

# Climate Protection in Sonoma County

## Highlights of Status ♦ May 2009

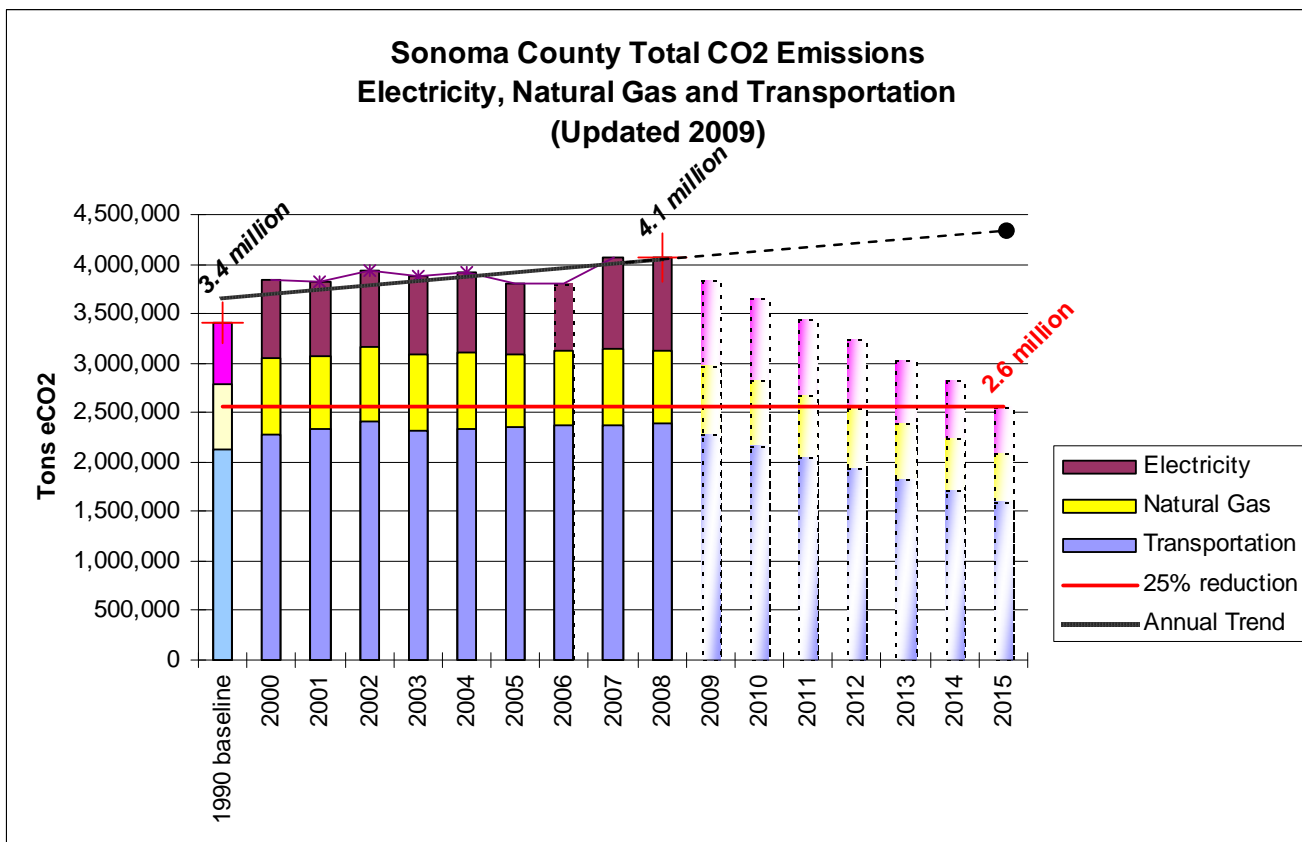
Prepared by the Climate Protection Campaign - Dave Erickson, Technical Consultant, and Ann Hancock, Executive Director

Beginning in 2002, Sonoma County local governments set a series of national precedents:

- All nine Sonoma cities, the County, and the Water Agency pledged to reduce greenhouse gas emissions.
- All cities and the County completed inventories of the emissions produced by their internal municipal operations, and all set GHG emission reduction targets for their internal municipal operations.
- All passed resolutions adopting the boldest emission reduction target in the nation - **25% below 1990 levels by 2015.**
- All Sonoma mayors signed the U.S. Climate Protection Agreement.

