



AUSTIN COMMUNITY CLIMATE PLAN

Austin/Travis County
Community Carbon Footprint
MARCH 2016

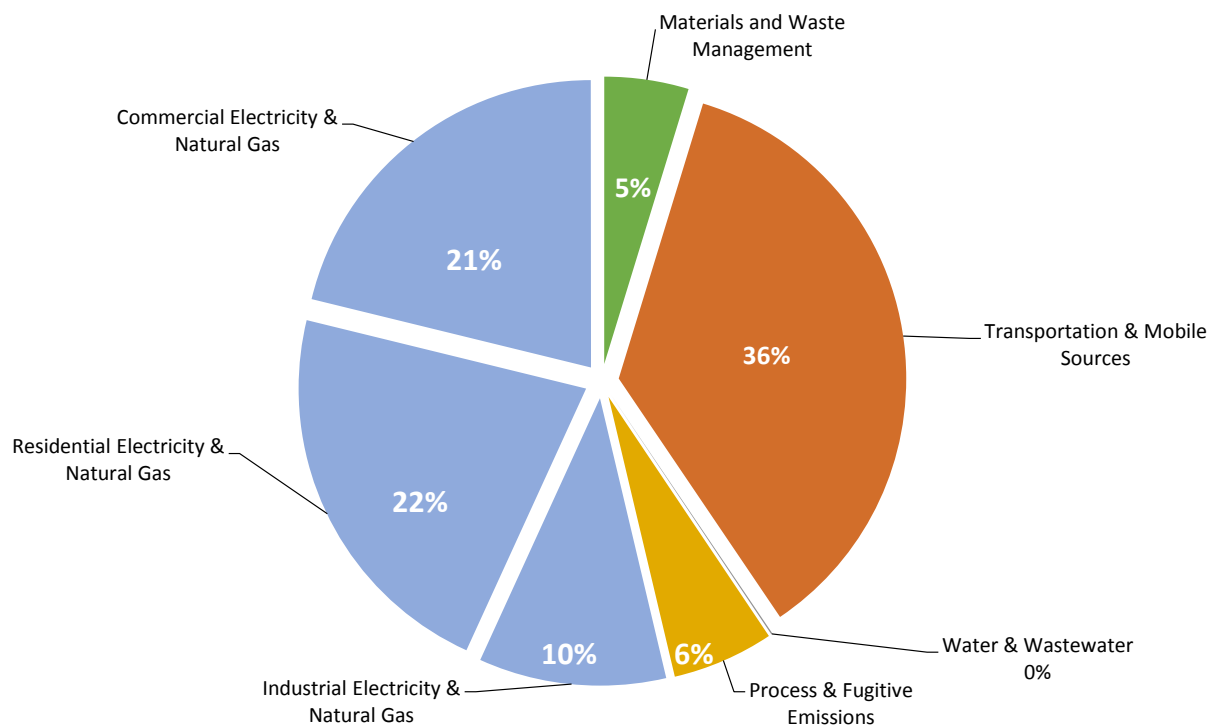


AUSTIN/TRAVIS COUNTY COMMUNITY CARBON FOOTPRINT

The Office of Sustainability gathers data for all sources of greenhouse gas emissions in Austin/Travis County every three years; the most recent data available is for calendar year 2013. The U.S. Community Greenhouse Gas Protocol developed by the International Council for Local Environmental Initiatives (ICLEI) is used to calculate the community-wide carbon footprint. Collecting this information is used to track progress towards the target set by Council of net-zero community-wide greenhouse gas emissions by 2050.

