

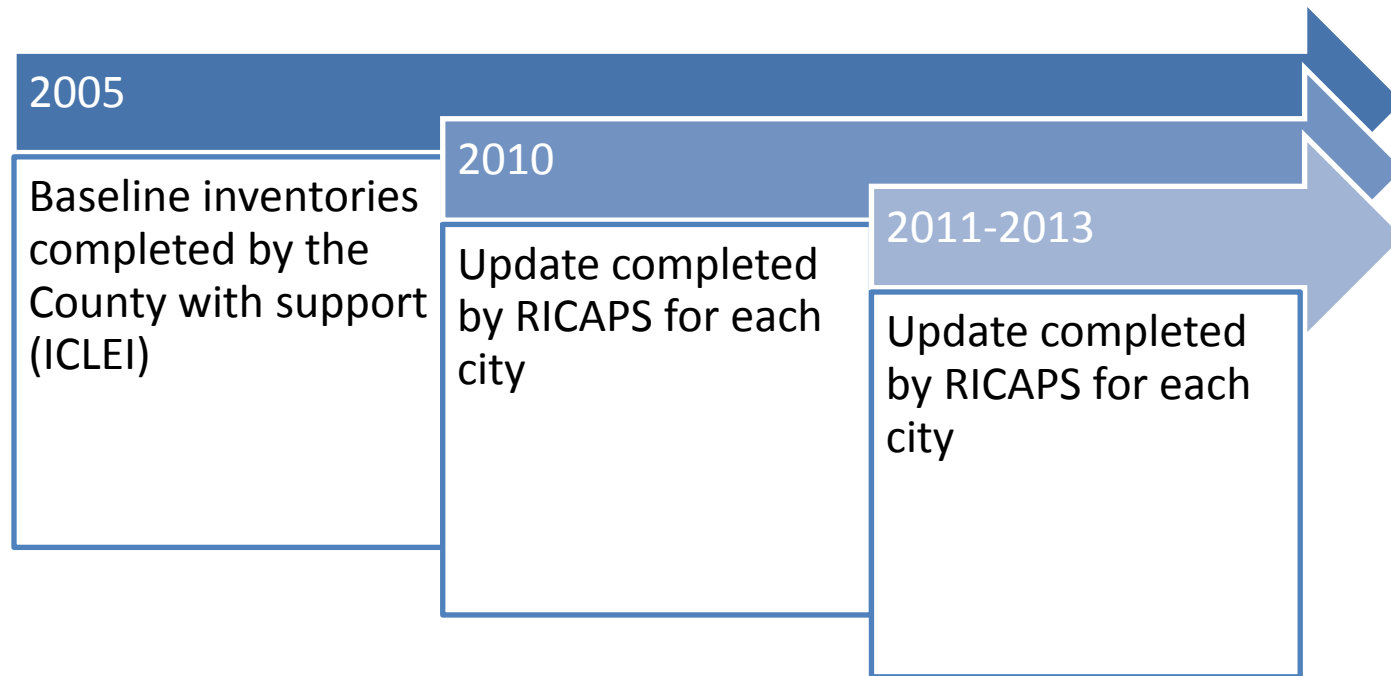
RICAPS

Regionally Integrated Climate Action Planning Suite

Multi-city Working Group Meeting
October 27, 2015

RICAPS technical assistance is available through the San Mateo County Energy Watch program, which is funded by California utility customers, administered by Pacific Gas and Electric Company (PG&E) under the auspices of the California Public Utilities Commission and with matching funds provided by C/CAG.

