

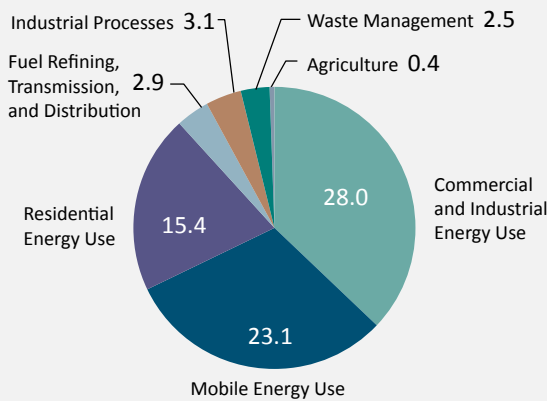
TRACKING GREATER PHILADELPHIA'S GREENHOUSE GAS EMISSIONS



The Delaware Valley Regional Planning Commission (DVRPC) conducts a comprehensive inventory of Greater Philadelphia's greenhouse gas (GHG) emissions and energy use every five years. It provides valuable insights into the largest sources of GHG emissions, and helps stakeholders understand where to focus GHG reduction efforts. The inventory follows standard, accepted protocols to estimate emissions from all major sources, including commercial and industrial energy use, mobile energy use, and residential energy use.

Where We Are

Here is a snapshot of where the Greater Philadelphia region's 2015 GHG emissions (MMT_{CO2e}) came from:



Note: Graphic shows gross emissions. It does not include sequestration from land use, land cover, and forestry.

Where We Have Been

The table below compares the regional GHG emissions (MMT_{CO2e}) from 2005 to 2015. Note that this table shows gross emissions that do not include sequestration from land use, land cover, and forestry as at left.

Category	2005	2010	2015
Commercial and Industrial Energy Use	33.6	30.0	28.0
Mobile Energy Use	27.3	26.4	23.1
Residential Energy Use	21.2	18.5	15.4
Fuel Refining, Transmission, and Distribution	6.5	4.0	2.9
Industrial Processes	3.2	2.7	3.1
Waste Management	2.2	2.1	2.5
Agriculture	0.5	0.4	0.4
Total*	94.5	84.0	75.3

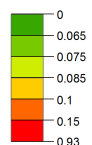
* Items may not add to totals due to rounding.

Accounting for Growth

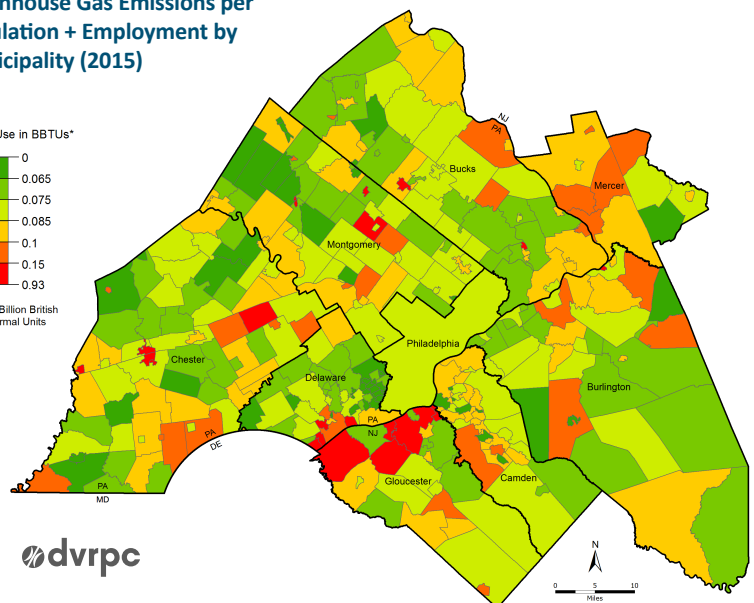
DVRPC mapped per capita GHG emissions by municipality for 2015. Communities with walkable, mixed-use neighborhoods; near transit infrastructure; and with smaller houses tend to use less energy and produce lower GHG emissions. *Connections 2045: Plan for Greater Philadelphia* calls for continued investment in these already-established communities or "Centers." As the region continues to grow, focusing new development in Centers will be essential to achieving energy use and greenhouse gas emissions reduction goals, as well as to building vibrant, walkable communities.