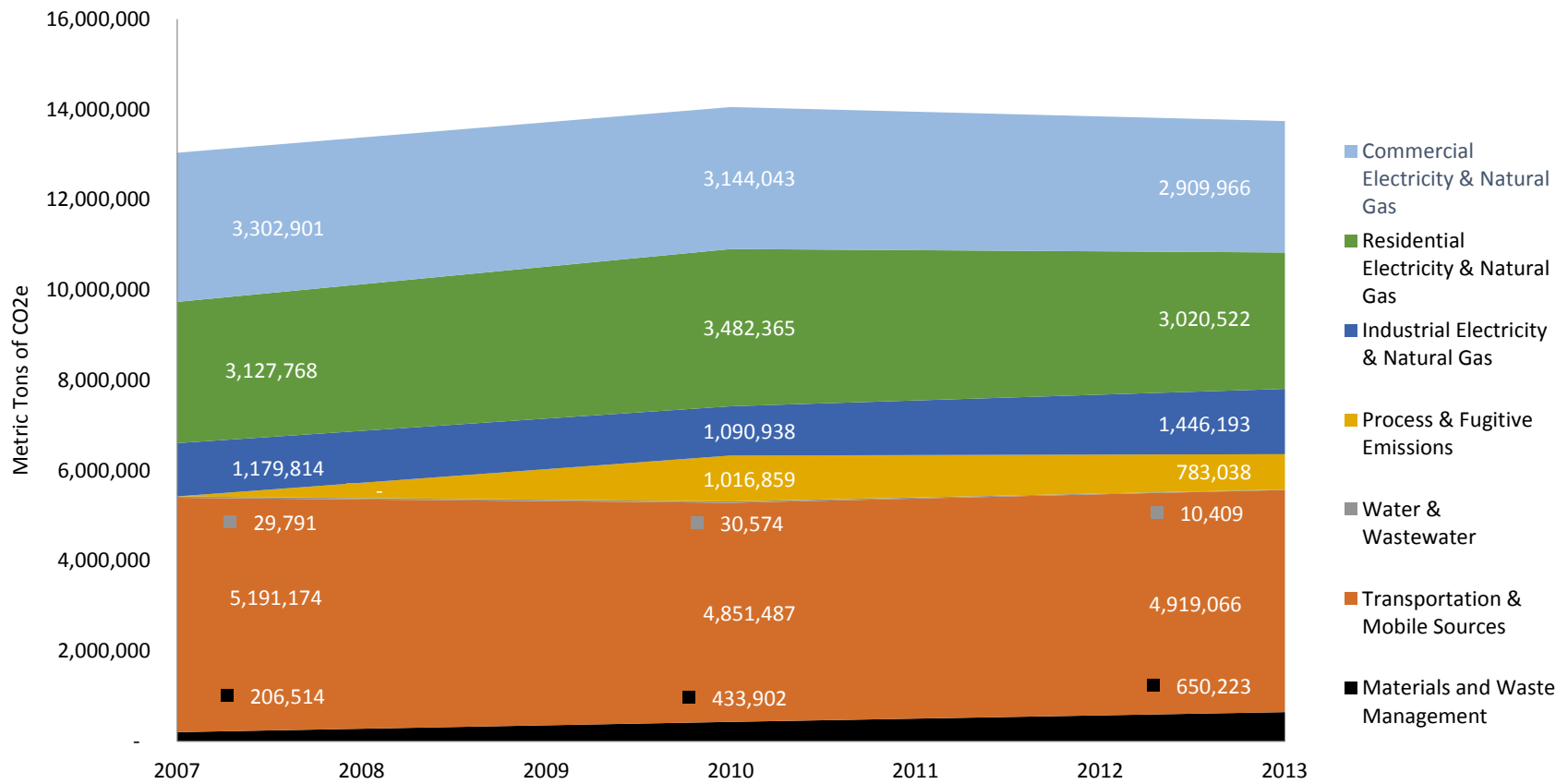
The major sources of greenhouse gas emissions in Austin/Travis County come from the use of electricity and natural gas in residential, commercial, and industrial facilities; transportation and mobile sources; waste management; water and wastewater processing; and fugitive emissions from industrial facilities:

