

City of Santa Ana

Climate Action Plan: Greenhouse Gas Emissions Inventory and Forecasts



Overview



Santa Ana has already made progress!

- Per capita emissions lower than most
 - Higher transit ridership than most of OC
 - More walking and biking than most of S. California
 - Lower water usage per capita compared to California
- Lower emissions in the future will require new programs and policies
- Ongoing activities are interrelated
 - Circulation Element Update
 - Climate Action Plan
 - Orange County Sustainable Communities Strategy



Emissions Reduction Progress since 2008

- Analysis will identify actions that have been taken since the baseline year 2008 to the present
 - Allows successes to be showcased
 - Existing measures can provide foundation for more aggressive and expanded actions.
- Methodology is consistent with the baseline inventory
- Analysis of these measures is ongoing



Community Highlights since 2008

- Significant reductions have been achieved through
 - Over 260 solar systems – provide permit fee waiver
 - Residential Energy programs
 - SCE Small Business Energy Efficiency Retrofit Program
- Santa Ana achieved a 67% waste diversion rate, well in excess of the State mandate at 50%.
 - Green waste diversion is a major component of the reductions achieved
- Transportation measures are still being analyzed, but significant reductions are expected



Government Operations

Highlights since 2008

- Significant reductions achieved through system upgrades
 - LED streetlights and traffic lights
- Through American Recovery and Investment Act (ARRA) the City made energy efficient improvements to municipal facilities and community parks.
 - Lighting and heating / air conditioning retrofits in City buildings
 - Lighting upgrades in community parks
- Water measures achieved impressive results in the past
 - Water\$mart Rebates for high-efficiency plumbing fixtures
 - Energy efficiency upgrades to water pumping facilities



GHG Emissions Inventory - Approach

- Based on a calendar year (2008)
- Provides a reference point of emissions by sector:
 - Transportation
 - Building Design and Energy Use Patterns
 - Water Consumption
 - Solid Waste and Wastewater Generation
 - Other