### COUNTYWIDE

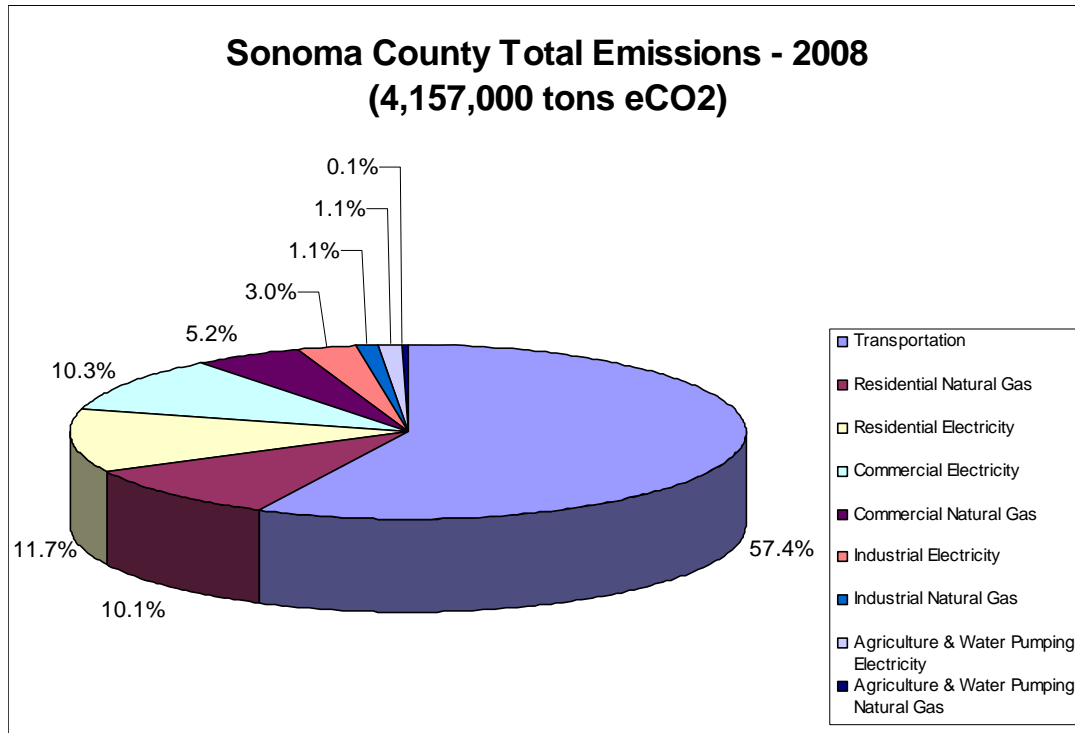
The following graph reveals that Sonoma County's emissions from transportation, electricity, and natural gas continue to increase. To achieve Sonoma County's 25 percent target, strong collective action is needed. Local governments, businesses, citizens, and the Climate Protection Campaign are currently developing a Community Climate Action Plan to identify the most cost-effective solutions for significant greenhouse gas reductions.



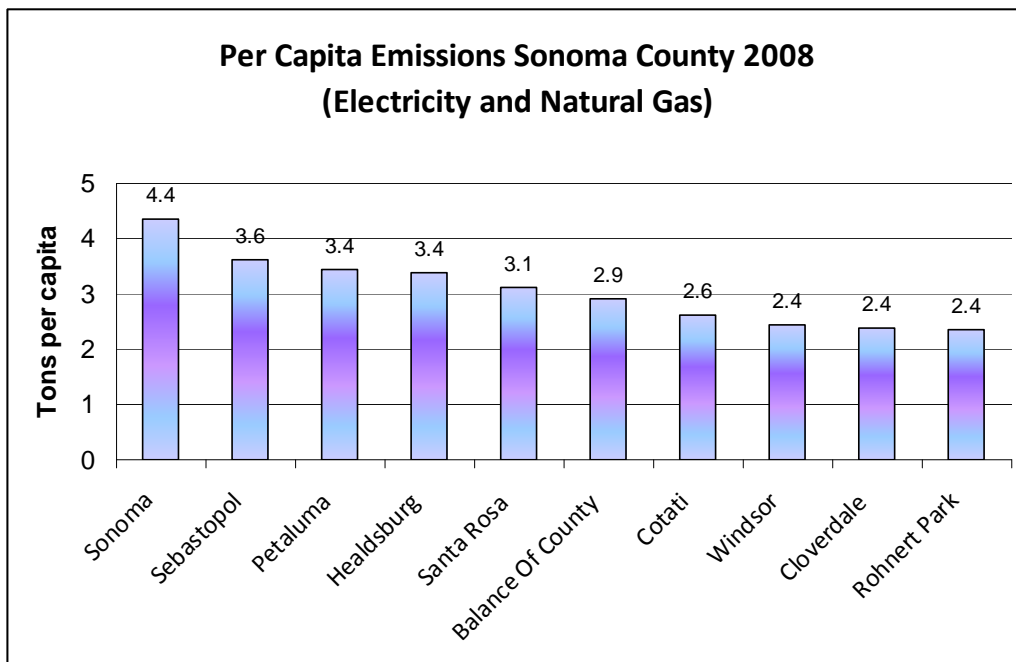
Natural gas use is decreasing. Electricity use is up. A spike in the emission factor occurred in 2007. Probably during 2005 and 2006 more electricity was generated from hydropower than in 2007. Hydropower produces relatively fewer emissions.

