

Suffolk County Community GHG Inventory

Executive Summary Overview



**Climate Smart
Communities**

A community greenhouse gas (GHG) emissions inventory accounts for the sum total of all heat-trapping GHGs released into the atmosphere as the result of emission causing activities occurring within a community boundary. This Executive Summary offers a quick and interesting format to provide a snapshot of the sources of emissions from community activities and to promote awareness of our community baseline from which future emissions reductions and progress can be measured.

What is included in a Community GHG Inventory?

The Suffolk County GHG Emissions Inventory calculated community-wide GHG emissions by sector, including residential, commercial, industrial, mobile energy, solid waste, wastewater treatment, industrial processes, agriculture, and energy supply, for a 2010 baseline year (see Sector Descriptions below).

SECTOR	SOURCE DESCRIPTIONS
Residential	Stationary energy used in residential, commercial, industrial buildings and other non-mobile uses (e.g., electricity, natural gas, fuel oils, wood and propane).
Commercial	
Industrial	
Mobile Energy	Fuel consumption for on-road transportation, passenger & freight rail, aviation, marine transit & off-road vehicles.
Solid Waste	Non-energy process emissions from landfills.
Wastewater Treatment	Non-energy process emissions from wastewater treatment plants or septic systems (e.g., methane emissions from anaerobic decay).
Industrial Processes	Non-energy process emissions from industrial activity & fugitive emissions from fuel systems (e.g., CO ₂ from cement production, A/C coolants, & leakages).
Agriculture	Non-energy emissions from crops & livestock (e.g., methane & nitrous oxide emissions from fertilizers).
Energy Supply	Energy generation & fugitive emissions and energy losses due to the transmission and distribution of electricity and natural gas.

Why is it important to communicate the results of the Community GHG Inventory?

The community GHG inventory reveals which sectors have the highest emission levels to help local government create and implement policies, projects, and programs that incentivize and encourage GHG reductions in those specific sectors throughout the community. The community GHG inventory is complimented by the [government operations GHG inventory report](#). Together these reports inform Suffolk County's policies, programs, and projects that aim to reduce GHG emissions.

The Suffolk County's community greenhouse gas (GHG) inventory identifies and quantifies the sources of GHG emissions from community activities and establishes a baseline from which future emissions reductions and progress can be measured. New York State conducted regional GHG emissions inventories for the baseline year 2010, which included emissions for each community on Long Island. Suffolk County partnered with Nassau County and the Rauch Foundation to create the Long Island Carbon Footprint Project.

Table 1 lists the Suffolk County's emission sectors and **Figure 1** shows GHG emissions associated with each sector. The Residential sector is Suffolk County's largest source of GHG emissions, comprising approximately 31% of 2010 community emissions. The next largest source is the Transportation sector at 24%. Reducing emissions from all areas is ongoing work. Please visit the County's [Energy and Climate Action page](#) for details on the County's efforts.

TABLE 1: Community GHG Inventory (2010)
Suffolk County

GHG EMISSION SECTORS	MTCO ₂ e*
Residential	7,191,056
Commercial	4,657,479
Industrial	4,657,479
Transportation	5,773,726
Waste	689,711
Industrial Processes	-
Agriculture	-
Energy Supply	465,845
Total Emissions	18,777,816
Population	1,493,350
Per Capita Emissions	13

*Metric Tons of Carbon Dioxide Equivalent

FIGURE 1: Community GHG Emissions by Sector (2010)
Suffolk County