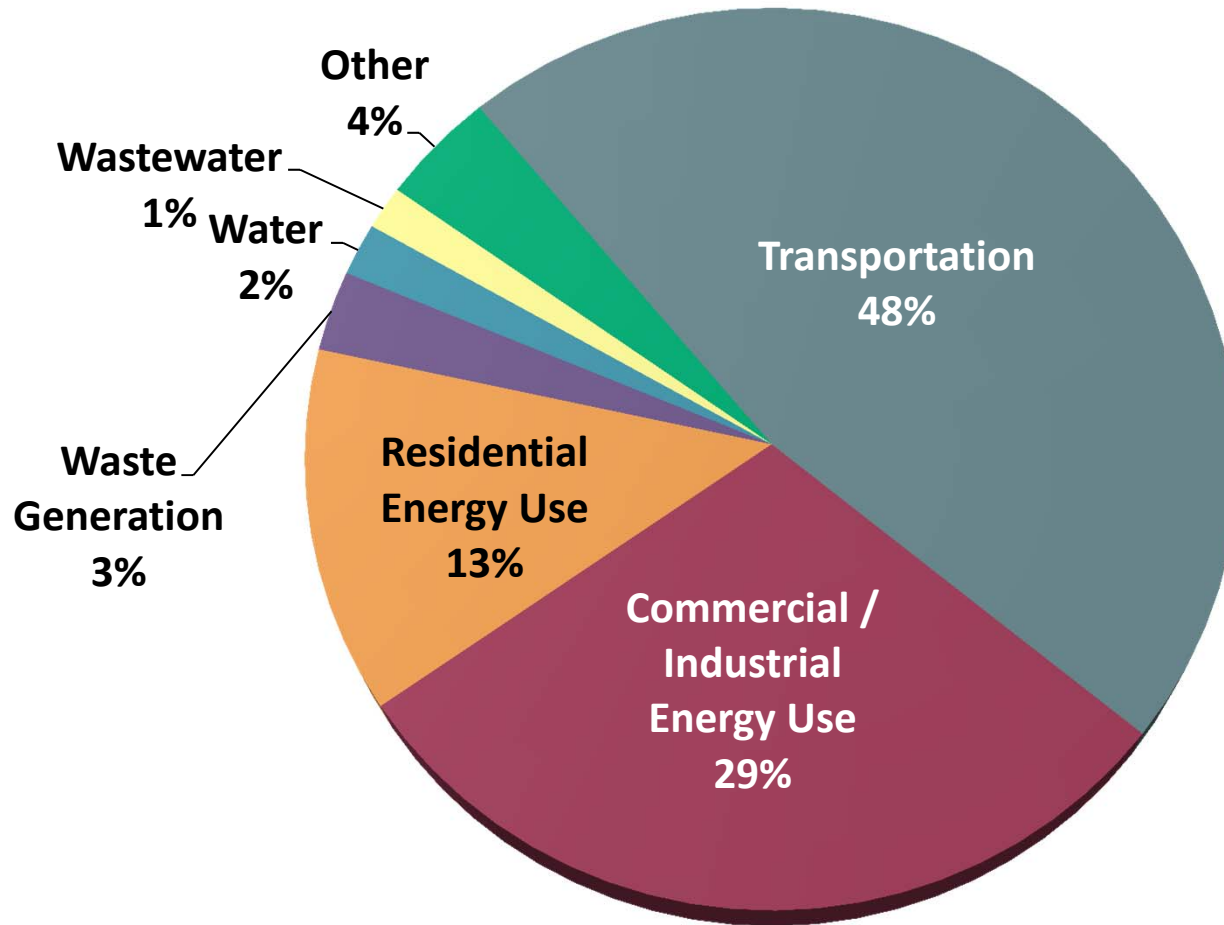
GHG Emissions Inventory – Methodology

Data Sources

- Electricity & Natural Gas – Local Utilities
- Transportation – Fehr & Peers – Community Vehicle Miles Traveled (OCTA Travel Demand Model) and municipal employee commute (employee survey)
- Water – City staff
- Wastewater – Orange County Sanitation District
- Solid Waste – Waste Management and City staff



GHG Emissions Inventory – Community (2008)

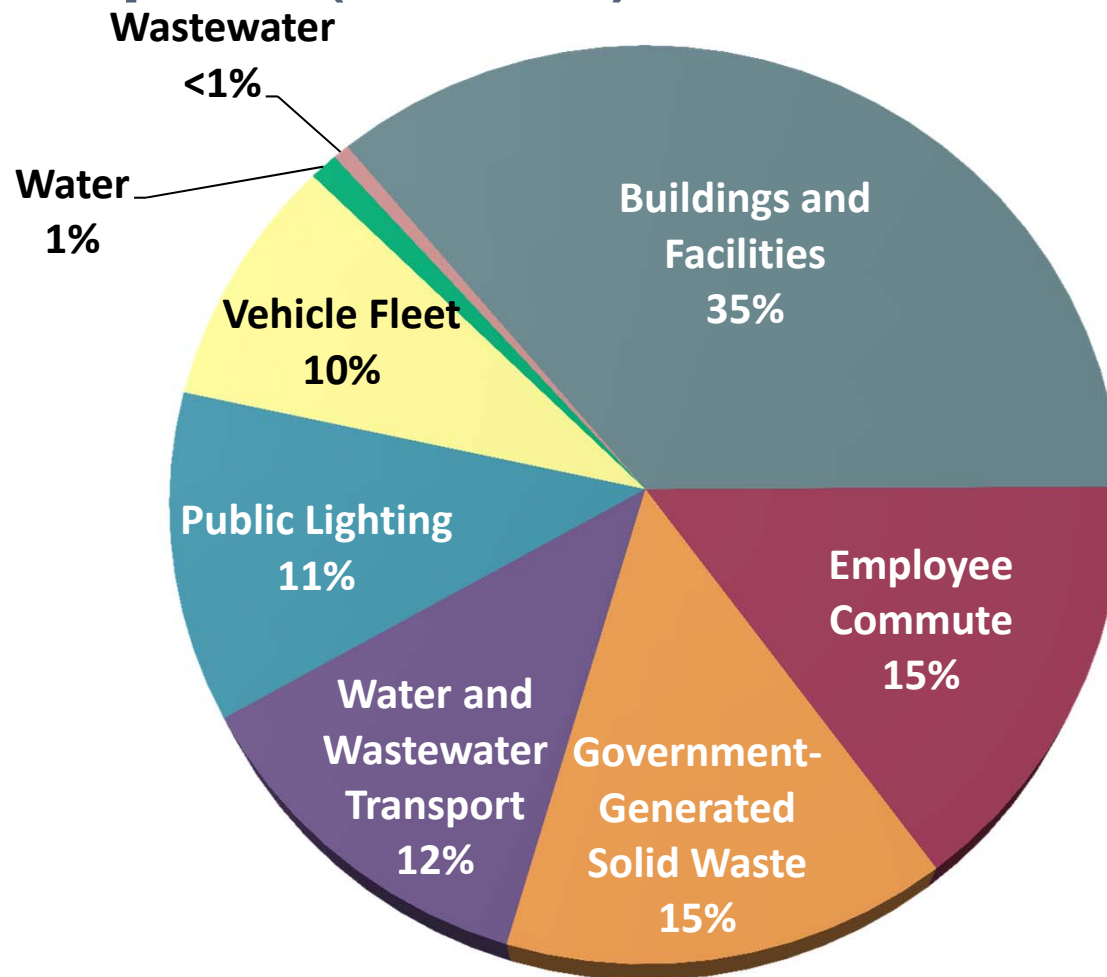


GHG Emissions Comparison

Jurisdiction	Year	Population	Per Capita Emissions (CO ₂ e/resident)
Santa Ana	2008	361,591	5.47
Monterey Park	2009	67,784	6.18
San Diego	2008	1,337,926	9.37
Mission Viejo	2008	93,483	7.25
Union City	2005	69,516	4.92
Denver	2005	579,744	21.5
Davis	2006	61,262	4.8
Berkeley	2005	104,400	6.3
Los Angeles	2004	3,906,603	13.5