## COUNTYWIDE

The following graph shows major sources' relative contributions to Sonoma County's emissions in 2008.

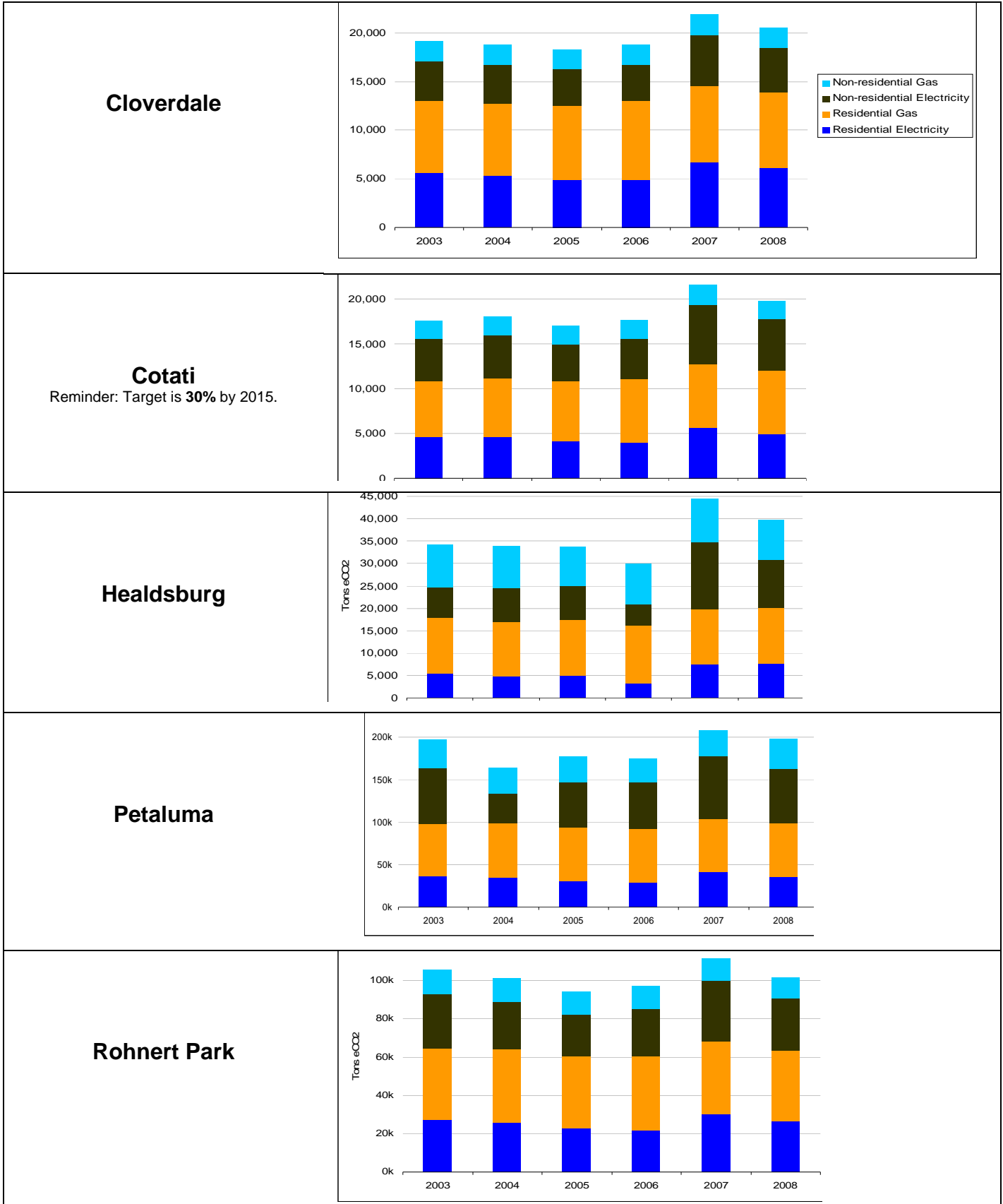


## COMMUNITY WIDE

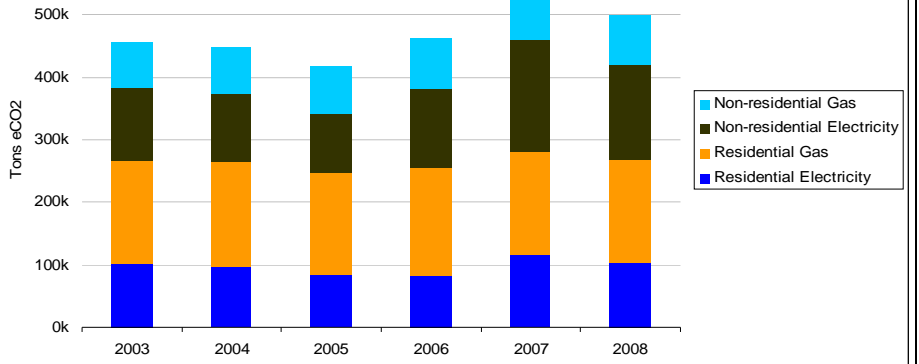


# COMMUNITY WIDE

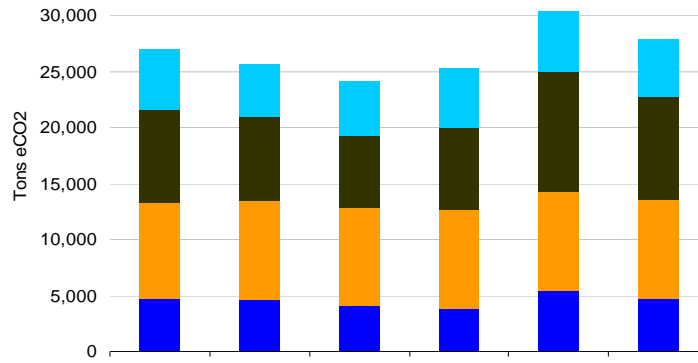
## Greenhouse gas emissions from electricity and natural gas, 2003 to 2008