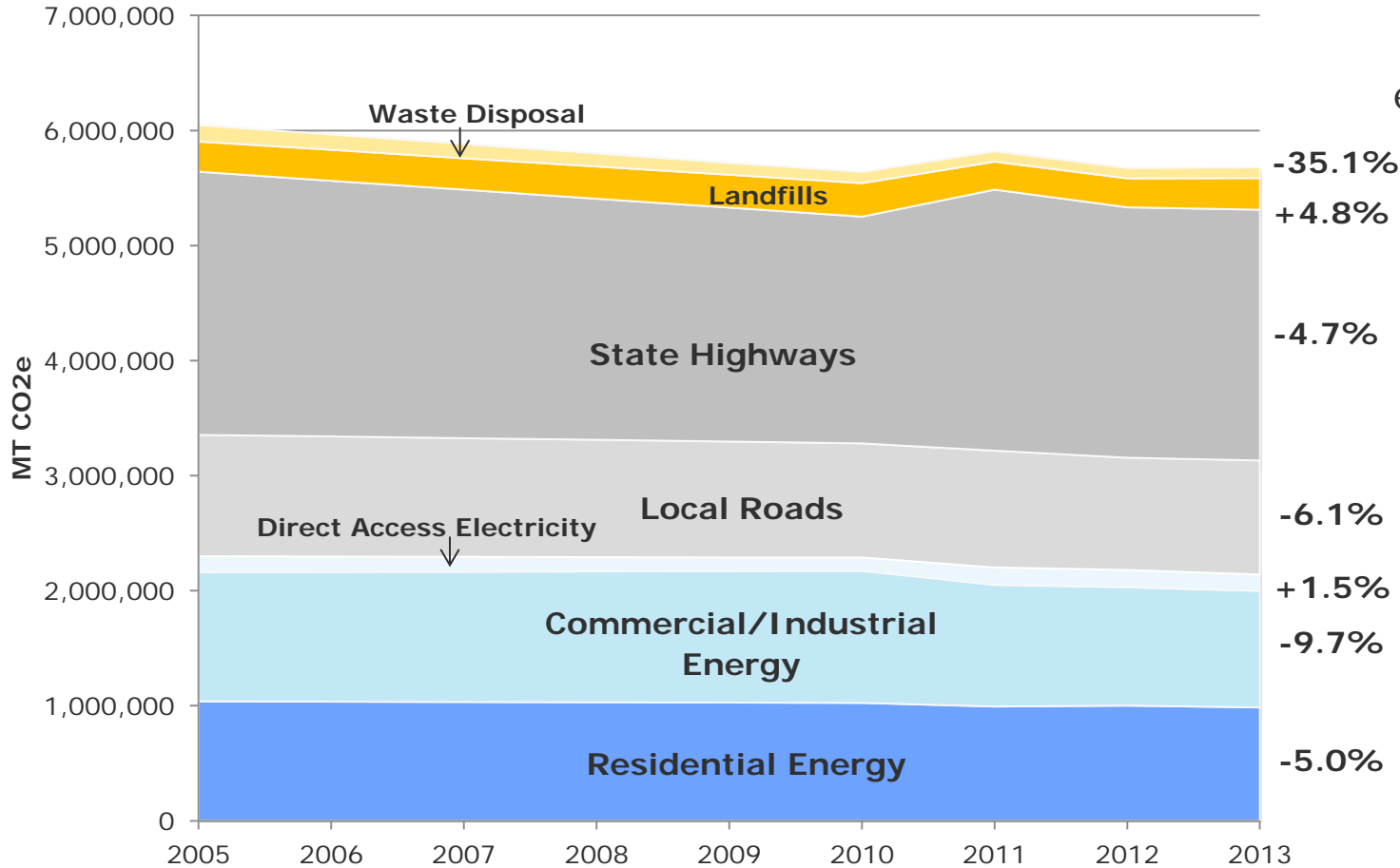
Communitywide GHG emissions inventory*



*Results presented today are county-wide.

