

2012 City of Charlottesville Emissions Report Update

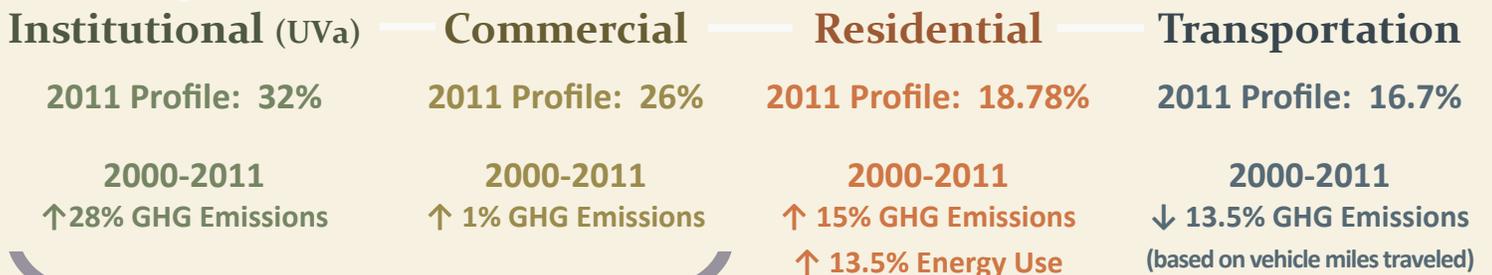
The City of Charlottesville has made commitments to reducing community-wide greenhouse gas (GHG) emissions. The Climate Protection Program supports these commitments by periodically calculating the emissions associated with sectors and activities within our community. The first emissions inventory was created in 2008 and presented data from a baseline year 2000 and an interim year 2006. The 2012 Update adds inventory years 2009 and 2011. By comparing associated emissions data from 2000 to 2011, we can track how we are progressing on our community emissions reduction commitments.



2011 Profile: Commercial & Institutional 58.38% Residential 18.78% Transportation 16.7% Waste 3.43% Municipal 2.7% Industrial 0.05%

Note: The University of Virginia is the only institutional entity within the City and was included in its entirety in the emissions profile.

The Largest Community Sectors



Commercial + Institutional

58.38% 2011 Profile ↑ 16% GHG Emissions ↑ 20% Energy Use

The commercial sector includes all non-residential, non-municipal, and non-institutional building energy uses. In the City's community profile, the commercial and institutional sectors are combined.

Municipal Sector Focus

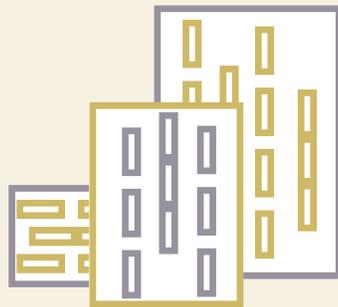
The City's municipal operations contribute 2.7% of the City's community-wide emissions profile.

See Next Page for Municipal Focus

Municipal Sector: 2011 Community Emissions Profile

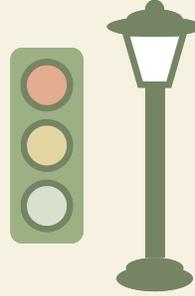
The Municipal Sector represents emissions associated with activities of the City's municipal operations, which is comprised of three areas: Facilities; Traffic Signals & Streetlights; and Fleet. Municipal waste is accounted for in the waste sector.

2011 Community Profile: **2.7%** 2000-2011: **↓18%**



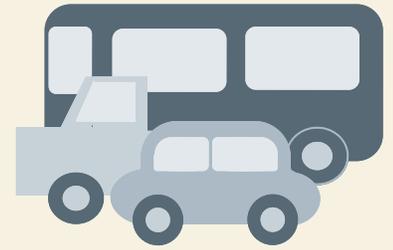
Facilities

↓ 29.8% GHG Emissions
↓ 29.5% Energy Use



Traffic Signals & Streetlights

↓ 24% GHG Emissions
↓ 20.8% Electricity (kWh)



Fleet

GHG Emissions
↓ 10.3% Gasoline
↑ 48.4% Diesel

2000
vs.
2011

Facilities' Annual Energy Use Costs (Calculated at 2011 Utility Rates)



Energy reductions in Facilities produce annual avoid costs from utility bills. For example, avoided costs in 2011 alone amounted to over \$840,000.

Reductions in facility operations reflect three major efforts:

- Improve the efficiency of existing facilities
- Pursue high performance green buildings for new facilities
- Implement operational adjustments

As of 2012, there are 681 units in the municipal fleet. Emissions were calculated based on fuel consumption by vehicle type. An ongoing "greening of the fleet" contributed a decrease in gasoline usage while an increase in the public transit system produced an increase in diesel usage.

Goals Community-wide: Prevent increases in emissions and pursue a 10% emissions decrease by 2035
Municipal operations: 1% average emissions reductions per year through 2050