Greenhouse Gas Emissions per Population + Employment by Municipality (2015)

Energy Use in BBTUs*



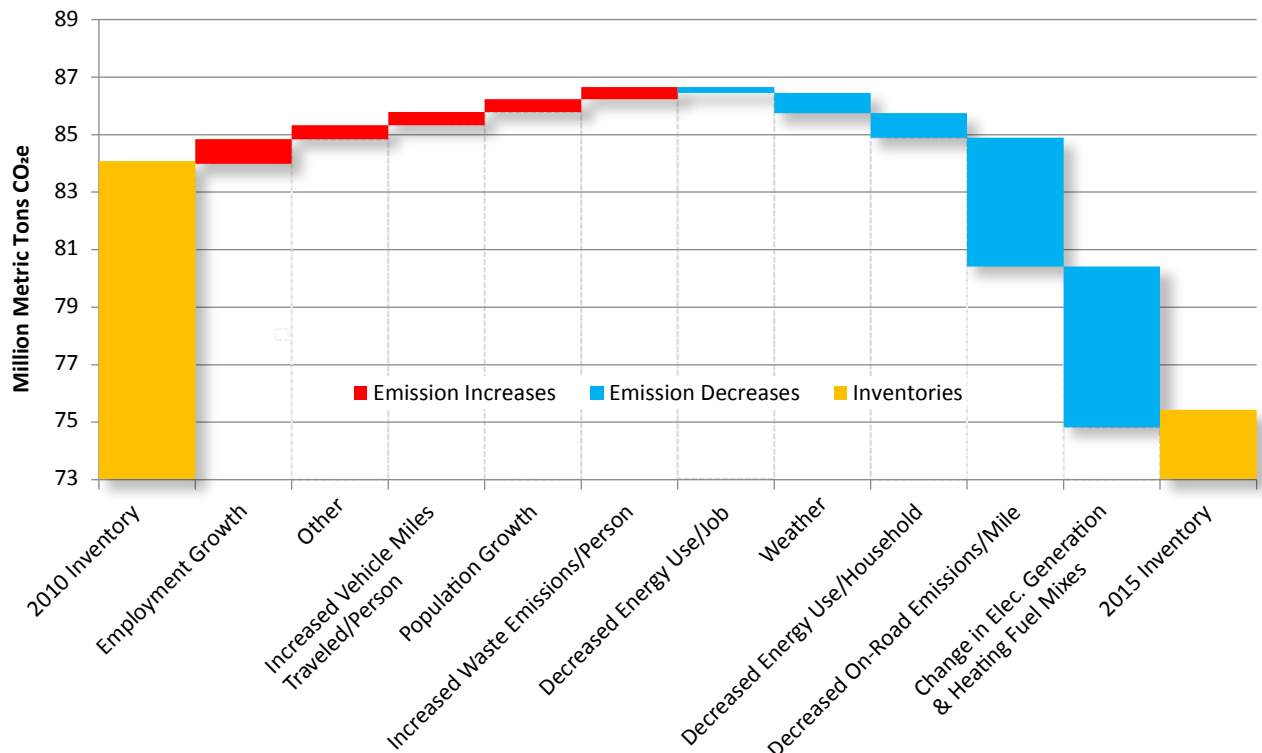
* One Billion British Thermal Units



What's Driving the Trends?

Tracking changes in GHG emissions inventories over time is critical for informing future action. Understanding the underlying factors that drove observed changes is essential for effective policy making. For example, is a decline in emissions due to external factors such as population growth and weather, or to local programs or policies such as home energy retrofit subsidies or building codes?

DVRPC conducted an analysis of Greater Philadelphia's GHG emission trends to better understand why they change. This will help establish regional priorities for future climate action. The graphic below summarizes the resulting drivers of change in the region's GHG emissions from 2010 to 2015. The results show that while Greater Philadelphia is experiencing economic and population growth, decreases in GHG emissions due to changes in fuel mix for generating electricity and heat along with increasing vehicle fuel economy are outpacing GHG emissions changes due to that growth.

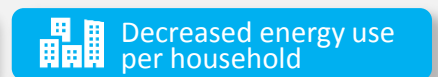
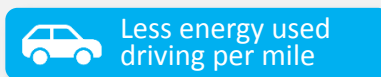
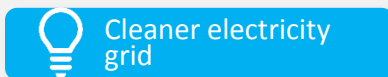


Largest contributors to GHG emissions INCREASES:



? What drove GHG emissions in Greater Philadelphia between 2010 and 2015?

Largest contributors to GHG emissions DECREASES:



Connecting People, Places & Prosperity in Greater Philadelphia
The Delaware Valley Regional Planning Commission (DVRPC) fully complies with Title VI of the Civil Rights Act of 1964 and related nondiscrimination statutes in all activities. For more information, visit www.dvrpc.org/GetInvolved/TitleVI.

This document is based on one produced by ICLEI-Local Governments for Sustainability USA as part of a US Department of Energy funded project Analyzing Drivers of Change in Greenhouse Gas Emissions Inventories (DE -EE0007736)

For more information on DVRPC's 2015 *Energy Use and Greenhouse Gas Emissions Inventory for Greater Philadelphia*, visit www.dvrpc.org/energyclimate/inventory. Learn more about DVRPC's climate action work: Robert Graff at rgraft@dvrpc.org.