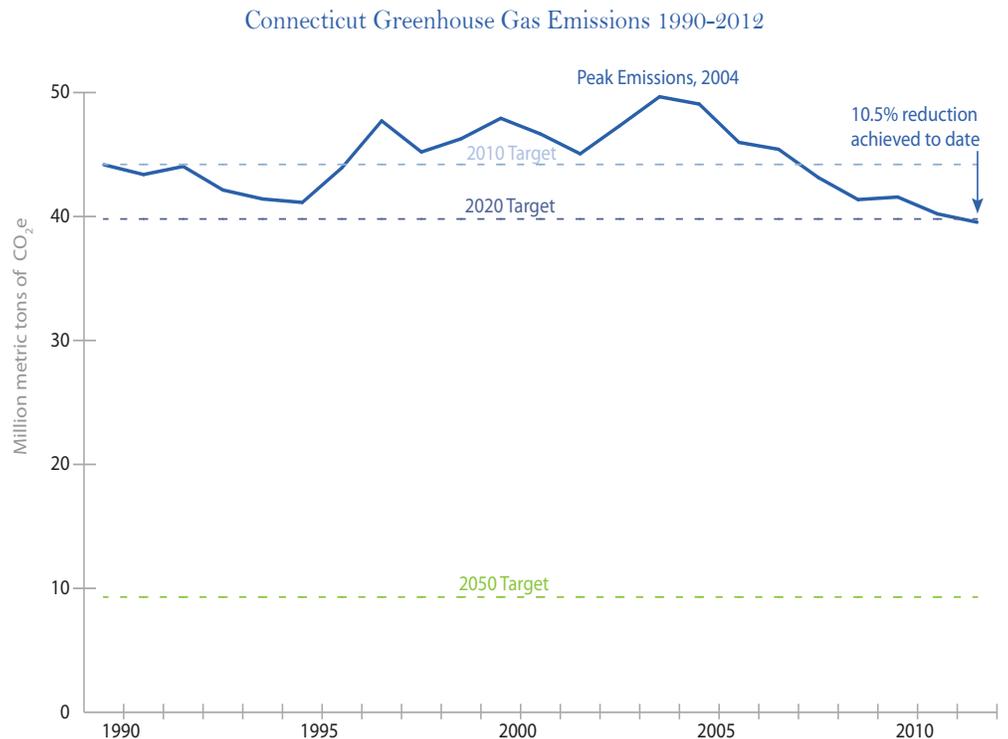


Connecticut Greenhouse Gas Emissions Inventory 2012

Executive Summary

Connecticut has long been a leader in addressing climate change. In enacting the Global Warming Solutions Act in 2008, the state committed to reducing its greenhouse gas emissions 10 percent below 1990 levels by 2020 and 80 percent below 2001 levels by 2050. To track progress toward achieving these targets, the Department of Energy and Environmental Protection (DEEP) regularly reports statewide greenhouse gas emissions, following the standard practice of reporting these emissions in terms of carbon dioxide equivalence (CO₂e). This executive summary reports the state's greenhouse gas emissions for 2012, the most recent year for which full data are available.¹



In 2012, Connecticut's greenhouse gas emissions fell to 39.5 MMT (million metric tons) of CO₂e. The overall decline between 1990 and 2012 was 10.5 percent, meaning that emissions for the first time fell below the Global Warming Solutions Act target for 2020. Having reached this target eight years ahead of schedule, the state aims to maintain this progress and continue pushing emissions downward in the coming decades to meet the 2050 goal. Additionally, a focus on achieving greater reductions sooner may result in improved health, economic savings, and reduce the risks of climate change impacts.²

Connecticut's greatest progress has occurred in the electric power sector, where emissions decreased 34 percent since 1990. The next largest reductions were in the agricultural, residential, and commercial

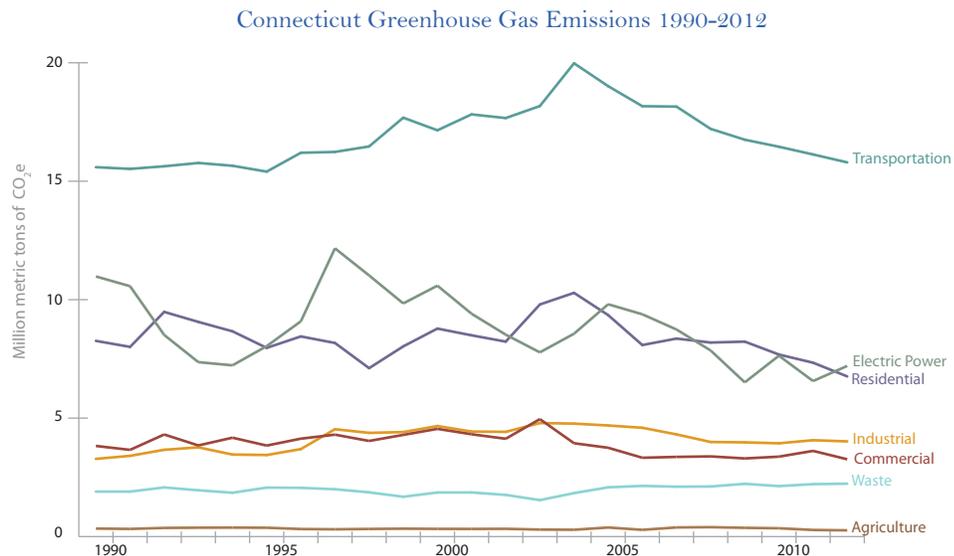
sectors, at 22, 18, and 15 percent, respectively. These reductions can be attributed largely to state policies and programs that encourage investment in energy efficiency in homes and businesses, a shift to cleaner fuels and generation sources, and increased deployment of renewable energy sources.