GHG Emissions Inventory – Municipal (2008)

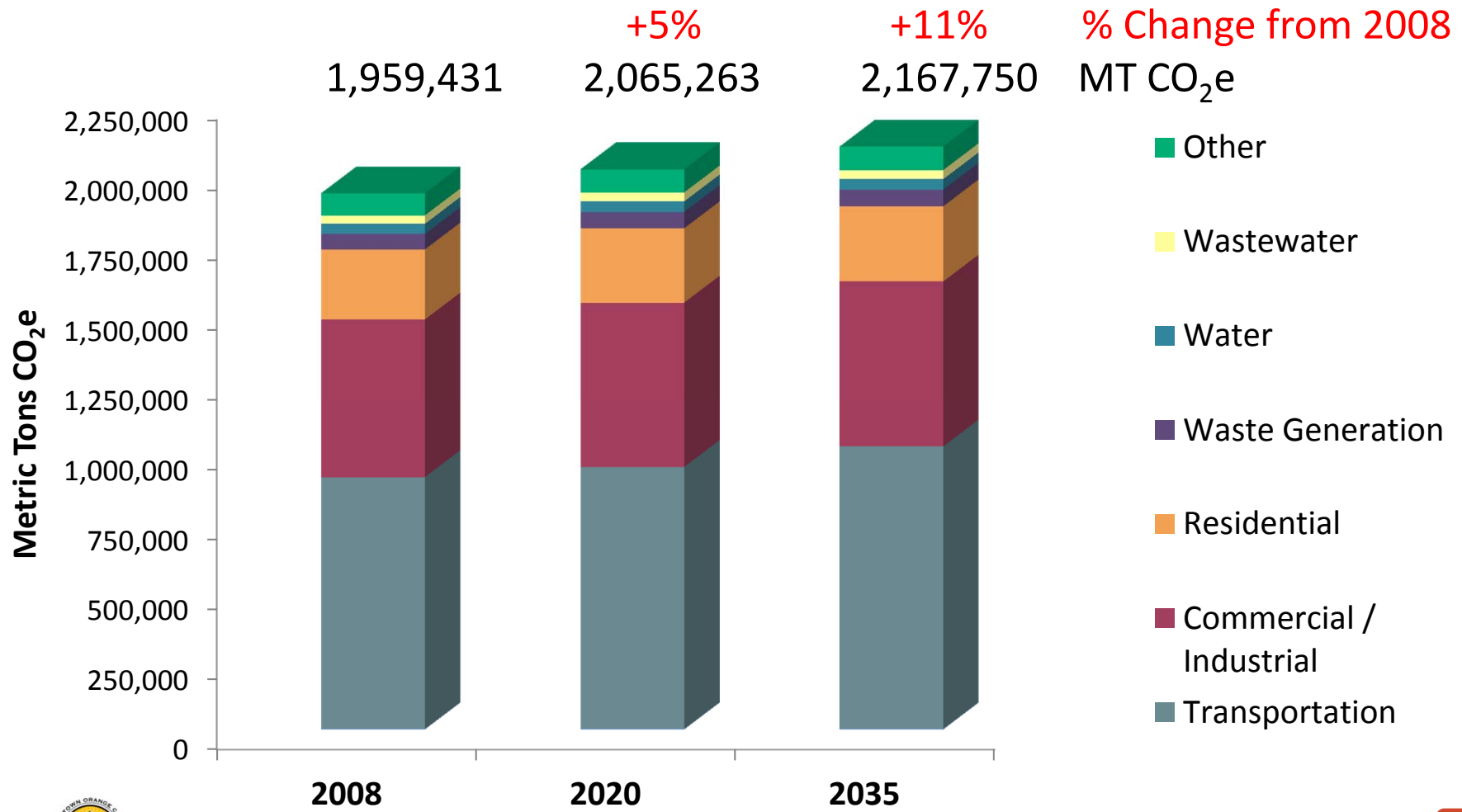


GHG Emissions Forecast

- Estimate of emissions if no CAP is implemented
- Starting point for reduction measures and target setting
- Set at years 2020 and 2035 (trajectory toward 2050/ Governor's Executive Order S-3-05)
- Based on indicators



GHG Emissions Forecast – Community (2020 and 2035)



Next Steps

- Set preliminary reduction targets
- Create GHG reduction measures
- Refine targets
- Stakeholder input
- CAP preparation and EIR
- Implementation and monitoring