Countywide Emissions Significantly Reduced since 2005

Emissions in Energy, Transportation and Waste: 2005-2013

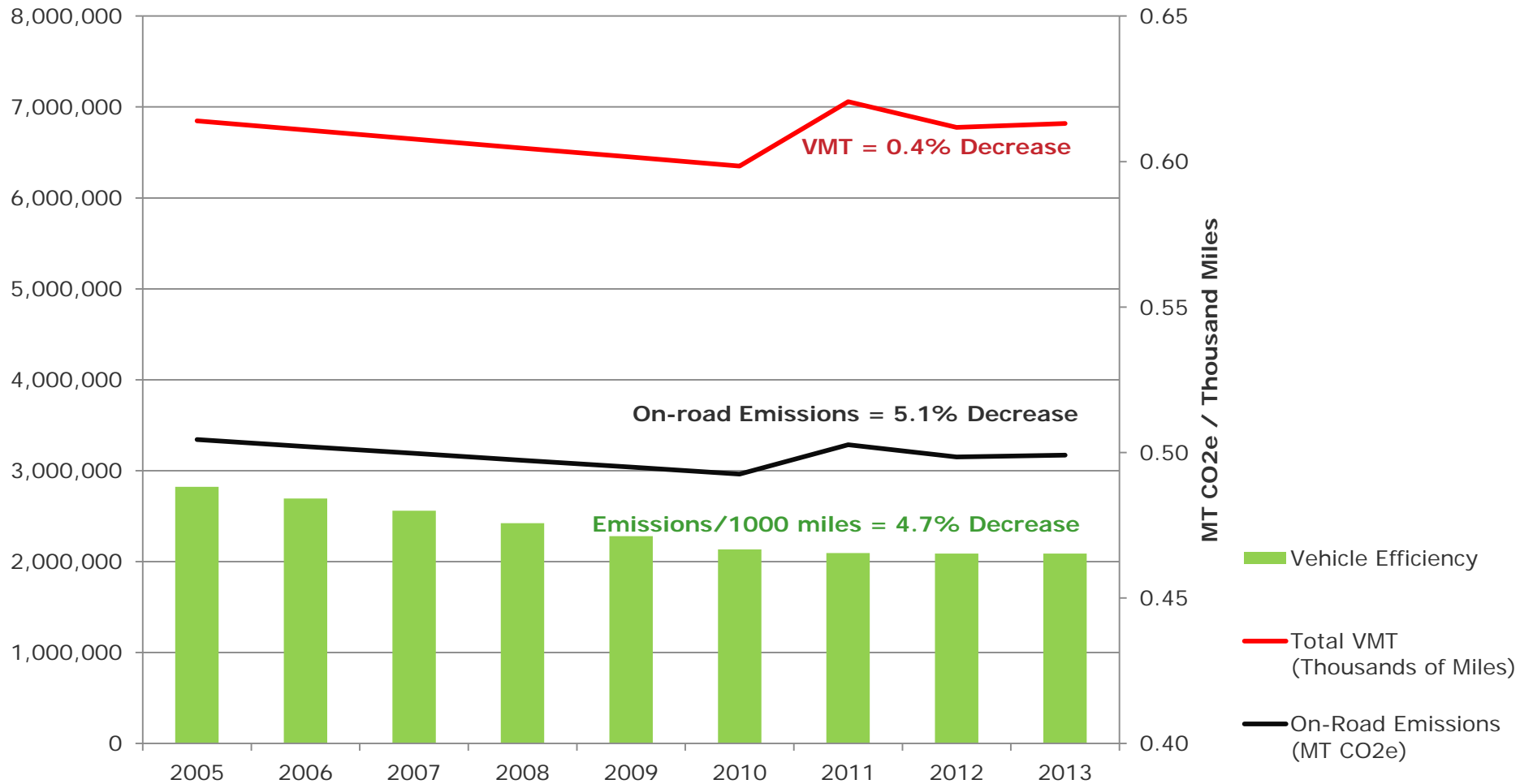


6.1% decrease
in combined
emissions since
2005

Sectors not included in this graph because 2005 data not available: Stationary sources, off-road equipment, trains, wastewater treatment, and water

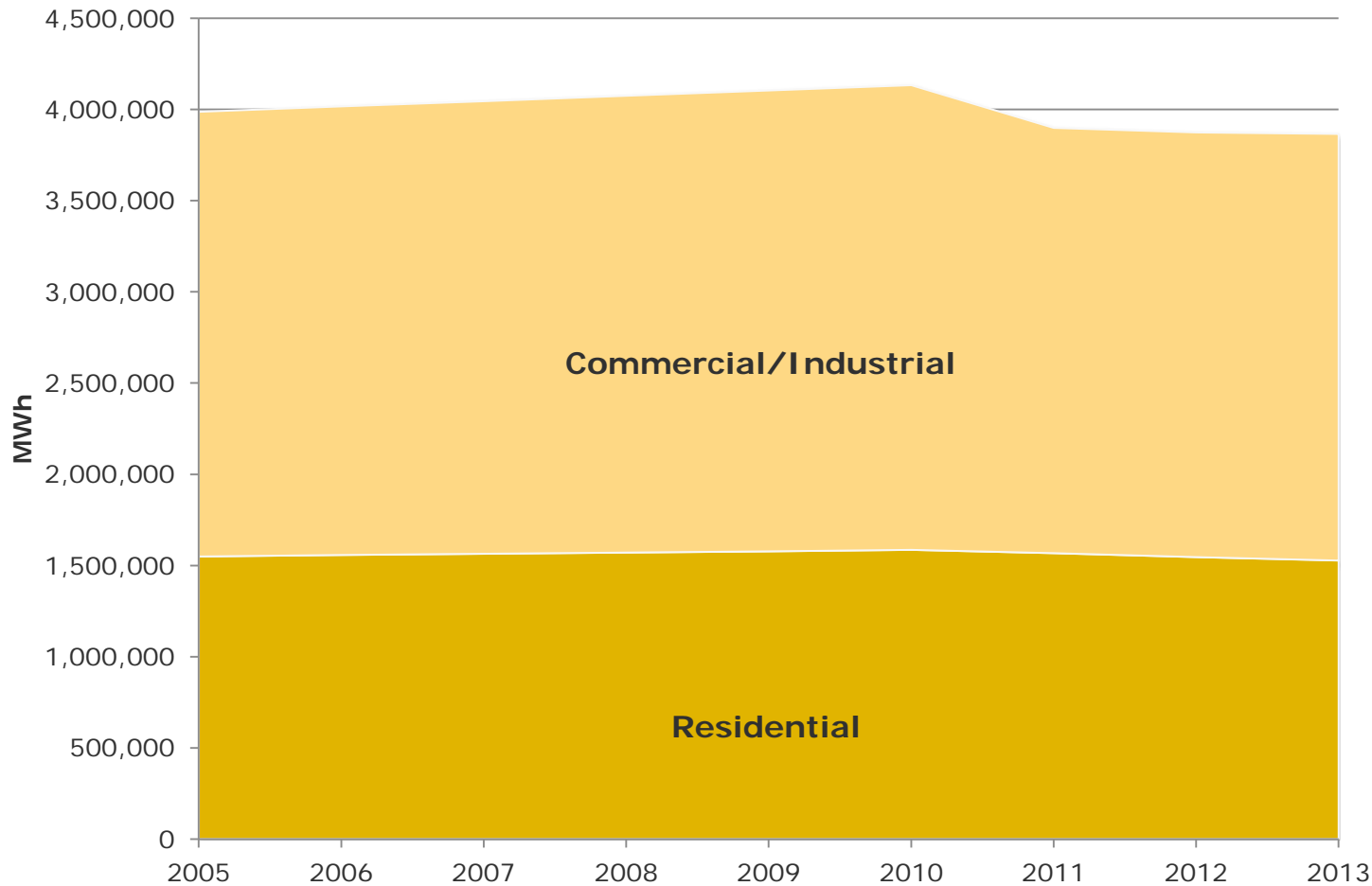
Emission Reductions Primarily Due To Vehicle Efficiency Improvements