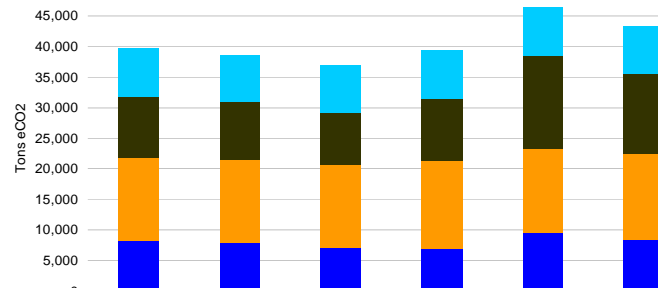
**Santa Rosa**



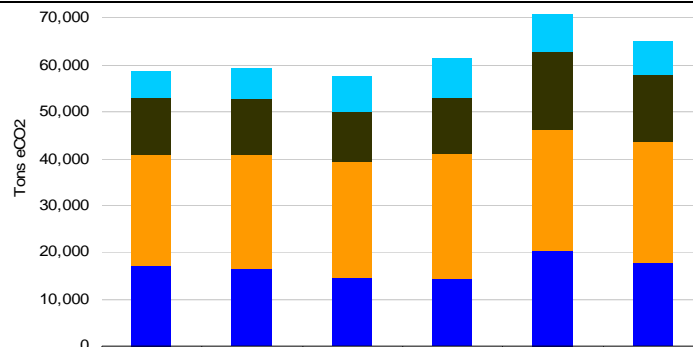
**Sebastopol**



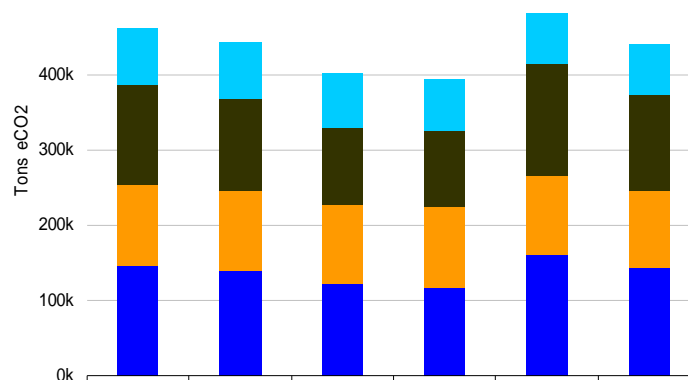