13.7 Million Metric Tons of Carbon Dioxide-Equivalent





AUSTIN/TRAVIS COUNTY GREENHOUSE GAS EMISSIONS TRENDS

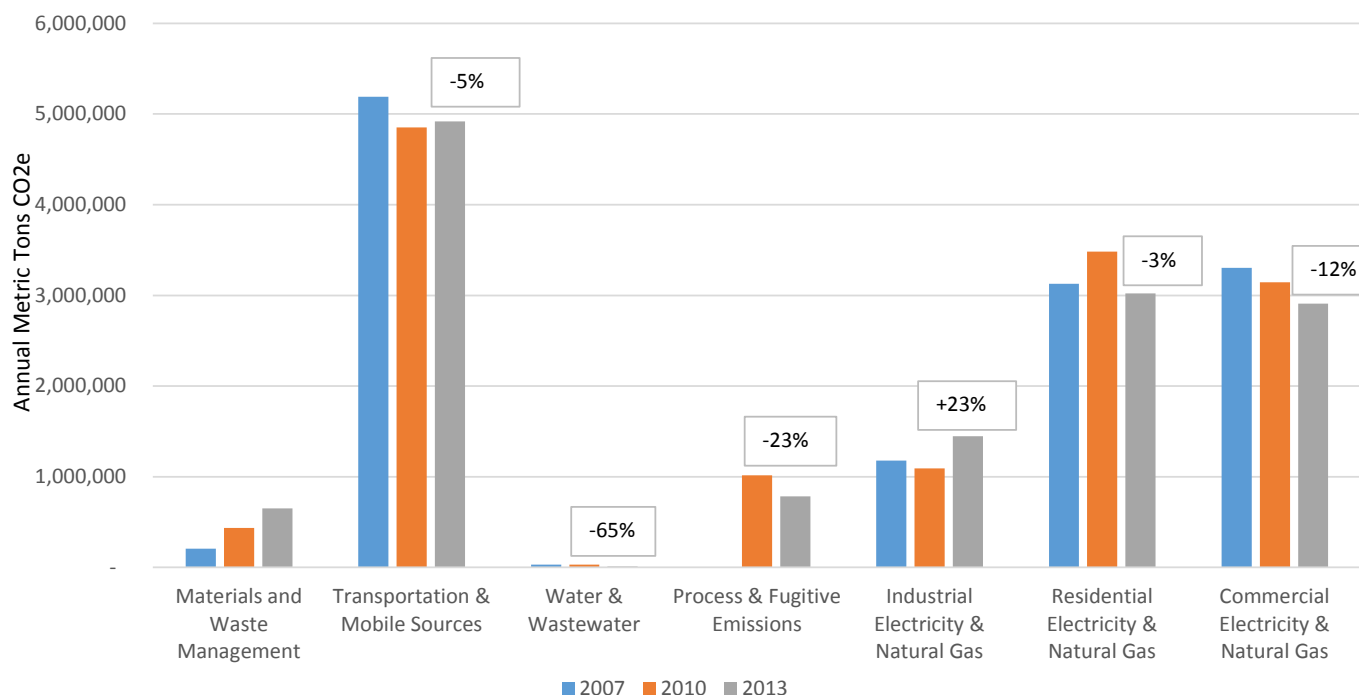


Overall, **Austin/Travis County greenhouse gas emissions decreased by approximately 2% between 2010 and 2013**, even as the population increased from 1.03 million to 1.21 million. Emissions in four categories decreased. However, emissions in the following categories increased:

- Industrial electricity and natural gas use
- Transportation and mobile sources
- Materials and waste management



EMISSIONS TRENDS BY SOURCE



Materials & Waste: Emissions from landfills result from methane unless it is captured and destroyed. Methane emissions and an increasing amount of waste being processed accounts for the rise in this area.