Transportation Trends: 2005-2013



Total electricity use decreased mostly due to commercial/industrial

Electricity Use: 2005-2013



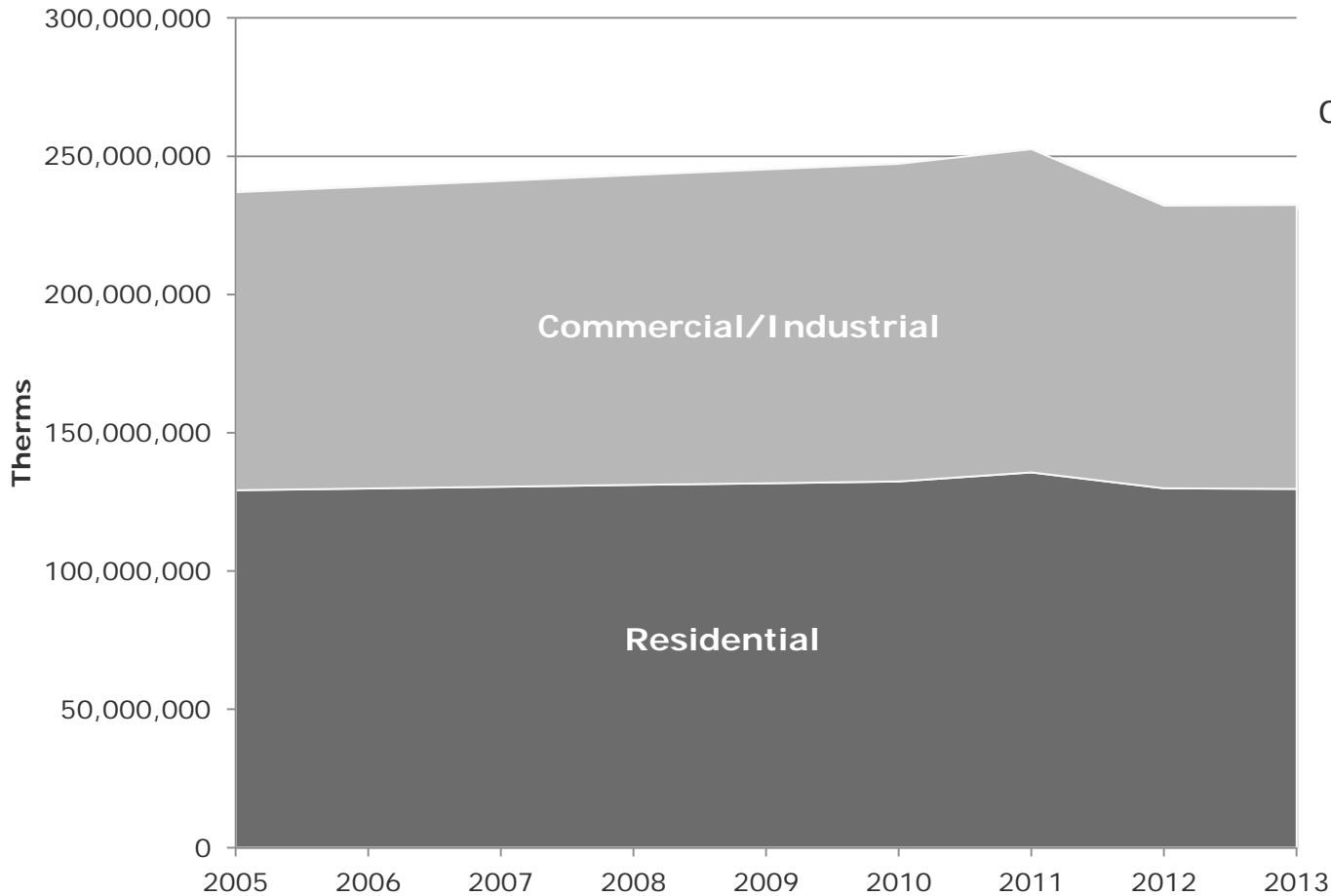
3.1% decrease
in combined
electricity

4.1% decrease
in commercial/
industrial
electricity

1.5% decrease
in residential
electricity

Total Natural Gas Consumption Decrease Due to Commercial/Industrial Sector