**City of Sonoma**



**Windsor**

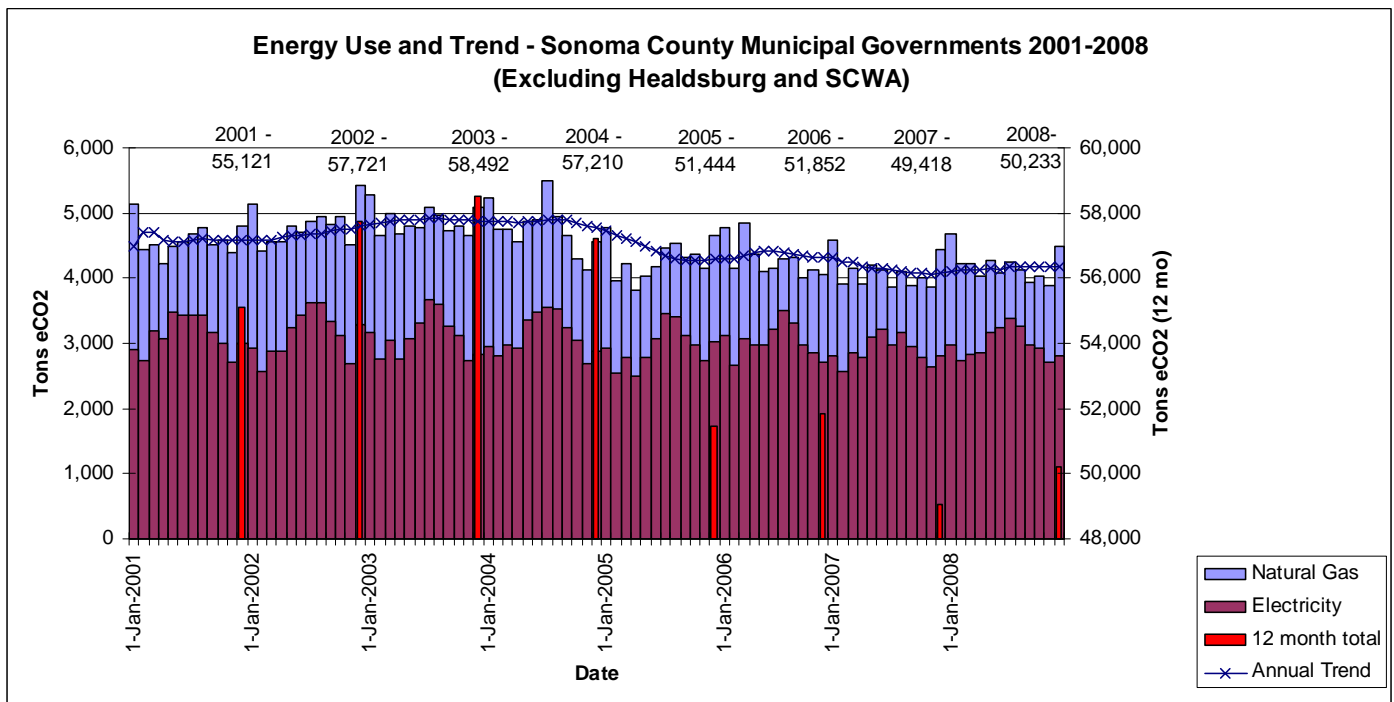
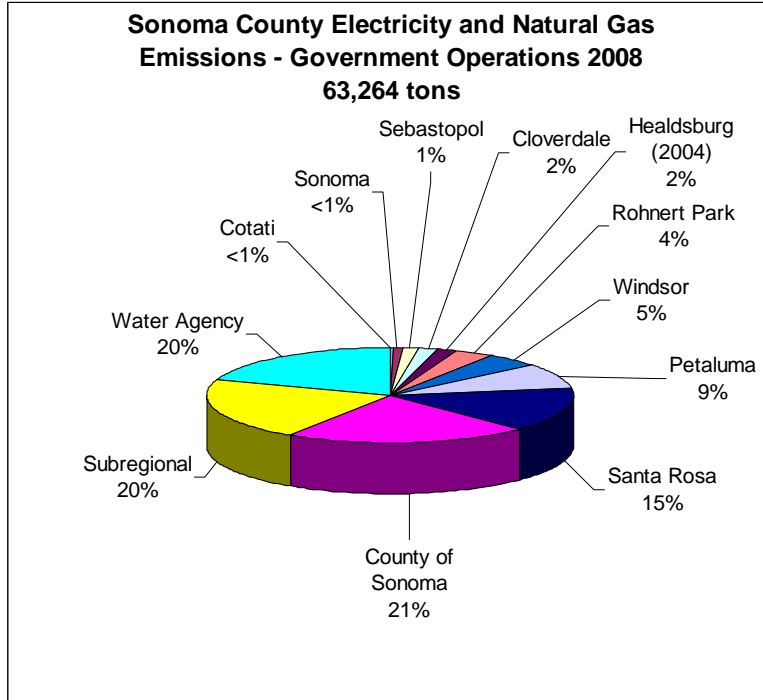