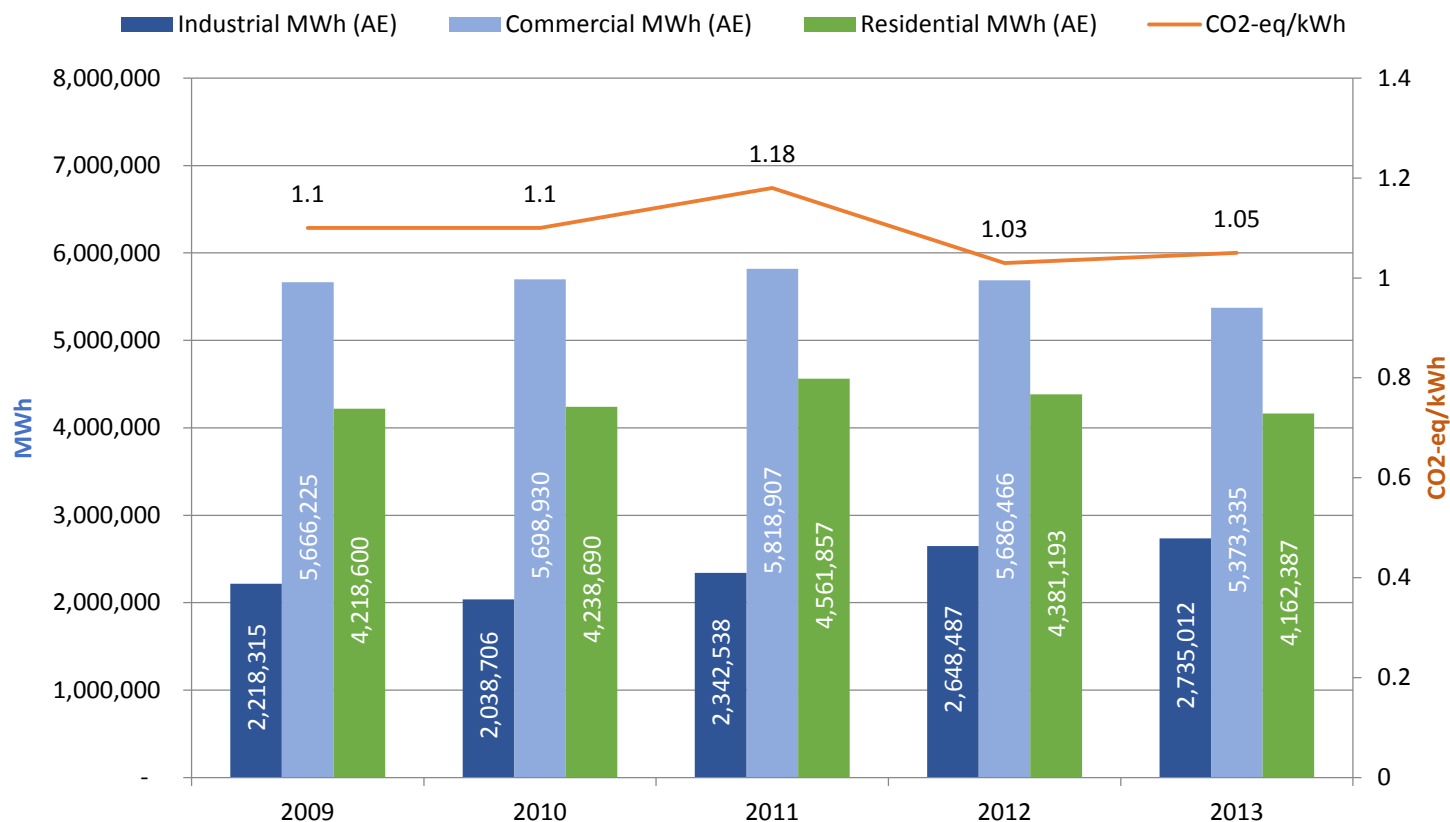
Transportation: Emissions in this sector typically rise because of population growth and the associated increase in the number of cars on the road. However, newer model vehicles tend to be more fuel efficient, which has helped minimize impacts from the region's growing population.

Water & Wastewater: More accurate measures than what were used in 2007 and 2010 account for the apparent reduction in this area.