Natural Gas Use: 2005-2013



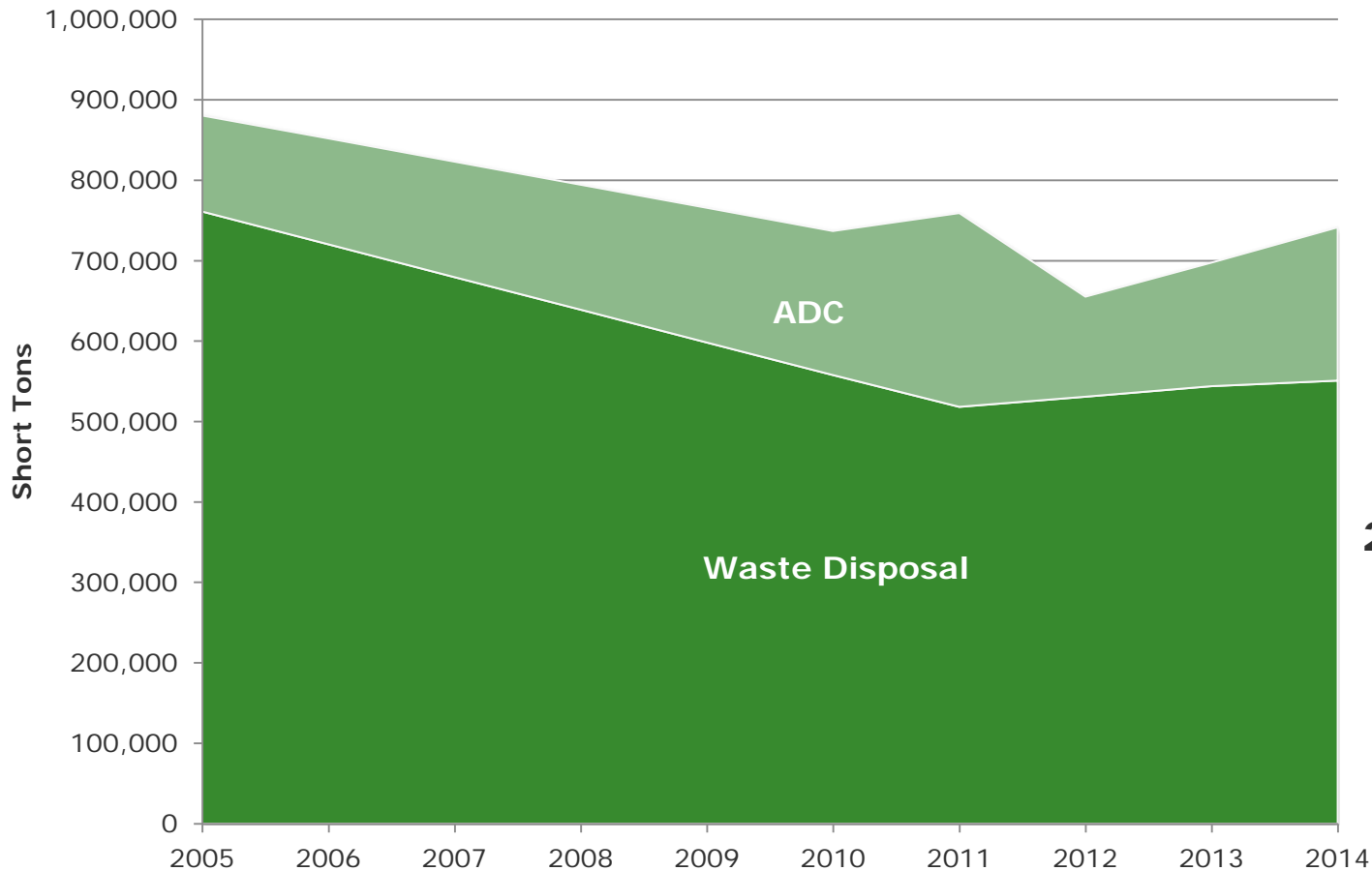
2% decrease in combined natural gas use since 2005

4.8% decrease in commercial/industrial gas use since 2005

0.4% increase in residential gas use since 2005

Substantial Decrease in Waste Disposal

Waste Disposal and Alternative Daily Cover: 2005-2014



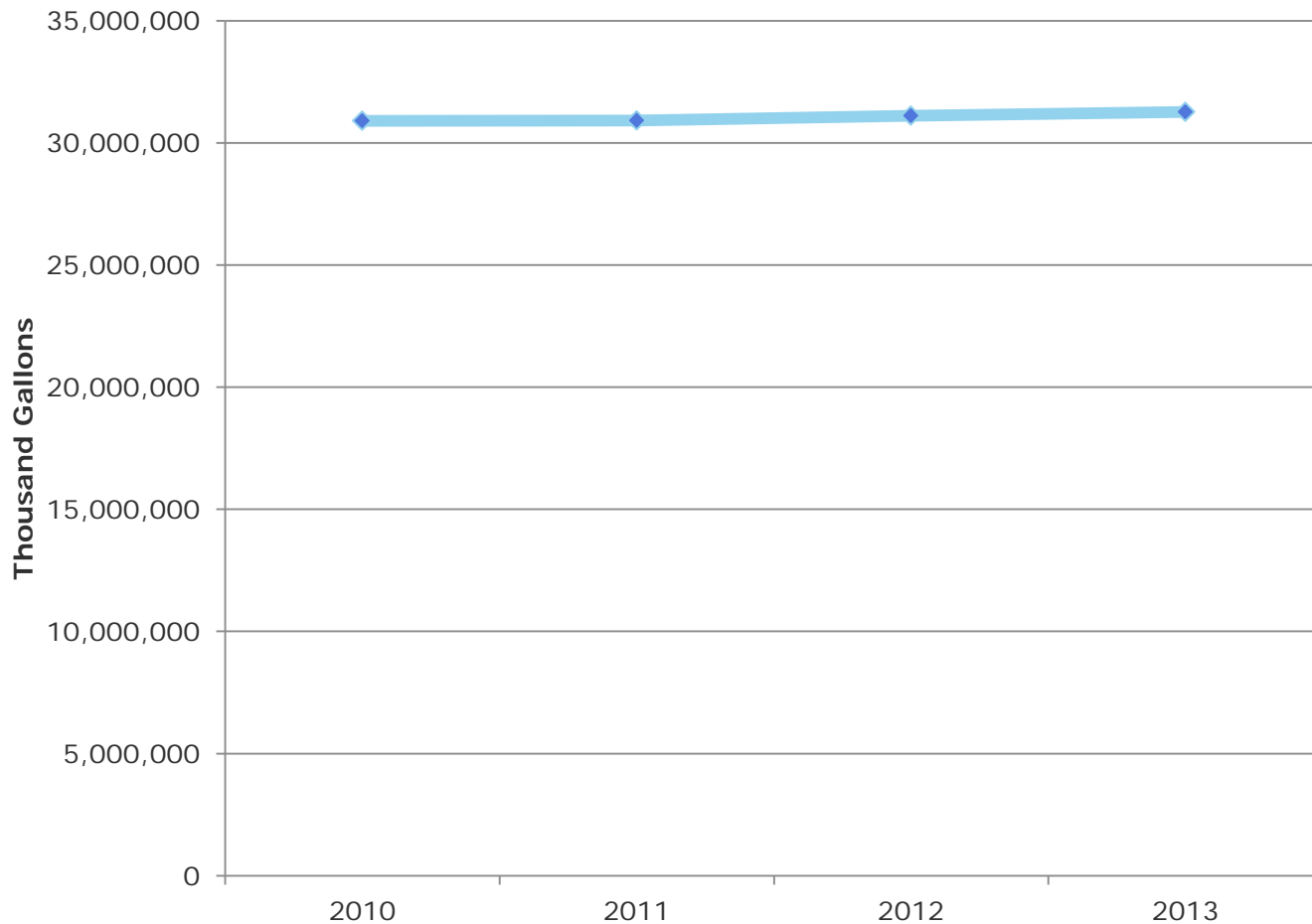
15.8% decrease in waste tonnage since 2005