**County Unincorporated**

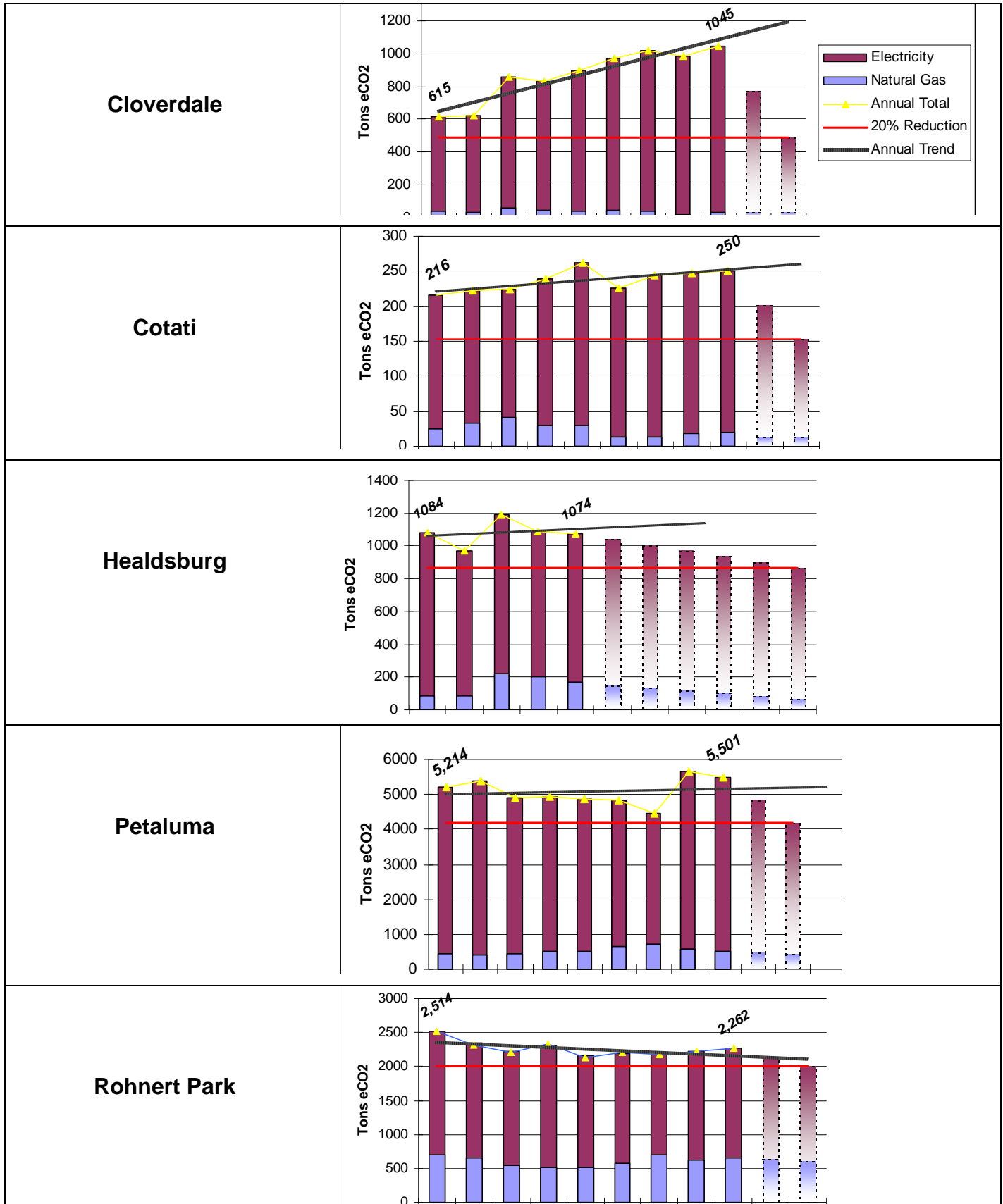


# MUNICIPAL OPERATIONS

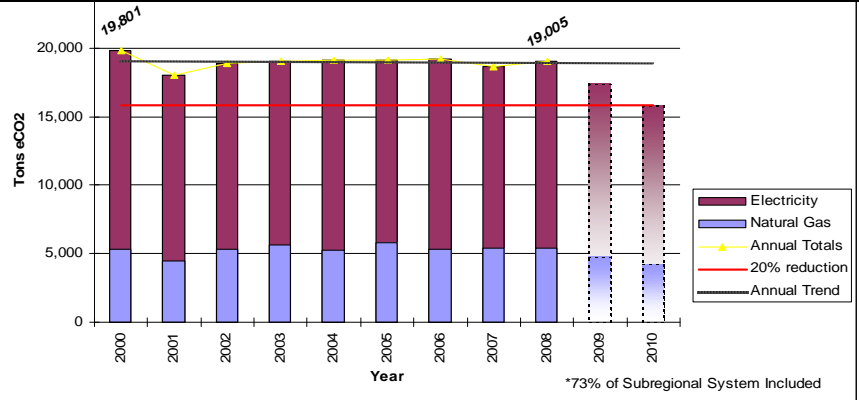
All Sonoma cities and the County set the same target to reduce emissions for municipal operations - 20% from 2000 levels by 2010 - except Sebastopol whose target is to reduce emissions by 30% from 2000 levels by 2008. The Climate Protection Campaign tracks electricity and natural gas use for municipal operations. Ideally, emissions produced from all municipal sources, including fleets, employee commutes, and solid waste, would be tracked as are emissions from electricity and natural gas.



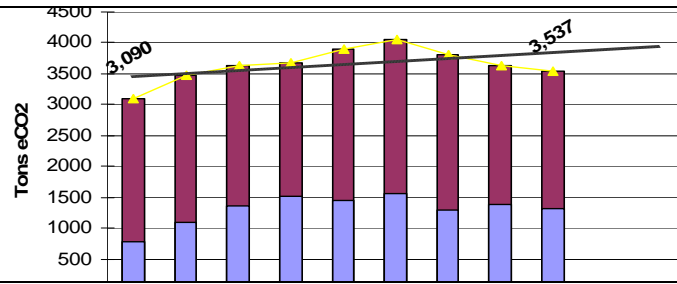
Electricity and natural gas - Municipal operations – 2000-2010 (2009-2010 projected)



