate and track greenhouse gas emissions from energy and waste-related activities on a community-wide scale, as well as those resulting directly from municipal operations.

Bellingham's pollution emissions are not stationary. The general trend of population growth, coupled with increasing per capita energy use, and the local government's attempt to keep services apace with that growth, result in a steady increase in annual emissions. Any attempt to achieve an absolute reduction must first take into account this growth.

Based on the community and municipal operations emissions inventories developed for Bellingham for the base year 2000 and interim study year 2005, the next step was to forecast future emissions generated in the community and by municipal operations. The emissions forecast represents a business-as-usual prediction of how greenhouse gas emissions are likely to change over time. Emissions were also back-cast to 1990. While detailed data was not available to inventory the emissions for years prior to 2000, it was considered of value to have an estimate of 1990 emissions.

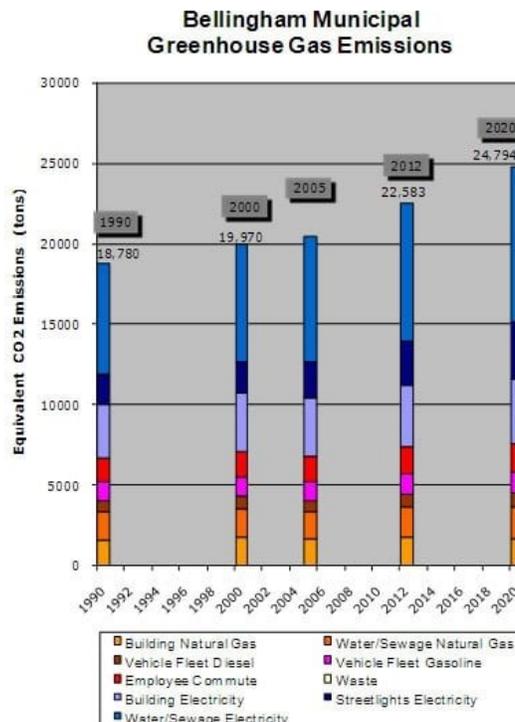
Municipal Operations

In the base year of 2000, Bellingham's municipal operations generated 19,945 tons of equivalent carbon dioxide (eCO₂). The largest source of municipal emissions was electricity, which resulted in 64.2% of those emissions. Water and wastewater treatment was the most significant sector, accounting for 45.5%. The chart below shows the breakdown of municipal emissions by source type and sector.



Bellingham’s municipal greenhouse gas emissions—2000
 Source: CACP Model output

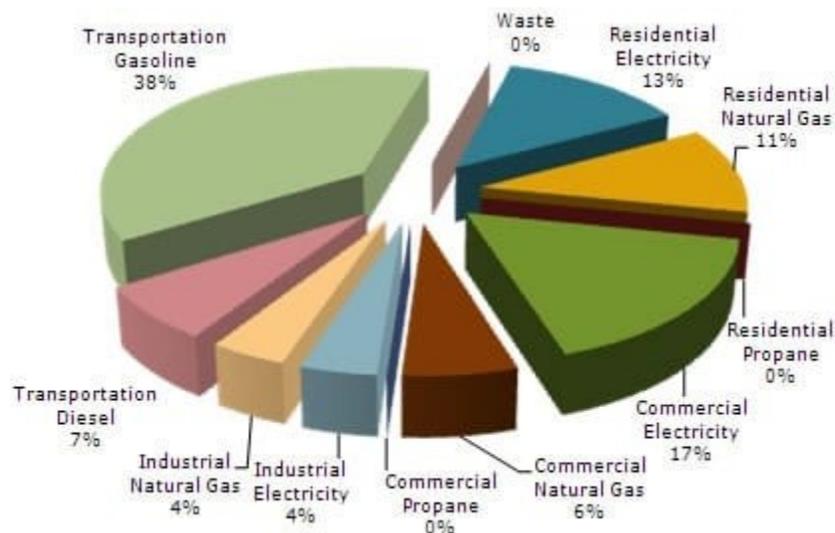
In 2000, municipal emissions in Bellingham constituted about 2.05% of the community’s total emissions. Local government emissions typically fall between 2 and 5 percent of overall community levels. As a minor contributor to total emissions, actions to reduce municipal energy use will have a limited impact on Bellingham’s overall emissions levels.



Municipal greenhouse gas emissions 1990-2020
 Source CACP Model Output

Community Inventory

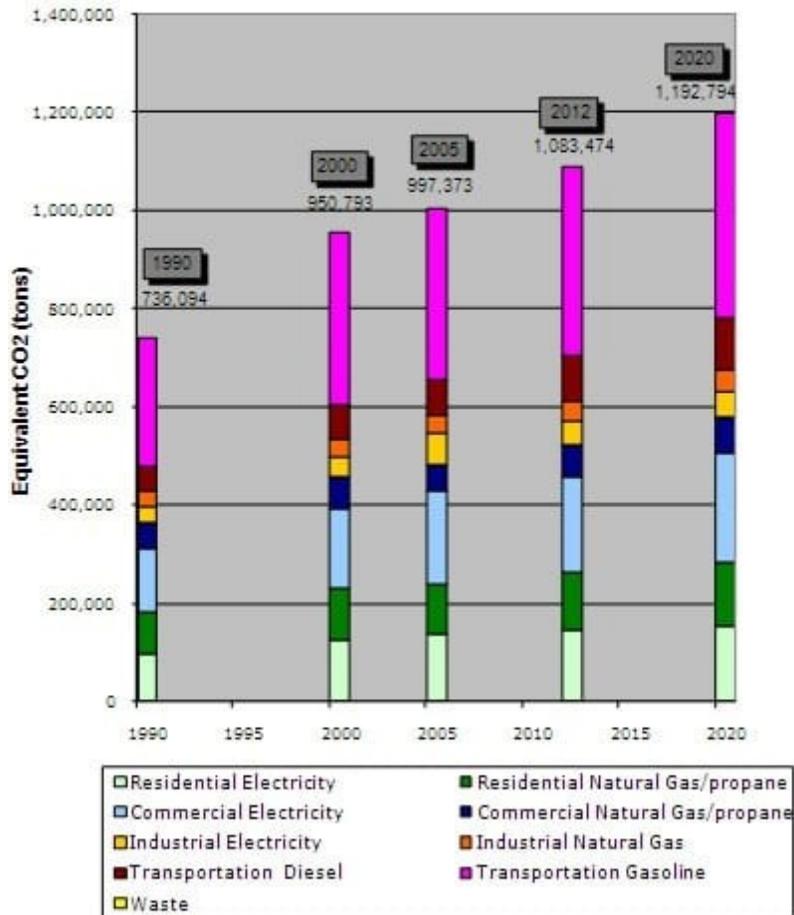
In the base year 2000, the community of Bellingham emitted approximately 950,793 tons of eCO₂. By far the largest single sector was transportation in which diesel and gasoline emissions together accounted for 44.2% of all emissions in Bellingham in 2000. Gasoline emissions alone accounted for 37.3% of total community emissions. When electricity based emissions from residential, commercial and industrial sectors are combined, they accounted for 34.7% of the total community emissions. The figure below shows the breakdown of community emissions by sector and source type.



Bellingham community greenhouse gas emissions – 2000

Source: CACP Model output

Bellingham Community Greenhouse Gas Emissions



Bellingham community greenhouse gas emissions 2000 – 2020
Source: CACP Model output

Read the complete [Bellingham Greenhouse Gas Emissions Inventory and Local Climate Action Plan \(PDF\)](#).