59.6% increase in ADC since 2005

27.6 % decrease in waste disposal since 2005

Slight Increase in Water Consumption in Recent Years

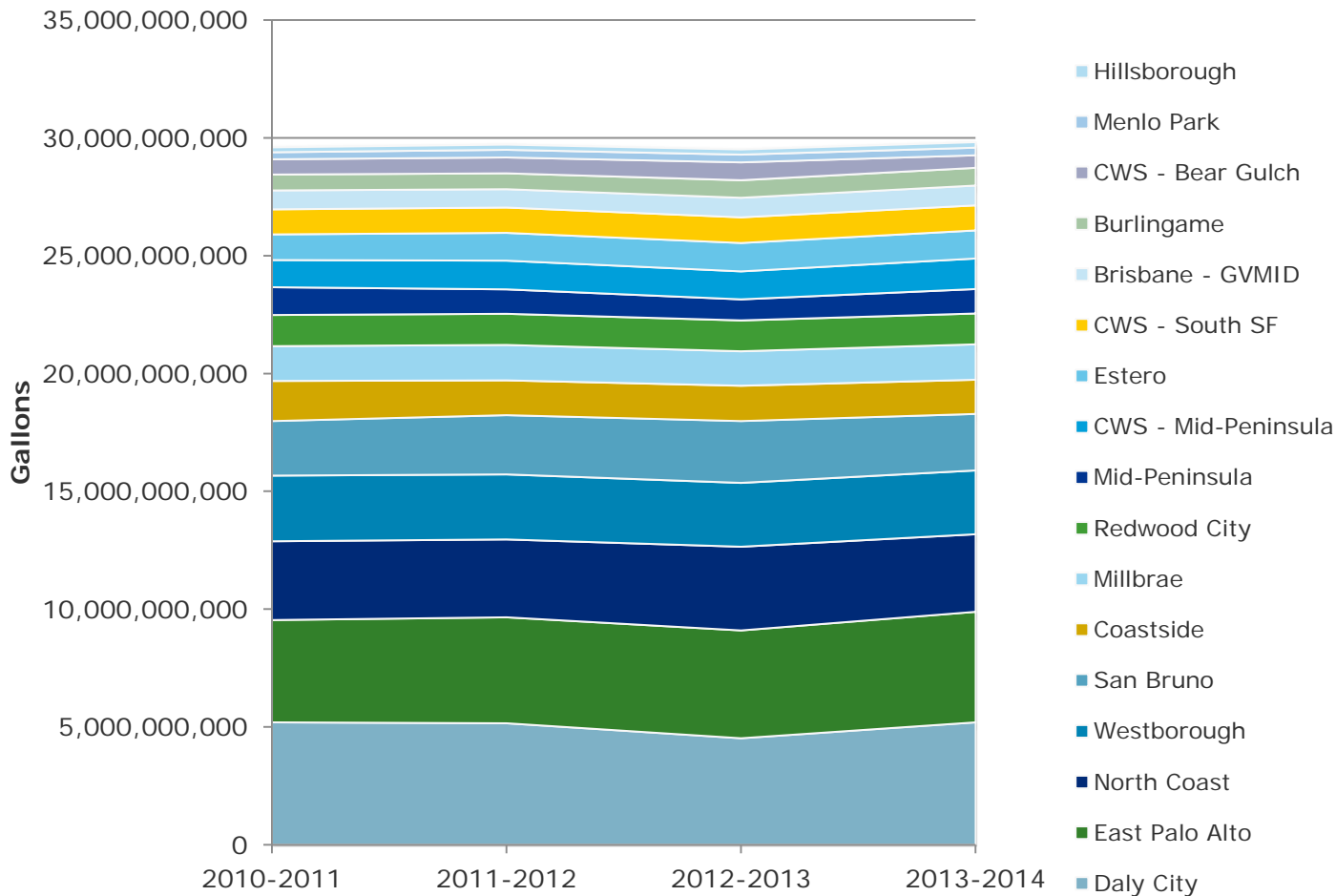
Water Consumption: 2010-2013



1.2% increase in water consumption since 2010

Water Consumption Trends Vary Across Districts

Water Consumption: FY 2011 – FY 2014

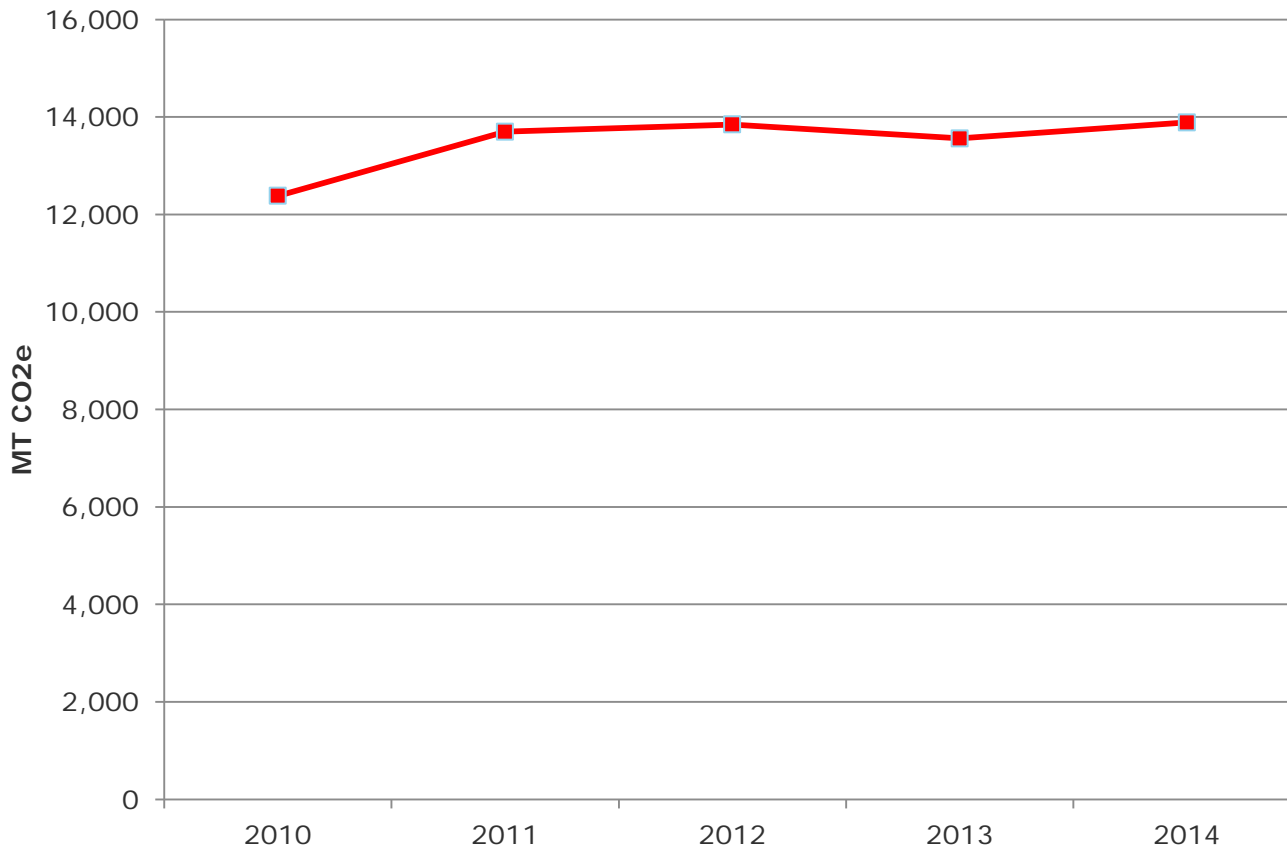


Decrease in water consumption in **6 of 17** water districts

All districts between 16.6% decrease and 12.7% increase

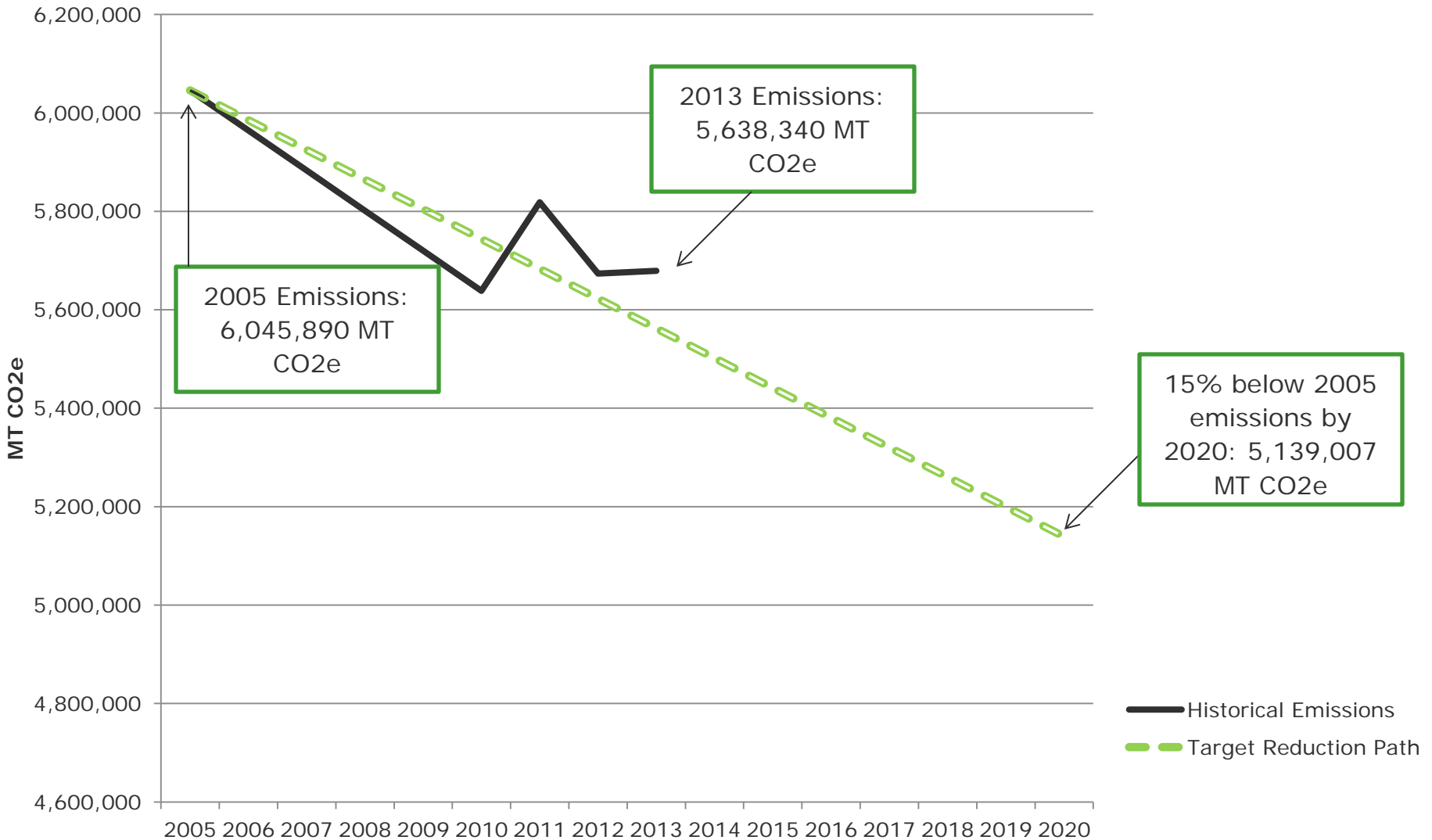
Moderate Increase in Wastewater Emissions

Wastewater Emissions: 2010-2014



12.2% increase in wastewater emissions since 2010

Historic Emissions vs. Target Emissions Reduction Path



Communitywide GHG Emissions Inventory: Next Steps

- Provide individual community-wide GHG inventories to cities (by mid-November 2015)