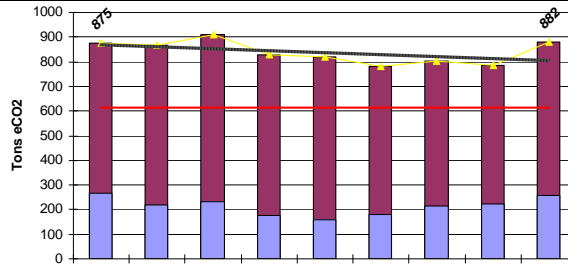
### Santa Rosa



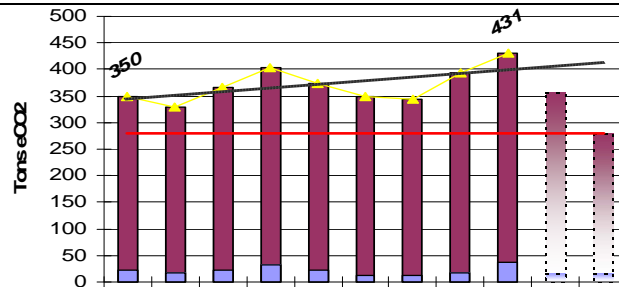
### Santa Rosa Sub-regional System



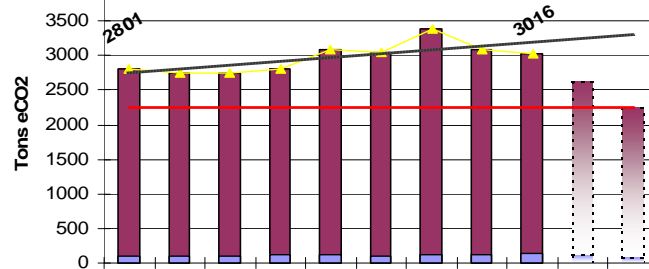
### Sebastopol (Reminder: Target is 30% by 2008)



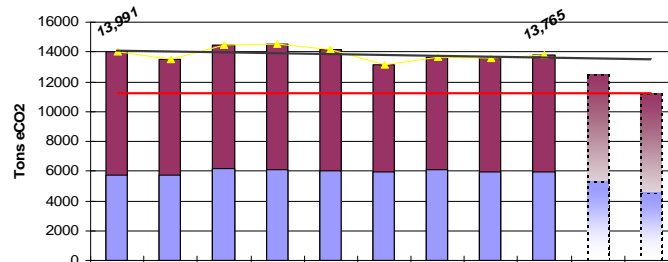
### City of Sonoma



### Windsor



### County of Sonoma



## NOTES ON GRAPHS

Population figures for calculating per capita emissions taken from California State Department of Finance website.

Andrea Gough, California Energy Commission, supplied County electricity and natural gas and Healdsburg community figures.

Harold Brazil, Metropolitan Transportation Commission, and Chris Barney, Sonoma County Transportation Authority helped with data for vehicle miles traveled from which emissions for transportation are derived. Transportation figures for years prior to 2006 were updated to increase their accuracy.

Carol Foreman and Randy DeCaminada, Pacific Gas and Electric Company, supplied electricity and natural gas data for city and unincorporated community-wide breakdowns.

Electricity and natural gas figures pertain to Cities for Climate Protection® inventory sectors: Buildings, Streetlights, Water/Sewage. Graphs do not show emissions from Employee Commute, Vehicle Fleet, and Solid Waste.

PG&E's emissions coefficients (lb./kWh):

2003	2004	2005	2006	2007	2008 (est.)
0.619	0.566	0.489	0.456	0.635	0.553

Use of natural gas for vehicles was removed from natural gas totals.

All data is shown through 2008 except for Healdsburg municipal data that only goes through 2004. Emissions factors for electricity supplied by Healdsburg Municipal Utility are taken from a study done by Climate Protection Campaign for the City of Healdsburg in August, 2006.

Cotati was adjusted to remove pumping energy use prior to the time the City joined the Water Agency and shut down their wells. Cotati's Corp Yard energy use was adjusted to remove contribution from Nextel cell phone tower.

Rohnert Park was adjusted to remove pumping prior to the shutdown of their wells.

Santa Rosa data includes 73.4% of the energy use from the Subregional Wastewater System (Laguna + reclaim + Geysers). Data from other cities on the Subregional System do not include their portion of the remaining energy use.

For Santa Rosa Sub-regional system, the 2000 natural gas data were incomplete. Data includes Laguna Treatment Facility, Geysers pumps, and reclaim pumps.

Data for propane consumption are not available and therefore are not included in the report; emissions from propane consumption may be significant.

Methane emissions from residential septic systems are not included.

HFC, PFC and SF-6 gases are not included.

**For more information, please contact the Climate Protection Campaign  
(707) 525-1665, [www.climateprotectioncampaign.org](http://www.climateprotectioncampaign.org)**