Connecticut greenhouse gas emissions, by sector (MMT CO₂e)

	1990	2000	2005	2008	2009	2010	2011	2012
Total	44.2	47.9	49.1	43.1	41.4	41.6	40.2	39.5
Transportation	15.6	17.1	19	17.2	16.7	16.4	16.1	15.8
Electric Power	11.0	10.6	9.8	7.9	6.5	7.6	6.6	7.2
Residential	8.3	8.8	9.3	8.2	8.2	7.7	7.3	6.8
Industrial	3.3	4.7	4.7	4.0	4.0	3.9	4.1	4.0
Commercial	3.8	4.5	3.8	3.4	3.3	3.4	3.6	3.3
Waste	1.9	1.9	1.9	2.2	2.1	2.2	2.2	2.2
Agriculture	.34	.33	.38	.40	.37	.35	.28	.26



As in previous years, the bulk of Connecticut's emissions in 2012 were from three sectors. Transportation contributed about 40 percent, principally from the use of gasoline and diesel fuel. Electric power generation using natural gas and other fossil fuels contributed 18 percent. Residential use of heating oil and natural gas yielded 17 percent. The remaining sectors — waste and wastewater, commercial, industrial, and agriculture — together contributed 25 percent.

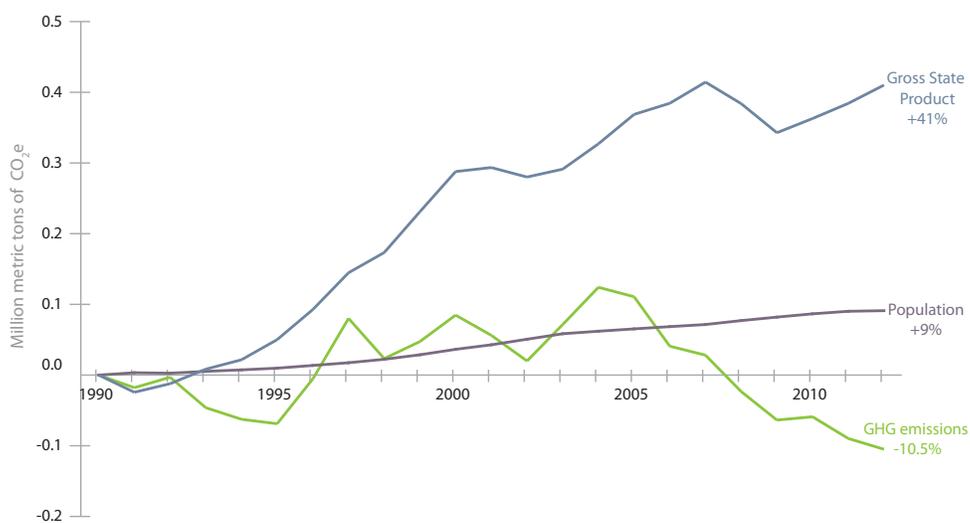


The largest opportunities for future reductions are in the transportation sector. Fossil fuel consumption in passenger cars and light trucks account for more than 60 percent of emissions within the sector. In the coming decades, improved fuel efficiency, a switch to zero- or low-emission vehicles, and improved mass transit will play a significant role in reducing these emissions. Meanwhile, improvements in the electric power sector will come from greater efficiency to reduce consumption, from further reducing reliance on oil and coal during periods of extreme electricity demand, and from continuing expansion of renewable energy. In the residential sector, improvement will be driven by increasing adoption of natural gas as a replacement for fuel oil as well as deeper penetration of high-efficiency and low-emissions equipment for space and water heating.

The 2012 data also show that Connecticut is continuing to reduce its carbon emissions even as the economy expands and population increases. Between 1990 and 2012, as emissions dropped 10.5 percent, Connecticut's population grew 9 percent and the economy grew 41 percent.

Tracking emissions over this period shows that Connecticut's commitment to cutting carbon pollution through energy efficiency, switching to low-carbon fuels, increasing use of renewable energy, and other means is continuing to reduce greenhouse gas emissions and transitioning the state to a truly "clean energy" economy.

Change in GHG emissions, gross state product (in 2009 \$), and population 1990-2012



¹ Carbon dioxide is the primary greenhouse gas. Emissions of other chemicals are expressed on the basis of their potential to contribute to global warming, relative to carbon dioxide's potential. DEEP's tracking program uses emissions data from U.S. EPA's State Inventory Tool. EPA released data from January-December 2012 in February of 2015.

² California Climate Policy to 2050: Pathways for Sustained Prosperity