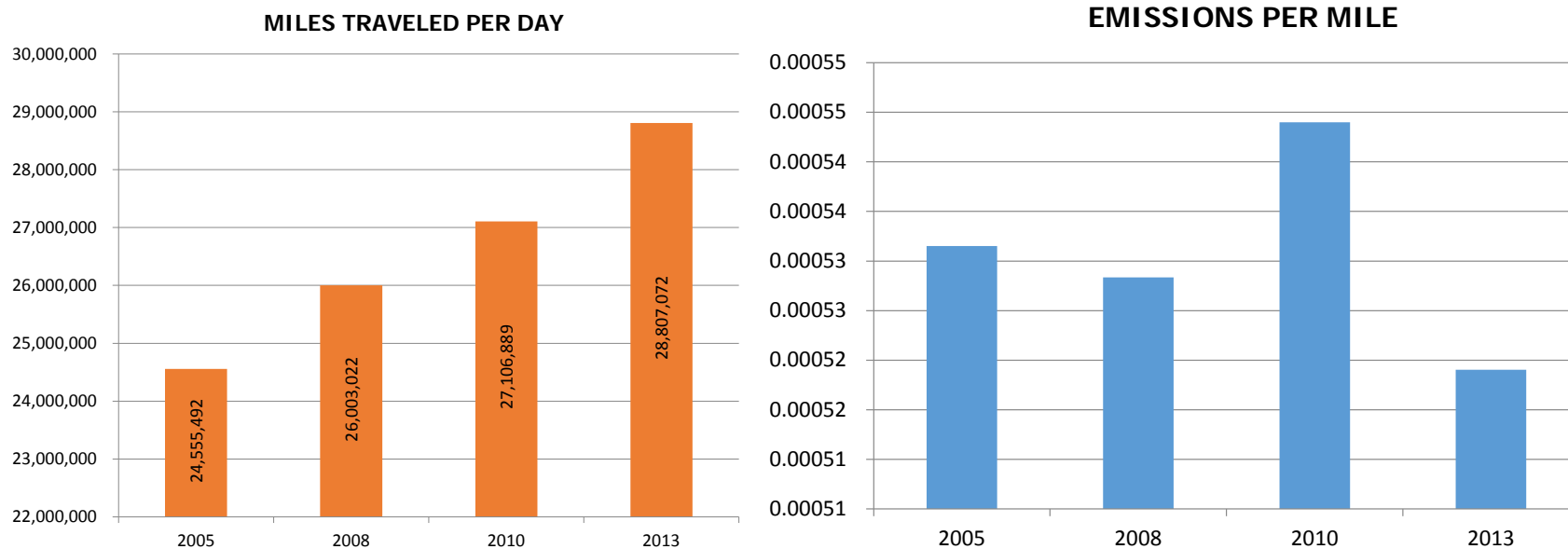
Process Emissions: Lower emissions may be the result of less activity, process improvements, or emission control activities.

Industrial, Residential and Commercial Electricity & Natural Gas: Emissions increases or decreases are based on energy use and the carbon intensity of that energy source.

ELECTRICITY CONSUMPTION AND EMISSION FACTORS



Two factors affect emissions that are produced from electricity use: 1) the amount of energy used and 2) the carbon intensity of that energy. Conservation, efficiency, and weather can lower energy use. Using less fossil fuel power and more renewables reduces the carbon intensity. Industrial electricity use has increased substantially, while electricity for commercial and residential use has decreased slightly. However, the carbon intensity of that energy has been reduced from 1.1 pounds per kWh to 1.05 due to conservation and energy efficiency programs promoted by Austin Energy, as well as the investment in renewables. This means that **total emissions from electricity were 5% lower in 2013 from the baseline in 2010**. This is particularly great news given the population increase during this same time period.



Emissions produced from transportation sources are the result of: 1) the amount of miles driven per day and 2) emissions per mile, based on vehicle fuel efficiency and traffic congestion.

The amount of miles driven in Travis County continues to increase, but as emissions standards improve fuel efficiency and as older inefficient vehicles are retired, emissions per mile decrease. The outcome: **While overall emissions from transportation have increased since 2010, they are lower than they would have been without vehicle fuel efficiency improvements.**