- Excel workbook format
- Opportunity for cities to review and provide comment

Government Operations: GHG Emissions Inventory

- Assess interest in 2015 municipal GHG inventory
- Review data needed
- Potential process: provide template + consultant guidance



Government Operations GHG Inventories: Data Needed

Sector	Data Source
Buildings and Facilities	PG&E (electricity, natural gas) City Public Works (diesel, propane, etc.)
Employee Commute	Commute.org (commute survey)
Landfill (Government-Owned/Operated)	PG&E (electricity, natural gas) Landfill manager (LFG captured, %methane, year opened/closed, historical waste deposited, etc.)
Public Lighting	PG&E (electricity)
Solid Waste (Government-Generated)	Local waste hauler (tons and/or volume)
Vehicle Fleet	City Public Works (gasoline, diesel, biodiesel, etc.)
Wastewater Treatment Plant (Government-Owned/Operated)	PG&E (electricity, natural gas) Plant manager (nitrogen discharged, digester gas produced, % methane) BAAQMD (point source emissions)
Water/Sewage Transport	PG&E: Electricity

Proposed Process: 2015 Government Operations Inventory

Tools

- Excel templates
- Bulk data collection where possible (e.g., PG&E data)

Support

- "Curriculum"
- Monthly working meetings

Technical assistance

- Peer review
- Assist with answering questions

- What support do cities need? (is this enough?)
- What would help move this forward?

Contact info

Susan Wright

swright@smcgov.org

Kim Springer

kspringer@smcgov.org

Betty Seto, DNV GL

Betty.Seto@dnvgl.com

Ben Butterworth, DNV GL

Benjamin.Butterworth@dnvgl.com

Andrea Pappajohn

apappajohn888@gmail.com